## EAST STROUDSBURG UNIVERSITY

East Stroudsburg, Pennsylvania 18301-2999
2002-2004 GRADUATE CATALOG

[ASTSTOUDENXIR:


East Stroudsburg University of Pennsylvania
A Member of Pennsylvania's State System of Higher Education
Office of Graduate Studies 570-422-3536
Toll-free 866-837-6130
Graduate School (Fax) 570-422-3506
ESU Main Number (Voice mail) 570-422-3211
E-mail
grad@po-box.esu.edu

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## Graduate School Calendar 2002-2004

(Subject to change)*

| FALL SEMESTER | 2002 |
| :---: | :---: |
| Deadline for International Student Applications | May 1 |
| Semester begins Tuesday, 9 a.m. | September 3 |
| Student Registration |  |
| Faculty Meetings |  |
| Classes begin Wednesday, 8 a.m. | September 4 |
| Last Day to Enroll in Courses | September 17 |
| Deadline: Application for December Graduation | October 1 |
| Comprehensive Examinations | November 2 |
| MSES Comprehensive Examinations | November 2 |
| Last Day to Schedule Oral Examinations | November 22 |
| Thanksgiving Recess begins Tuesday, 10 p.m. | November 26 |
| Classes resume Monday, 8 a.m. | December 2 |
| Last Day to Take Oral Examinations | December 6 |
| Last Day to Submit Completed Thesis | December 11 |
| Fifteenth Week | December 16 |
| Classes end Friday, 10 p.m. | December 20 |
| Commencement 10 a.m. | December 21 |
| INTERSESSION |  |
| Classes begin 8 a.m. | January 2 |
| Classes end Friday, 10 p.m. | January 17 |
| SPRING SEMESTER | 2002 |
| Deadline for International Student Applications | November 1 |
| Classes begin Monday, 8 a.m. | January 20 |
| Last Day to Enroll in Courses | January 31 |

*The 2003-2004 calendar will change as the State System of Higher Education has adopted a common calendar and all 14 state-owned universities will start and end classes on the same date. Check the ESU website to obtain information about the 2003-2004 calendar. The deadlines for 2003-2004 international student applications are May 1 for the following fall semester and November 1 for the following spring semester.
Deadline: Application for May Graduation ..... March 1
Comprehensive Examinations ..... March 1
MSES Comprehensive Examinations ..... March 1
Spring recess begins Friday, 10 p.m. ..... March 14
Classes resume Monday, 8 a.m. ..... March 24
Last Day to Schedule Oral Examinations ..... April 11
Last Day to Take Oral Examinations ..... April 25
Last Day to Submit Completed Thesis May 7
Classes end Friday, 10 p.m.
Deadline: Application for August GraduationMay 9
May 9
Commencement, Saturday, 10 a.m. ..... May 10
SUMMER SESSIONS ..... 2003
Pre Session
Classes begin Monday, 8 a.m. ..... May 27
Comprehensive Examinations ..... June 7
Pre Session ends Friday, 10 p.m. ..... June 13
Main Session
Classes begin Monday, 8 a.m. ..... June 16
Independence Day Holiday - No Classes ..... July 4
Main Session ends Friday, 10 p.m.July 25
Post Session
Classes begin Monday, 8 a.m. ..... July 28
Post Session ends Friday, 10 p.m. ..... August 15

## Mission and Objectives

## Governance

East Stroudsburg University is one of 14 state-owned institutions in the Pennsylvania State System of Higher Education whose mission is undertaken on behalf of those who support it - the citizenry - through their governor and legislature, students and alumni, and other friends who share its commitments.

## Mission

The mission of East Stroudsburg University is to provide high-quality programs in both traditional and emerging fields of study which recognize and promote human and intellectual diversity, and to prepare graduates to enter a complex, changing global society with competence and confidence.

## Purposes and Scope

In pursuit of this mission, East Stroudsburg University seeks to:
। Offer affordable programs at the associate, baccalaureate, and graduate levels, as well as opportunities for lifelong learning;
। Offer an intellectually challenging environment which enhances each student's critical thinking and communicative and quantitative skills;
1 Provide resources for creating a learning environment conducive to the pursuit of excellence in areas such as the library, the classroom, laboratories, instructional technologies, and student co-curricular activities;
I Identify, recruit, and retain students representing a multicultural world, who by background, motivation, and commitment can benefit from higher education;
1 Attract and retain a diverse, recognized, and credentialed faculty committed to excellence in teaching and continuing scholarship;
। Develop a university community committed to personal, professional, and social values appropriate to an educated individual;
1 Provide expertise and service to the community, region, state, nation, and the world;
। Create opportunities for the university community to develop positive, healthy, and integrated lifestyles;
। Serve as a primary source of cultural and intellectual programs of importance to students and residents of the region; and
। Maintain a partnership with its alumni to benefit both the alumni and the university.

## 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.

## History of the Graduate School

East Stroudsburg University inaugurated its graduate school in 1962 with programs in health and physical education, biology, history, and political science. Since then, other departments have established degree programs, the most recent being the Master of Science in instructional technology (2002) preceded by the Master of Science in speech language pathology (1997), the Master of Public Health in community health education (1990) and the Master of Science in physical education with a major in cardiac rehabilitation and exercise science (1987). It is anticipated that new graduate programs will be added in the near future and students should visit the website for the latest listing of graduate programs. The most popular graduate program at ESU is the Master in Education degree program.

In its first graduating class of 1964 the university awarded 10 graduate degrees. At that time, the total annual graduate school enrollment was 194. Since then, the graduate school enrollment has grown steadily. Enrollments now exceed 1,000 graduate students each semester. Since 1964, East Stroudsburg University has awarded more than 4,700 graduate degrees.

In addition to its numerous graduate degree programs, ESU has over 20 post-baccalaureate certification programs in education and serves a significant number of non-traditional and off-campus non-degree students and students completing Act 48 credit.

## 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; and Rosenkrans Hall which houses the graduate school.

New buildings are under construction for student recreation and the alumni center. Zimbar-Liljenstein Hall will undergo a major renovation in 2002 to complete a Student Services Center and will also house offices, physical education classes, and a small instructional gymnasium.

## The Campus

The 60 campus buildings are located on 213 acres in the East Stroudsburg community. In addition to the academic facilities, nine residence halls, housing 2,200 students, and a 1,000-seat dining hall are located on campus. The Student Activity Association, Inc., owns Stony Acres, a 119-acre offcampus student recreation area near Marshalls Creek, that includes a lodge and a small lake.

## Library

Kemp Library provides a wide variety of resources to support graduate studies. The library houses more than 448,000 books and periodical volumes, and 1.3 million pieces of microform material. It currently subscribes to more than 1,000 print periodicals including subscriptions to more than 7,500 periodicals in electronic form. The library is also a depository for both U.S. Government documents and Pennsylvania State publications, with more the 80,000 documents in the collection.

The library also has extensive electronic holdings, most of which are available both on campus and off campus. Full-text databases such as Academic Universe (Lexis-Nexis), American Chemical Society Web Editions, and BIOone provide the full-text to more than 7,500 journals. Off-campus users must enter their e-card as their password.

The library uses an integrated online library system. The system is accessible in the library, on the campus network, or via modem. Remote users can not only check our catalog online, but place holds on material that is checked out, renew their materials, and access electronic reserve articles.

The Curriculum Materials Center provides teacher-trainees with a
special collection of over 7,414 items including a Children's Collection, a selection of textbooks currently used in schools throughout the country and a comprehensive collection of school courses of study.

The library Web page, <www.esu.edu/library/>, contains descriptions of all of our services, policies, and resources. Users guides to the library are available on the Web or at the library circulation desk.

## Location

East Stroudsburg University 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 and Newark, 85 miles northeast of Philadelphia, 40 miles southeast of the WilkesBarre/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 Route 80, exit 308 (old exit 51), is within easy reach of major highway systems and commercial air services.

## Academic Facilities

The Academic Computing network consists of 14 UNIX or Windows NTbased servers that are connected to 600 microcomputers provided to support instruction, Internet access, World Wide Web, and E-mail. They are located in 15 computer laboratories across campus. Additionally, many academic departments maintain discipline-specific computer laboratories for their curricula.

The University Computing Center supports both administrative and academic computing. Administrative computing is served by a UNISYS enterprise server, encompassing over 40 online systems and providing services to the students, faculty, and staff.

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 McGarry Communication Center.

## Administration and Faculty

The graduate school at East Stroudsburg University coordinates all programs leading to degrees and certificates beyond the bachelor's degree. The chief administrator of the graduate school is the dean of graduate studies and research. The dean works under the supervision of the provost and vice president for academic affairs and sits on the Provost's Council.

The Graduate Advisory Committee provides input to the dean of graduate studies in regard to graduate school procedures and in preparing policy recommendations. This committee consists of the graduate coordinators of all departments offering graduate degrees.

The academic departments initiate graduate course proposals to be considered by the University Curriculum Committee. The Provost's Council reviews all course and program proposals before recommending them to the president of the university.

The entire university faculty totals 265 . Of this number, more than 130 serve on the graduate faculty. Each academic department identifies its graduate faculty according to its established criteria. Faculty members are representative of many and varied institutions of higher education in both

| O f f i c e / P r o g r a m | Tel. Number | E-mail |
| :--- | :--- | :--- |
| Office of Graduate Studies | $570-422-3536$ | grad@po-box.esu.edu |
|  | Toll-free | $866-837-6130$ |
|  |  |  |
| Biology | $570-422-3725$ | jhuffman@po-box.esu.edu |
| Cardiac Rehabilitation | $570-422-3336$ | dcumming@po-box.esu.edu |
| Computer Science | $570-422-3666$ | rprince@po-box.esu.edu |
| Elementary Education | $570-422-3356$ | pkelberman@po-box.esu.edu |
| General Science | $570-422-3264$ | scady@po-box.esu.edu |
| Health Education | $570-422-3835$ | khillman@po-box.esu.edu |
| Health and Physical Education | $570-422-3106$ | smueller@po-box.esu.edu |
| History | $570-422-3286$ | Isqueri@po-box.esu.edu |
| Instructional Technology | $570-422-3646$ | ecamper@po-box.esu.edu |
| Master of Public Health | $570-422-3560$ | Iwoodhouse@po-box.esu.edu |
| Off-campus Classes and |  |  |
| $\quad$ Continuing Education Classes |  |  |
| (including ACT 48 credit) | $570-422-3589$ | cesmmr@po-box.esu |
| Political Science | $570-422-3286$ | mclarke@po-box.esu.edu |
| Reading | $570-422-3416$ | jmoore@po-box.esu.edu |
| Secondary Education | $570-422-3363$ | kfoster@po-box.esu.edu |
| Special Education | $570-422-3558$ | tburcroff@po-box.esu.edu |
| Speech Language Pathology | $570-422-3247$ | jpage@po-box.esu.edu |
| Sport Management | $570-422-3316$ | rfleischman@po-box.esu.edu |

the United States and abroad. The terminal degree is held by 76 percent of the instructional faculty. Another 345 employees make up the management and non-instructional staff.

Inquiries and communications concerning the graduate school and its degree programs may be directed to the following office telephone numbers:

## Graduate School Office, 570-422-3536 or toll-free 866-837-6130, grad@po-box.esu.edu

The graduate school office is located on the second floor of Rosenkrans Hall, West, between Stroud Hall and the Abeloff Convocation Center. The postal address of the graduate school is 200 Prospect Street, Rosenkrans West, Room 218, East Stroudsburg University, East Stroudsburg, PA 18301-2999.

The office provides important services to graduate students:
। Receives and processes applications for admission;
। Maintains a supply of graduate school literature;
। Counsels students in graduate procedures;
। Refers students to appropriate academic advisers on matters of program development;
Interprets the guidelines for admission to the graduate school and the fulfillment of graduate requirements;
Evaluates transfer credits and certifies the validity of program changes;
Maintains academic records of all graduate students;
Maintains and amends plans of study;
। Provides verification of students' status for academic and professional purposes;
। Coordinates the processing, selection, and payment of graduate assistants;
। Makes available and approves thesis guidelines, setting forth the scholarly standards for thesis preparation;
। Reviews theses for final approval.
Telephone or mail-in registration is quick and convenient. The graduate school distributes advance notice of course offerings three times a year: fall semester, spring semester, and summer. To insure that students receive these publications, they are requested to keep the graduate school office informed of their latest mailing address.
Continuing Education, Off-campus Classes, and Act 48 Credit, 570-422-3589, cesmmr@po-box.esu.edu

Many of the services provided to graduate students are provided by the Office of Continuing Education and Off-campus Classes. Evening students,
off-campus students, non-degree students, and students completing Act 48 credit frequently register through the Office of Continuing Education.

The Office of Continuing Education and Summer Sessions at East Stroudsburg University of Pennsylvania aims to extend the resources of the school to the surrounding communities by offering credit and non-credit programs on campus and throughout northeastern Pennsylvania. We offer programs for working adults, children, and older adults. The summer session allows undergraduate and graduate students the opportunity to further their studies in all fields offered by the university.

On-campus continuing education opportunities include approximately 100 credit courses offered after 4:00 p.m. in the fall and spring semesters, while approximately 30 graduate education courses are offered off campus throughout northeastern Pennsylvania. Programs for children include the Aquatots learn to swim program and a summer day- camp in cooperation with Oasis Services for Children. Residents who are over 60 years of age can take up to six (6) hours a semester free of charge through the Senior Citizens Tuition Waiver program.

## Accreditations

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 Post-secondary Education.

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.

The athletic training program is accredited by the Commission on Accreditation of Allied Health Education Programs.

The Master of Public Health Program in community health education is accredited by the Council on Education for Public Health (CEPH).

## Approvals

The Chemistry program is approved by the American Chemical Society.
The Early Childhood Education program is approved by the National Association for the Education of Young Children (NAEYC).

The Elementary Education program is approved by the Association for Childhood Education International (ACEI).

## Stricter Requirements May Apply/Requirements Subject to Change

The regulations and requirements stated in this catalog are minimums governing the graduate school at the time of publication as a whole and must be adhered to and fulfilled by all graduate students in all programs. The graduate faculty in individual degree programs may establish additional regulations and requirements beyond the minimums. Departments may require higher graduate point averages, earlier application dates, or additional documentation for admission. Furthermore, the requirements in this catalog do not constitute a contract with the student and are subject to change. The most recent changes in graduate school and departmental requirements and policy can be found on ESU's website.

All programs in the various departments of education related to teacher certification are subject to the policies and regulations of the Commonwealth of Pennsylvania Department of Education (DOE). Students seeking teacher certification must meet current DOE requirements.

## Admission, 570-422-3536 or toll free 1-866-837-6130, grad@po-box.esu.edu

The graduate school coordinates all admission activities for all graduate degree programs and post-baccalaureate certification programs at ESU. All admission materials including application, transcripts, examination scores, letters of recommendation, etc., should be submitted directly to the graduate school. Materials, especially transcripts, addressed simply to "Admissions" or "East Stroudsburg University" may be misdirected to the undergraduate Admission Office. To avoid confusion and possible delay of your admission, please be careful to direct all admission material to the following address:

Graduate Studies and Research
Room 218 Rosenkrans West
East Stroudsburg University
East Stroudsburg, PA 18301-2999

## How to Apply

I All degree programs and post-baccalaureate certification programs require the student to submit an Application for Admission to the Graduate School Office.
। A $\$ 25$ application fee is to accompany the admission application in the form of a check or money order made payable to "East Stroudsburg University." The application will not be considered without the application fee. The application fee cannot be waived and is non-refundable regardless of the admission decision.
। Submit one official transcript of all undergraduate work from each institution you attended. Have the institution mail the transcript to: Graduate Studies and Research, East Stroudsburg University, East Stroudsburg, PA 18301-2999. A transcript from every institution you attended, regardless of the number of credit hours at that institution, is necessary because in addition to classes and credit hours, disciplinary actions and dismissals from institutions are factors affecting the admission decision.
pathology and audiology are required to submit a current Graduate Record Examination (GRE) score. GRE scores are not required for applying to other degree programs and post-baccalaureate certification programs.
1 If the department requires letters of recommendation or an essay, enclose the letters of recommendation and essay with the application.

International Students Only
International students must submit:
। A statement and documentation of financial resources. If granted a graduate assistantship, it may be included in the documentation of financial resources but additional financial resources is mandatory.
। A TOEFL or ILETS score. The minimum TOEFL score acceptable for admission is 560 on the paper test or 220 on the computer test. The Test of English as a Foreign Language (TOEFL) score should be submitted directly from the Educational Testing Service, Princeton, New Jersey. ESU's Institutional Code Number is 2650.
। Proof of health insurance (certification must be in English) meeting the required criteria or purchase health insurance coverage from ESU. It is recommended that the student purchase health insurance coverage from ESU.
। A credential evaluation equivalence report of your transcript from the institution granting your baccalaureate degree. Contact the graduate school or visit the ESU website for a list of approved companies providing credential evaluations.
The review of an application for admission (domestic and international) to a graduate degree program or a post-baccalaureate certification program will not start until all documentation is received. Applications for admission with missing material will not be considered. It takes four (4) to seven (7) weeks to process an admission application after all documentation has been received. Failure to provide all documentation delays the processing of your application.

Documentation from applications that are not complete will be retained for a maximum of six (6) months. If all documentation has not been received after six (6) months, the application and all documents will be discarded. Students must submit all new documentation if they want to reactivate their application. Application fees will not be refunded to those students whose application and documentation are discarded.

## When to Apply

U.S. Citizens or Permanent Residents: To insure admission prior to the
beginning of the semester, please submit application accompanied by all needed documentation and transcripts within the following timelines.

Submit application between:
January 1 - July 31
September 1 - November 30
January 1 - April 30

To start classes in this semester:
FALL (September)
SPRING (January)
SUMMER (June)

The following programs admit students only once a year and require an earlier deadline:
February 1 Speech-Language Pathology
March 15 Cardiac Rehabilitation
International Student Deadlines
May 1 for the following FALL (September)
October 1 for the following SPRING (January)
January 1 for the following SUMMER (June)
Earlier submission is encouraged. Due to various delays beyond the control of the university, additional time may be required to process an international student's application for admission and secure the I-20 form. The university does not assume any liability or responsibility for the timely processing of an international student's application for admission. International students should contact the Director of International Programs at <intlpro@po-box. esu.edu> or 570-422-2863 for more information about visas, I-20 forms, and financial certification.

## Notification of Admission

Applicants to the graduate school will be notified of the university's admission decision within five (5) to seven (7) weeks after all application materials are received. Admission categories are described below. The student will receive an admission decision letter and a response letter to be returned to the graduate school. The student must return the response letter or it will be assumed that the student does not accept the admission offer and the student's admission status will be voided. The student has one year to start graduate classes. If the student does not take a graduate course at ESU within one year, the student's admission status will be voided and the student's admission documentation will be discarded. It will be necessary for the student to reapply and submit new documentation if admission is requested after one year.

Once a student begins taking classes but stops taking classes for a period of two years, the student's admission status will be moved to inactive status. The student will be notified of this action and asked if he/she intends to resume classes. Failure to respond to notification will be considered the same as a decision not to continue in graduate studies. (Students who obtain an approved leave of absence are subject to a different time frame before their
file is moved to inactive status.)

## Admission Categories and Their Requirements

## Admission with Full Graduate Standing

। Minimum of a bachelor's degree from an accredited college or university. Students who apply for admission while in their last semester of their bachelor's degree may be admitted to full- standing graduate status, but this admission presumes completion of the bachelor's degree and no significant change in the student's quality point average. If the student does not complete all the requirements for the bachelor's degree, the offer of admission to graduate studies is void.
1 Undergraduate major or its equivalent in the field of proposed graduate study. Students without the necessary undergraduate course work for the major applied for may be admitted as conditional status. Early in their graduate studies the student will be required to complete the necessary undergraduate deficiency course work to prepare him or her for graduate studies in the field.
। An undergraduate minimum quality point average of 2.50 ( 4.00 basis) and a 3.00 in the area of specialization. Some departments may have higher QPA requirements for full graduate standing. Admission to full graduate standing in graduate education programs requires a minimum QPA of 2.8 for initial certification programs and 3.0 for advanced certification programs.
। Standardized test scores that meet or exceed the minimum criteria of the degree program (including the TOEFL or ILETS for international students).
। Satisfaction of all prerequisite undergraduate course work and/ or licensure. (Certain educational degree programs require that the student has Commonwealth of Pennsylvania Department of Education teacher certification as a prerequisite for admission to the degree program.)
1 Receipt of all required documentation for admission required by the degree program such as letters of recommendation, portfolio, etc.

## Admission with Conditional Standing

If the applicant does not meet the requirements for full graduate standing, he or she may be granted conditional admission. Conditional standing may be granted because of one or more of the following reasons: (a) the student does not meet the academic criteria for admission to full standing or (b) the student does not have all of the necessary prerequisite course work, licenses, or experience necessary for full standing or (c) the student has not submitted all documentation necessary for admission.

For a student who does not meet the academic criteria for admission to full standing, continuation of approval for graduate study is dependent upon completion of nine (9) to twelve (12) credits of graduate course work with grades no less than a B in each of the courses. After completion of twelve (12) credit hours of course work with no less than a B in each class and the filing of a plan of study, the student's status automatically changes to full standing. The student may petition to the graduate coordinator of the degree program for a change of status with only nine (9) credit hours of graduate work completed provided that the student has a 3.5 QPA in the graduate work completed. The graduate coordinator will indicate his or her approval or disapproval of the petition and forward the petition to the graduate dean for final approval or disapproval. For a student who does not meet the criteria for admission to full standing because of reasons outlined in (b) or (c), continuation of approval for graduate study is dependent upon the student submitting the required documentation, taking the necessary prerequisite classes, or obtaining the necessary licensure.

Students admitted to conditional standing because they did not meet the minimum academic criteria are not eligible for graduate assistantships. Students admitted to conditional standing because of lacking documentation, prerequisite work or licensures are eligible for graduate assistantships.

Deficiencies are stated at the time of admission to a degree program. They may be corrected by taking required undergraduate or graduate courses or successfully passing comprehensive examinations demonstrating content knowledge. The graduate program coordinator will advise the student of the nature of the deficiencies and how the student may satisfy the criteria for admission.

The student is required to fulfill all deficiency requirements in his/her program and to have achieved a 3.0 quality point average in his/her graduate work by the time he/she has completed eighteen (18) graduate credits. At this time, the student's status will be changed to full standing. The student is required to file a plan of study after completing twelve (12) credits of graduate classes. The plan of study should reflect what the student will do to remove any remaining deficiencies.

## Admission to Non-Degree Status

। An applicant for admission to the graduate school may select "non-degree status" in order to take graduate courses for personal improvement, to satisfy professional requirements, or for other reasons where a graduate degree is not required. The admission requirement for non-degree status is fulfilled by the student signing the application certifying the possession of a bachelor's degree. An application fee is required. Transcripts are not required for nondegree applicants, except for the school nurse certification program. Non-degree students are not admitted to a graduate program
or a post-baccalaureate certification program. Credits taken as a non-degree student do not transfer to a degree program or postbaccalaureate certification program unless the graduate program advisor, graduate coordinator, and graduate dean approve the transfer.
। A student may take a maximum of twelve (12) credits as a nondegree student. After taking twelve (12) credits, the student must sign a statement verifying that the student does not intend to seek admission to a graduate program or post-baccalaureate certification program before he or she can take any additional credits. There is no limit to the number of credits that a non-degree student who is not seeking a graduate degree or post-baccalaureate certification can take.

A student taking courses in the non-degree status who wishes to change to a degree program or post-baccalaureate certification program must apply for admission, provide all required documentation (including official transcripts), and meet the minimum academic standards for acceptance to the program. The student is subject to the then current requirements for admission to the degree program. At this time, all completed graduate courses are reviewed by the department for their applicability to the student's chosen program.
Students who apply for a degree program but who do not meet the minimum academic standards may be recommended for nondegree status. A student who has promise as a graduate degree student based upon other achievements may, in a sense, be given the opportunity to prove his or her ability. A non-degree student in this situation is not admitted to the program that he or she applied to, but has the opportunity to take graduate course work in that department. The student should make an appointment with the degree program graduate coordinator to determine what course work and/or other achievements are necessary to reapply for degree status. After completing nine (9) to twelve (12) hours of graduate course work as a non-degree student and completing any other required prerequisite course work or achievement such as passing the PRAXIS examination, taking the GRE, etc., the student can request in writing a transfer to degree status. If accepted as a degree status student, the course work taken with the approval of the graduate coordinator can be applied toward partial completion of the degree program. There is no guarantee that a student recommended for non-degree status will qualify for degree status. If the student does not have the ability to perform graduate work satisfactorily or does not complete all criteria necessary for degree status, the student will not be transferred to a
degree program and the course work taken will not count toward the completion of the degree.

Important Note for Other Than Full-Standing Admission Status
Students admitted other than full-standing admission status, i.e., conditional, non-degree, etc., are not guaranteed that they will be transferred to full-standing admission status. Transfer to full-standing requires satisfactory completion of all the requirements in effect at the time the student is granted full-standing status. These standards may differ from those in effect when the student was first granted other than full-standing admission status.

Students admitted other than full-standing may only take twelve (12) credit hours. After twelve (12) credit hours the student must: (a) submit a plan of study, (b) declare that he/she is a non-degree student, or (c) cease taking graduate and/or post-baccalaureate course work.

Students admitted as non-degree status may transfer a maximum of twelve (12) credits taken at ESU as a non-degree student to a graduate program unless they have written approval from the program graduate coordinator and the dean of graduate studies.

## Registering for Graduate Classes before Receiving Notice of Admission

A student who has applied for admission to a degree program or a postbaccalaureate certification program may register for a graduate class prior to receiving notice of the admission decision of the graduate school. However, if a student registers for courses before receiving an admission letter, he or she runs the risk of taking courses and not being admitted into a program. Permission to register for a graduate class does not de facto grant admission to a graduate degree program.

## Completion of Course Work Does Not Qualify a Student for

## Degree Status

A non-degree status student who completes all of the course work necessary for a degree does not de facto qualify for the receiving of that degree. Only degree status students are eligible to receive a graduate degree.

## Post-baccalaureate Certification Programs

Students who want to apply for admission to a post-baccalaureate certification program in one of the various education programs submit their application to the graduate school. A student may apply for both admission to a graduate degree program and a post-baccalaureate certification education program. Students should contact the graduate program coordinator responsible for the post-baccalaureate certification education program for further information regarding admission criteria. Students admitted only to post-baccalaureate certification education programs are not eligible for graduate assistantships. Students admitted to both a post-baccalaureate
certification education program and a graduate degree program are eligible for graduate assistantships.

## International Students 570-422-2863 or 422-2864

Persons who are not United States citizens or resident aliens (permanent residents or "green card" holders) must apply as international students according to the application deadlines previously indicated and on the Application for Admission. To apply, international applicants must do the following:

1 Apply for admission to a degree program using the Internet at <www. esu.edu> or by completing a paper application. The application fee of $\$ 25$ (U.S.) must be paid by check or money order in United States currency payable to "East Stroudsburg University." Do not send cash under any circumstances. This fee cannot be waived and is due at the time the student applies for admission. No action will be taken on the student's application until the admission fee is received.
। Each program requires different admissions documentation and has different application deadlines. The deadline for applying for admission to the fall term (September - December) is May 1 and the deadline for the spring term (January - May) is October 1. Some departments have an earlier deadline.
All documentation including financial certification, proof of medical insurance, official transcripts, TOEFL scores, GRE scores (if required), and letters of recommendation (if required) must be received by ESU by these dates. Students whose documentation is not received by these deadlines will not be eligible for admission. ESU is authorized to issue the I-20 form that is necessary to secure an $\mathrm{F}-1$ visa, but can only do so when full and accurate financial data has been received.

I Medical insurance which covers injury or illness and, if necessary, medical evacuation to your home country or repatriation of remains, is a requirement for all students on non-immigrant visas. International students should obtain this insurance through East Stroudsburg University.
1 Approved financial documentation that demonstrates you have access to approximately $\$ 18,000$ (U.S.) per year from INCOME sources is mandatory before an $\mathrm{I}-20$ form can be issued. Without this you will not receive an F-1 visa. The Financial Certification form must be accompanied by an income tax form, pay receipts, or a letter from an employer showing annual salary and a letter outlining expenses and assets. Bank statements may only be used to supplement documentation on earnings. If persons other than the applicant will assist in meeting expenses, documentation from that person must also be included. International students are eligible to apply for
graduate assistantships. The assistantship can be considered as part of the support on your financial certification, but the assistantship is not sufficient proof of financial certification.
An official copy of all undergraduate and graduate course work must be forwarded to ESU and a credential evaluation equivalence report. If your transcript is not in English, you must send a certified English translation directly to the graduate school. Do not send high school transcripts.
। TOEFL or ILETS scores are required for all international students unless your undergraduate degree is from an English language institution. (It must be documented that English is the only language of instruction for the institution.) The required scores on the TOEFL are 560 (paperformat test) and 220 (computer-format test). Those exempt from submitting TOEFL or ILETS scores include applicants who were raised in and completed all elementary and high school work in a country in which English is the native language, or those who graduated from a university in an English-speaking country in which all instruction is given in English. All other international applicants must submit TOEFL or ILETS scores.

## Visas

International students should apply early so that information necessary for the preparation of their visas can be secured and processed. International applicants may contact the Office of International Programs and Student Exchange regarding their I-20, visa, arrival, or orientation at 570-422-2863.

## Housing for International Students

All international students (except those attending with spouse or children) may apply to live on campus in an ESU residence hall and eat in the university dining room OR they may live off campus. However, students choosing to live off campus are responsible for finding their own housing. University housing is limited and freshmen undergraduate students have first priority for university housing. Do not assume that you have university housing unless you receive a contract from University Housing.

## Undergraduate Students Admitted to a Graduate Course

An ESU undergraduate student may be allowed to take a maximum of six (6) graduate credits provided the following criteria are met: 1) satisfaction of the quality point requirements for admission with full graduate standing to the department offering the course work. (For most departments the minimum QPA in the major is 3.0 and a 2.5 QPA overall. For education programs the minimum overall QPA is 3.0.); 2) verification of having senior class status (completion of 96 credits); 3) approval by the instructor of the class; 4) approval of the dean of the graduate school. Approval to Enroll cards
Summary of University Fees Per Semester (2002-2003 Fees)
Recurring Fees
Type of Fee Amount/Semester
Full-time, Pennsylvania Residents (9-15 semester credit hours) ..... \$2,627.00
Full-time, Pennsylvania residents taking more than 15 ..... \$292.00
semester hours pay this additional fee per semester hour
Part-time Pennsylvania residents taking fewer than 9 semester ..... \$292.00 hours pay at the following rate per semester hour
Instructional Technology fee for full-time Pennsylvania ..... \$50.00 residents
Instructional Technology fee for part-time Pennsylvania ..... \$25.00 residents
Full-time, out-of-state residents ( $9-15$ semester credit hours) ..... \$4,204.00
Full-time, out-of-state residents taking more than 15 semester ..... \$467.00 hours pay this additional fee per semester hour
Part-time, Pennsylvania residents taking fewer than 9 ..... $\$ 467.00$ semester hours pay at the following rate per semester hour
Instructional Technology fee for full-time non-residents ..... $\$ 75.00$
Instructional Technology fee for part-time non-residents ..... $\$ 38.00$
General Fee for full-time students (same for both Pennsylvania ..... \$427.50residents and non-residents)
General Fee for part-time students (same for both ..... \$47.50
Pennsylvania residents and non-residents) pay at the following rate per semester hour
Summer Sessions Fees 2003(Subject to change without notice.)
Basic Fee

| Pennsylvania Resident | per semester hour | $\$ 292.00$ |
| :--- | :--- | :--- |
| Out-of-state Resident | per semester hour | $\$ 467.00$ |
| General Fee | per semester hour | $\$ 47.50$ |

## Fees and Deposits, 570-422-2800 or 800-378-6732

## Financial Obligations

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, non-payment, 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.

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 his/her 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.

## Graduate Students Taking Undergraduate Classes

According to university policy, the graduate student who enrolls for undergraduate credits, i.e., student teaching, will be charged at the undergraduate rate. A graduate student taking a mix of credits will be charged at a rate based on the predominant credits. Thus, a graduate student taking nine (9) graduate credits and six (6) undergraduate credits would be charged at the full-time graduate rate. A graduate student taking twelve (12) undergraduate credits and six (6) graduate credits would be charged as a fulltime undergraduate. This can make a substantial difference in the charges for a graduate student. Please be sure to visit the Center for Enrollment Services, Zimbar Hall, to see how a schedule change in graduate/undergraduate credits will impact your charges.

## Instructional Technology Fee - Summer

| In-state full-time | \$50.00 (maximum charge) |  |
| :---: | :---: | :---: |
| In-state part-time | \$25.00 |  |
| Out-of-state full-time | \$75.00 (maximum charge) |  |
| Out-of-state part-time | \$38.00 |  |
| Room and Board Fees |  |  |
| This charge represents the room fee per semester for students who reside in on-campus residence halls (except the University Apartments). |  | \$1,384.00 |
| Room fee for students residing in University Apartments |  | \$1,509.00 |
| Advance deposit for room |  | \$150.00 |

Only University Apartments residents may choose alternate meal plans or delete meal service; all other students in on-campus housing must participate in either the 19 -meal or 15 -meal plan. A student may make meal plan changes during the first two weeks of the semester only.

Board Only
This charge represents the room and board fee for students who reside in town and eat meals in the university dining hall and for commuting students who eat meals in the dining hall. (Subject to change.)

## ANY 19 meals

(Mon.-Fri.; Breakfast, Lunch \& Dinner;
Sat. \& Sun.; Brunch \& Dinner) w/100 Flex dollars \$789.00

ANY 15 meals
ANY 10 meals
w/100 Flex dollars
$\$ 761.00$
w/100 Flex dollars $\$ 619.00$

All meal plans include $\$ 100$ flex. 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 lapse to the university at the end of each spring semester.

Non-Recurring Fees

| Application Fee (non-refundable) | $\$ 25.00$ |
| :--- | ---: |
| ESU Record Transcript Fee (after first) | $\$ 2.00$ |

Late Registration Fees \$25.00
Late Request for Schedule \$25.00
(Charges apply to students who were registered for
and completed the previous academic semester.)
Late Payment of Fees
$\$ 25.00$
(Charges apply to those who fail to make payment by the due date indicated in billing instructions.)
Bad Check Fee
$\$ 25.00$
This is a handling fee assessed for all checks drawn in payment of fees that are not honored due to insufficient funds.

| Identification Card Fee | $\$ 15.00$ |
| :--- | :--- |
| $\quad$ This is a permanent card which 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 $\$ 10.00$. |  |

Graduation Fee (non-refundable) $\$ 10.00$
Thesis Binding: four (4) copies required. Check with the graduate school for current fee schedule.
(Fall 2002 fee was $\$ 16.50$ per copy.)
Insurance for Graduate Students, 570-422-3463
Insurance for graduate students is available for full-time, U.S. citizens through the Office of the Vice President for Student Affairs, located in the Reibman Administration Building. Insurance for International students is available through the International Program Coordinator. Call 570-422-2863 for information.

## Guidelines for Determining Resident Status for Students, 570-422-3485

(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 (570-422-2800).

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 that office. 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 Enrollment Services 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.

## Detailed Information on Fees

## 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 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 is used to support the university's academic programs need for technology equipment and services.

## Room and Board

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 Enrollment Services, East Stroudsburg University, 200 Prospect St., East Stroudsburg, PA 18301.
Non-recurring Fees
Application Fee
An application fee of $\$ 25$ must be paid by all applicants when submitting
the completed preliminary registration form to initiate application for admission. This payment is not refundable.

ESU Record Transcript Fee
A \$2 fee is charged for the second and each subsequent transcript of records.

Late Registration and Late Payment
A charge of $\$ 25$ is made for late registration and for late payment of fees. Bad Check Fee

Any student who processes a check to the university which is returned unpaid in payment of fees will be subject to a $\$ 25$ bad check fee regardless of the amount of the original check.
Graduation Fee
A fee of $\$ 10$ shall be paid by each candidate to cover the cost of graduation.
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.

## Payment Information

Payment may be made by check, money order, MasterCard, Visa, or Discover. Credit card payments may be made 24 hours a day using our credit card hotline: 1-800-378-6732.

## Delinquent Accounts

No student shall be enrolled, graduated, or granted a transcript of records until all previous charges have been paid.
Refund Policies, 570-422-2800
Refunds are not automatic. Requests for refunds must be submitted in writing to Enrollment Services not later than one month after the date of
official withdrawal. Refunds are issued to the student in the form of a check unless the payment was made using a credit card. In the case of a credit card payment, funds are returned to the card used for the original transaction.

## 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 below. (Subject to change.)

| Refund (\%) | Period of Attendance |
| :--- | :--- |
| 90 | First week |
| 80 | Second week |
| 70 | Third week |
| 60 | Fourth week |
| 50 | Fifth week |
| No refund after fifth week |  |

First-time, first-semester students attending East Stroudsburg University who totally withdraw will have their semester charges pro-rated as required by the Higher Education Amendments of 1992. Copies of the pro-rata refund policy may be obtained in Enrollment Services.

Federal guidelines for the proration of student financial aid awards to students who totally withdraw from the university part-way through a term usually do not coincide with the above refund policy. Students contemplating mid-term withdrawal from the university should first contact 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 pro-rated student financial aid awards.

## 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

## Financial Aid, 570-422-3340

Forms of Financial Aid for Graduate Students
। Loans
। Student Employment
। Scholarships
। Graduate Assistantships

## Tuition Payment Plan

A tuition payment plan through Academic Management Services, Inc., is available at ESU to all students. 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. Both part-time and full-time students are eligible for this tuition payment plan. The cost of the plan is $\$ 60$ (subject to change). There are no other fees or interest charges. Enroll online at <www.TuitionPay.com.>

## Student Loans 570-422-3340

The East Stroudsburg 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. during the academic year and 8:00 a.m. to 4:00 p.m. during the summer. Please call 570-422-3340 or 1-800-378-6732 to schedule an appointment. Prospective graduate students should see Enrollment Services for the regulations and processes required in order to determine eligibility for loans and University Student Employment programs.

Enrollment Services administers the federal educational loan programs available to graduate students. Applicants must complete and submit the Free Application for Federal Student Aid (FAFSA). Students are encouraged to submit the FAFSA online at <www.fafsa.ed.gov>. Recipients must be enrolled for at least six (6) credits of graduate-level class work and must maintain satisfactory academic progress. 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 students cease half-time enrollment (six (6) credits per term). Unsubsidized Federal Stafford Loans substitute for the student contribution 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. Interest rates are adjusted each year. Graduate students doing graduate-level course work may borrow up to $\$ 18,500$ per year with the first $\$ 8,500$ being subsidized, if eligible, and the balance being unsubsidized. Graduate students enrolled in undergraduate-level course work should contact Enrollment Services to determine eligibility. Total borrowing amounts for the loan term, however, cannot exceed the cost of education less other financial assistance.

After your completed application is received and processed, information from the FAFSA will be electronically transmitted to ESU. Enrollment Services will determine your eligibility for financial aid. If you indicated that you were interested in a Federal Stafford Loan, ESU will pre-certify a loan for you. New borrowers will be forwarded a Master Promissory Note (MPN) that must be completed, signed and returned to the guaranty agency before any funds will be forwarded to the university.

## Teacher Certification Students

Students enrolled in a post-baccalaureate teacher certification program are eligible for federal Stafford Loans at the undergraduate level.

Students simultaneously enrolled in a master's degree program and teacher certification should check with the Center for Enrollment Services regarding their eligibility for student loans.

## 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 applications are selected because the information on the FAFSA 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 Social Security Administration (SSA-1099 Forms), and other records that will substantiate sources of income available. If a file is selected for verification, Enrollment Services will request the required information from the applicant. Failure to supply this information will result in the cancellation of all financial aid. 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.

## Satisfactory Academic Progress Policy

To be eligible for federal financial 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).

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

## 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:

W/Z 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 the student originally failed will be counted toward academic progress.

## Academic Probation

A matriculated graduate student's eligibility for federal loans on academic probation may be affected. Students on academic probation should contact Enrollment Services to determine the impact upon their eligibility for federal aid.

## Academic Dismissal/Suspension

Academically dismissed students who have been readmitted are not automatically reinstated for financial aid. They must reapply for financial aid.

## Simultaneous Enrollment in Undergraduate and Graduate Classes

ESU and the federal government use different rules and regulations to
classify students as undergraduate or graduate. If a graduate student enrolled in a graduate degree program takes six (6) credit hours of undergraduate course work and only three (3) credit hours of graduate course work, under federal aid rules the student is considered an undergraduate student and is only eligible for the maximum amount of federal aid for undergraduate students. There is a significant difference in the amount of federal loan aid available to an undergraduate student and a graduate student. Students who are classified as graduate student in fall and undergraduate student in spring may find that they are only eligible for a small fraction of the federal aid that they would be eligible for in spring if they were classified as graduate student.

## Certification Only Students

Students enrolled in post-baccalaureate certification programs and not simultaneously enrolled in a graduate degree program may not be eligible for federal aid. Check with Enrollment Services to determine your eligibility for federal financial aid.

## Student Employment 570-422-3340

The Center for Enrollment Services administers the University Student Employment program, which provides an opportunity for students to earn money for personal expenses. Students usually work 140 hours per semester. Students applying for University Student Employment must complete the Free Application for Federal Student Aid (FAFSA) and should check "yes" to the appropriate questions.

## Scholarships

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 private endorsements. Additional information on scholarships is available online at <www.esu.edu/finaid>.

## Graduate Assistantships 570-422-3536

The Office of Graduate Studies and Research administers the graduate assistant program. There are five (5) types of graduate assistantships: academic graduate assistantships, administrative graduate assistantships, resident hall graduate assistantships, diversity graduate assistantships, and Frederick Douglass Institute Scholar graduate assistantships. All five (5) categories of graduate assistantships are based upon merit and not financial need.

Academic graduate assistantships are available for all graduate degree programs. Each graduate degree program selects a number of highly qualified students in the degree program for these graduate assistantships
and the students work with various faculty members in the department. Students interested in an academic graduate assistantship should contact the graduate coordinator of the degree program.

Administrative graduate assistantships are awarded to qualified students by the various non-academic departments such as Registrar's Office, Admission Office, Financial Aid Office, various sports coaches, etc. Students interested in administrative graduate assistants should contact one of the departments for an interview. Administrative graduate assistantships are open to qualified students from any degree program.

Resident hall graduate assistantships require the student to live in one of the on-campus resident halls and provide services as needed by Office of Student Affairs in the management of the dorms. Resident hall graduate assistantships require that the student is available weekends and evenings. In addition to the stipend and waiver of basic tuition provided to all graduate assistants, Resident hall graduate assistantships provide for room and board. Resident hall graduate assistantships require that the student is available one week before the start of classes for training and orientation. For information on Resident hall graduate assistantships, call 570-422-3138.

Diversity graduate assistantships are awarded to outstanding students from underrepresented groups. Students interested in applying for a diversity graduate assistantship should contact the graduate school or apply online. Diversity graduate assistants will be placed in an academic or non-academic department depending upon their skills and abilities and the needs of the university.

Frederick Douglass Institute Scholar graduate assistantships are awarded to persons from underrepresented groups who demonstrate potential for leadership and the ability to promote unity in a civil society. Applicants for Frederick Douglass Institute Scholar graduate assistantships should have a demonstrated record of leadership, social involvement, and commitment to education. Frederick Douglass Institute Scholars will be placed with various administrators and academic departments and provided the opportunity to enhance their leadership skills during their tenure at ESU. Contact the graduate school or apply online.

All graduate assistantships provide for stipends ranging from \$2,500 to $\$ 5,000$ for the academic year, plus a waiver of basic tuition. New graduate assistantships are awarded for the fall and spring terms, except for Cardiac Rehabilitation academic graduate assistantships which are awarded in the summer post-session.

Graduate assistantships may be renewed with the recommendation of the awarding department for a maximum of four terms. Graduate assistantships may be renewed during the summer term, but this term counts toward the maximum of four terms.

A graduate assistantship is in part a merit scholarship and in part a job. You must work from 10 to 20 hours a week in an academic department or
a campus office. Graduate assistantship assignments vary but may include research, lab work, and administrative responsibilities. The amount of the stipend depends upon the hours of work per week required of the student. Full-time graduate assistantships require 20 hours of work per week and the stipend is $\$ 5,000$ per academic year (fall/spring). Part-time graduate assistantships require 10 hours of work per week and the stipend is $\$ 2,500$ per academic year (fall/spring). The stipend is paid for actual hours worked. A student who does not work the full amount of hours required by the graduate assistantship will only be paid for actual hours worked.

## How to Apply for a GA

Complete the online Application for a Graduate Assistantship or fill out the paper application and return it to the Graduate Office. Diversity and Frederick Douglass Institute graduate assistantships require an essay. To be eligible for a graduate assistantship, you must be admitted into a graduate program with at least a 2.5 overall undergraduate GPA and a 3.0 in the major and be registered as a full-time student when your graduate assistantship begins. Please note: There is a limited number of graduate assistantships and they are awarded on merit and the needs of the department or office. Some departments and offices review all of the applications for graduate assistantships and select from this pool of candidates, but other departments and offices expect students interested in graduate assistantships to contact them for an interview. Students interested in an academic graduate assistantship should contact the graduate coordinator of the degree program to determine how that department awards graduate assistantships. Students interested in an administrative graduate assistantship should contact the department or office directly to arrange for an interview. Please remember that meeting these minimum criteria does not mean you will be awarded an assistantship. If you are selected for a graduate assistantship you will receive a letter from the graduate school advising you of the type and details of the assistantship. If you want this assistantship, you must return the response letter enclosed with the award letter. Failure to return this response letter as requested will result in the cancellation of the offer of a graduate assistantship.

Only the graduate school can authorize the awarding of a graduate assistantship. If you do not receive an offer of a graduate assistantship directly from the graduate school, you do not have a graduate assistantship. Do not
assume that you have a graduate assistantship based upon an interview with the department or office.

For additional information, call the graduate school at 570-422-3536 or visit the graduate school website. For information on Resident hall graduate assistantships, call 570-422-3138.

## Academic Policies

## General Graduate School Regulations

## Academic Integrity Policy

East Stroudsburg University is committed to promoting a climate of openness and honesty among all members of the university community. In order to foster an environment suitable for the development of academic excellence, it is imperative that all members of the academic community uphold the principles of academic integrity in all scholarly endeavors. Academic integrity implies that students are solely responsible for their work and actions while members of the ESU community. In accordance with this pursuit, students are responsible for knowing the rules and conditions under which university credit may legitimately be obtained. Violations of academic honesty will be viewed with the utmost seriousness and appropriate sanctions will be applied.

It shall be deemed an academic offense if a student commits any of the following:

। During a test or examination, using any material not authorized by the instructor.
। Providing or receiving assistance in an examination, test, assignment, paper or project in a manner not authorized by the instructor.
। Buying, selling, engaging in unauthorized exchange, or using any tests or examinations in advance of their administration.
। Buying, selling, engaging in unauthorized exchange or improperly using any assignments, papers or projects.
। Present as their own, for academic credit, the ideas or works of another person(s), scholastic, literary or artistic, in whole or in part, without proper and customary acknowledgment of sources and in a manner which represents the work to be their own.

। Falsifying or inventing information, data, or research material.
। Obtaining information in a way contrary to the stated policies of the course, and/or the university as stated herein.
। Attempting to bribe or coerce any university employee or student in order to gain academic advantage.
। Collusion with others in order to circumvent academic requirements.
। Substituting for another student, or arranging for substitution by another student, or misrepresenting oneself as another person during a test or examination whether in person or using electronic or telephonic communication.
। Altering, changing, or forging university academic records, or forging faculty, staff, or administrative signatures on any university form or letter.
। Submitting any false record in pursuit of university credit.

## Academic Status: Academic Warning, Probation, and Dismissal

Graduate students at East Stroudsburg University are expected to maintain high academic standards. Students failing to make satisfactory progress are subject to academic dismissal. All graduate students are required to have a minimum quality point average of 3.0 at all times. In addition to this requirement, the academic standing of a student is based upon the number of grades below a B that a student has on his or her graduate transcript. If a student's QPA falls below 3.0 regardless of the number of grades below a $B$, the student is placed on academic probation. Individual programs may have more stringent requirements than those listed. Delay or failure of the university to notify the student of their academic status does not exempt the student from the various restrictions and/or penalties resulting from receiving a grade or grades lower than a B or a QPA lower than 3.0.

Academic Warning
This is the first notice a student will receive that their academic performance in graduate studies is less than acceptable. Upon receipt of the first grade below B in a 3-credit-hour graduate course,* the student will receive a "letter of academic warning" from the graduate dean, with a copy forwarded to the student's graduate coordinator. In some departments, a student who is placed on academic warning is no longer eligible to receive a graduate assistantship. Students on academic warning should evaluate whether they will retake the class with the low grade. Students on academic warning should plan their next semester carefully to maximize their academic success.

This is the second notice a student will receive that his or her academic performance in graduate studies is less than acceptable. Upon receipt of the second grade below B in a 3 -credit-hour graduate course,* the student will receive a "letter of academic probation" from the graduate dean, with a copy forwarded to the student's graduate coordinator. In cases where the student has received more than one grade below B in the same semester, academic probation will be imposed without "academic warning." While on academic probation the student cannot take more than nine credit hours in a term. Students on academic probation are not eligible for a graduate assistantship. Furthermore, during this period, prerequisite classes for graduate work will not be waived and requests for independent study, home study, internships, theses and other similar non-classroom courses will be carefully considered and may be disapproved, if there is concern about the student's ability to meet the academic standards necessary for the class. Students cannot graduate if they are on academic probation.

## Academic Dismissal

Upon receipt of the third grade below B in a 3-credit-hour graduate course,* the student shall be subject to dismissal from the graduate school. The graduate dean will write a letter of academic dismissal, with copies to the student's graduate coordinator, the chair of the academic department, and the registrar of the university. This dismissal will occur upon receipt of the third grade below $B$ even in those cases where the first, second, and third grades below $B$ were awarded within the same semester.

## Academic Status: Appeals

A student who has been academically dismissed may appeal this decision in writing to the dean of graduate studies and research. Documentation of extenuating circumstances (student illness, death in the family, etc.) must be included. The dean's decision is final.

## Academic Status, Change of

A student may be removed from the status of academic warning or academic probation by repeating the course or courses in which the original grade is less than the grade of B. A repeat course grade will replace the original grade. Graduate studies policy provides that a maximum of six (6) semester hours of credit may be repeated. Some departments permit the student to repeat one three-hour credit class. A student on academic probation who removes one grade less than $B$ will be reclassified to academic warning.

[^0]Academic Status: Exceptions to Grades Less Than a B
Grades less than a B in undergraduate classes taken during the course of a student's graduate studies will not count toward determining academic status.

Grades less than a B in classes that are over six (6) years old (assuming these classes are not counted toward the current graduate degree) will not count toward determining academic status.

Grades less than a B in classes outside the plan of study will not count in determining academic status provided that the student has changed graduate programs and the old grades do not apply toward the new degree program.

In the case where the student receives a grade less than a B in a class outside the plan of study, but has not declared a new graduate degree program, the program graduate coordinator will submit a letter to the graduate dean recommending whether these grades should be counted in determining the academic status of the student. The graduate dean will determine if these grades are to count toward determining academic status.

## Academic Status and Graduate Assistantships

A student's eligibility to receive a graduate assistantship is effected by the student's academic status. If a student is on academic probation ( 2 grades below a B), the student is not eligible to apply for or to continue receiving a graduate assistantship. A student who has a graduate assistantship will be notified of their ineligibility and terminated at the end of the semester in which they are notified of their ineligibility.

Academic Status and Graduation
A student on academic probation is not eligible to graduate.
Applicable Graduate Catalog Policy
A graduate student is subject to the academic requirements and regulations contained in the catalog in effect during the semester in which the student's plan of study is filed or in the semester in which the student completes 12 credits of graduate course work at ESU (excluding transfer credit), whichever comes first.

A student who changes his or her degree program and files a new plan of study is subject to the program requirements as outlined in the catalog in effect at the time a new plan of study is accepted by the graduate dean. Amendments to a plan of study to drop or add classes do not count as a change of degree program.

A student who discontinues attendance for two or more consecutive semesters (not counting the summer semester) will be subject to the regulations and program requirements in effect when the student re-enters the university, unless the student has filed a leave of absence request that has been approved by the graduate coordinator and the dean of graduate studies.

This includes students who are dismissed from the university for academic or disciplinary reasons.

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.

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, a good faith effort will be made to notify all students of the change at least a full semester in advance and through several venues before the change goes into effect.

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.

## Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Governors of the State System of Higher Education, by the chancellor or designee of the State System of Higher Education, or by the president or designee of East Stroudsburg University. Further, it is not possible in a publication of this size to include all the rules, policies and other information that pertain to the student, East Stroudsburg University, and the State System of Higher Education. More current or complete information may be obtained from the appropriate department, school, or administrative office. Each semester, the Class Schedule and Student Information Handbook outlines changes in academic policy and procedure and current deadlines that are of importance to students.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgment or a limitation on any rights, powers, or privileges of the Board of Governors of the State System of Higher Education, the chancellor of the State System of Higher Education, or the president of East Stroudsburg University. The Board of Governors, the chancellor, and the president are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and East Stroudsburg University or the State System of Higher Education. The relationship of the student to East Stroudsburg University is one governed by statute, rules, and policy adopted by the Legislature, the Board of Governors, the chancellor, the president, and their duly authorized designees.

## Continuing Education or In-Service Courses

Graduate students may be granted approval to include in their programs of study up to six (6) credits of workshops or in-service course work sponsored and authorized by East Stroudsburg University. Approval for the inclusion of such credit in a graduate program is required before taking the course and is dependent upon approval of each student's individual program graduate coordinator.

## Course Credit

Course credit is measured in semester hours. A semester hour represents academic work equivalent to one 50 -minute session 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 field work 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 period of concentrated classroom instruction per week.
1 The third number shows the periods of laboratory, field, or other supervised activity work per week.
For example BIOL 562 MARINE BOTANY (3:2:3) is a course in Biology that earns three (3) semester hours of credit. It meets for two periods of class lecture and three (3) periods of laboratory per week for one semester. ELED 575 (3:3:0) is a three-credit class that meets three (3) periods of class lecture and does not have a laboratory or other supervised activity.

Departments may list when the course is normally scheduled by indicating this information in paraphrases following the description of the course, i.e., "Fall," "Spring," "Fall odd-years," "Summer," etc. Courses may be taught other than the semester listed for a number of reasons. This information is subject to change without notice. Students should check with the department to determine when a course will actually be taught.

## Credit Hour Load

Full-time graduate status is nine (9) credit hours of graduate courses per semester. The maximum credit hour load for students devoting full time to their studies is fifteen (15) credit hours during a semester, seven (7) credit hours during the main summer session, and four (4) credit hours each during
the summer pre-session and the summer post-session. Any exceptions to the maximum credit hour load restrictions must be approved by the dean of graduate studies.

## Degree Regulations Advisers

The chair or the graduate coordinator of the department of each graduate program will assign each graduate student to an adviser from among the faculty designated for that program. The adviser will (1) direct the student in the formulation of the program, (2) approve course selections and course changes, (3) give guidance relative to examinations for the program, and (4) ascertain that the candidate is meeting the requirements for the degree or certificate. The assignment of an adviser does not relieve the student of the primary responsibility for adequate program planning and for progress toward completion.
Degree Candidacy
A student may be authorized to take graduate classes as (1) a nondegree student, (2) a degree-status student or (3) a post-baccalaureate certification student. Non-degree students are not admitted to a graduate degree program, cannot be graduated from a degree program, and are not considered degree-seeking students for purposes of financial aid, graduate assistantships, or other purposes. A non-degree candidate must apply for admission to a degree program to be considered eligible for degree status. Non-degree students who complete more than 12 credit hours will not be considered de facto admitted to a degree program.

Post-baccalaureate certification students may be enrolled in only a certification program or simultaneously enrolled in a degree program and a certification program. Post-baccalaureate certification students simultaneously enrolled in a degree program must file a plan of study. Certification-only students do not file a plan of study but must complete all documentation required for certification.

Students admitted to graduate degree programs must file a plan of study as a requirement to be admitted as a degree candidate for that program. Failure to file a plan of study as specified can effect a student's authorization to continue in the degree program.

The following policies govern the acceptance of a graduate student as a degree candidate:

। A degree candidate must have admission with full graduate standing or conditional admission due to required prerequisite course work not taken prior to applying for the degree program. (Conditional admission for low grades or for missing admissions documentation does not qualify for degree candidacy.)
1 A degree candidate must complete at least six (6) semester hours of graduate study at ESU, have a quality point average equal to or
greater than that required for graduation in the particular degree program in which the student desires candidacy (see Requirements for Master's Degree), and not be on academic warning or academic probation. A student is required to file a plan of study no later than the completion of 18 credit hours but is strongly encouraged to file a plan of study after completing 12 credit hours. Submitting a plan of study does not guarantee that the program of study will be acceptable as submitted or that transfer credits will be accepted as submitted. Thus, by filing the plan of study early this allows time for corrections and/or changes. Courses completed that are deemed by the program graduate coordinator or graduate dean not to apply toward completion of the degree will not be accepted for inclusion in the degree program.
। When the degree candidate files his or her plan of study, he or she will indicate a choice of the thesis or non-thesis degree program. Students are encouraged to obtain approval for a thesis topic as early as possible in their graduate studies. It is highly recommended that students have their thesis or final project approved prior to completing 18 credit hours.
। To complete the application to the Graduate School Office for degree candidacy, the student must submit an Application for Candidacy and Plan of Study for Master's Degree form (available from the graduate coordinator, the Graduate School Office or the ESU website) indicating all courses to be taken for the degree, including deficiencies established upon initial admission, and approved by the adviser, the graduate coordinator, and the dean of the graduate school. Subsequent changes in an approved program must be submitted on an Amendment to the Plan of Study form available from and approved by those mentioned above. It is important to remember that when the student applies for graduation, his or her graduate degree check is based upon the plan of study that the student filed. It is important that all changes be made in a timely manner and that all incomplete grades be removed.
1 Approval of the above application by the adviser, graduate coordinator, and dean of the graduate school is required; however, minimal satisfaction of quantitative requirements does not guarantee approval of degree candidacy.
। If the student includes transfer credit on the plan of study, official transcripts of transfer credits must be submitted to the Graduate School Office. A maximum of six (6) semester hours may be counted toward degree completion (see Transfer Credit). The last course of a student's degree program must be taken at East Stroudsburg University unless prior approval is given by the dean of graduate
studies.

## Disciplinary Procedures (Nonacademic)

A graduate school disciplinary procedure document governing nonacademic matters is available at the Graduate School Office, Rosenkrans Hall, or from Judicial and Commuter Student Affairs in Flagler/Metzgar.

## Double Degrees and Certification Programs

Students who desire to obtain more than one graduate degree from ESU must be accepted into each graduate program from which they wish to obtain a degree and file a plan of study for each program. Undergraduate prerequisite classes may be used to satisfy the requirements of either or both degree programs. A graduate class cannot be used to satisfy the requirements of both degree programs simultaneously.

Students who desire to obtain a post-baccalaureate certificate and a graduate degree can use the same graduate class to satisfy requirements for either or both programs.

## Full-time Status

The minimum number of credits needed to maintain status as a full-time graduate student is nine (9) credits per semester during the academic year. During the summer session any combination of classes that totals nine (9) credits is a full-time load. For example, a student who takes three (3) credits in the pre-session, six (6) credits in the main session, and no credits in the post-session is a full-time graduate student for the entire summer session even though he or she does not enroll in any classes during the post-session. Independent study classes, special project classes, and theses classes count toward fulfilling a student's full-time status.

A graduate student can take undergraduate classes but only three (3) credits of undergraduate classes per semester (fall/spring) can be counted toward the student's full-time status. Furthermore, to count toward the student's full-time status the undergraduate class must be a 300 - or 400-level required prerequisite class for the student's graduate degree.

## Grade Reports

Student grade reports are distributed at the end of the semester. Semester grade reports are mailed to the student's permanent address of record. The student is required to notify the Registrar's Office or the Graduate School Office immediately of any change in the student's local or permanent address, phone number, or e-mail address.

Maximum Timeframe for Completing Degree Requirements/ Leave of Absence

Graduate students are required to complete all course work and degree
requirements including examinations, final projects, internships, and theses within six (6) years from the date of the first graduate course taken toward the program degree requirements.

Students who officially change their degree program by filing a new plan of study have six (6) years from the first class taken that counts toward the new program degree requirements.

Students who are dismissed for academic or non-academic reasons are required to complete their degree program requirements within six (6) years from the date of their first graduate course taken toward the program degree requirements. The time during their academic suspension counts toward the maximum time limit.

If a student obtains an official leave of absence approved by his or her department and the graduate dean, the time during the leave of absence does not count toward the maximum timeframe for completing degree requirements. A student who is not able to take classes for two or more semesters (not counting the summer session) due to medical reasons, military service, or other reasons beyond the control of the student, may request a leave of absence from the degree program. The student should submit his or her request to the program graduate coordinator. The graduate dean will review and approve or disapprove all requests for leaves of absence.

Students may petition for an extension of the maximum time for completing degree requirements. The petition should originate with the student's program degree graduate coordinator and is forwarded to the graduate dean for final approval or disapproval.

Under unusual circumstances a student may petition for an extension of the maximum time for completing degree requirements provided the student can demonstrate that his or her knowledge of the course subject matter that is over six (6) years old is current and accurate. Proficiency and knowledge must be demonstrated through documentation such as non-credit, professional training or by examination by the faculty of the department. The petition should originate with the student's program graduate coordinator and is forwarded to the graduate dean for final approval or disapproval.

## Minimum Requirements for the Master's Degree

। Admission to degree candidacy.
। Candidates for all graduate degrees must achieve a 3.0 quality point average (on a 4.0 scale) in all graduate course work that counts toward the degree program.
। Completion of a minimum of 24 semester hours for those students in a thesis program and a minimum of 30 semester hours for those students in the non-thesis program plus any additional requirements as determined by the department. (Degree program may require more than the minimum number of credit hours. Some departments require up to 45 semester credit hours.)

1 Completion of the degree program within a six-year period. Courses taken over six years prior to the time of completion of all degree requirements may not be accepted as part of a degree program. Exceptions to this time limit must be specifically petitioned to the graduate coordinator with approval by the dean of the graduate school (see Maximum Timeframe for Completing Degree Requirements).
। Satisfactory completion of a written comprehensive examination in the major field (when required) during the term in which the student completes the course work leading to the degree except by special arrangement with the department chairperson.
। Satisfactory completion of a final oral examination (when required).
। Completion and approval of the thesis or individual research project. (See coordinator for thesis guidelines.)
। If applicable, satisfaction of the foreign language or research tool requirement.

## Quality Point System

Grade Quality of Academic Work Number of Quality Points

| A | excellent | 4 | quality points |
| :--- | :--- | :--- | :--- |
| B | good | 3 | quality points |
| C | fair | 2 | quality points |
| D | poor | 1 | quality point |
| E | failing | 0 | quality points |

## Readmission to the Program/Change of Programs

A student who is dismissed for poor academic performance may reapply for admission to the graduate program after one year from the date of their dismissal. The student's application for readmission will be reviewed but readmission is not guaranteed. The department may deny readmission. In departments where the program of study requires students to complete the degree requirements in a cohort, the department may require the student to reenter the cohort and take all classes in the degree program or the department may decide that it would not be practicable for the student to enter the cohort at a different point and, therefore, refuse readmission. Students who are readmitted must remove two of the C grades from their academic transcript by retaking the classes prior to graduation.

Students who are dismissed from one program may apply for admission to another graduate program after waiting for a period of one year from their date of dismissal. A student who is accepted into another program does not have to retake the courses in which the student received grades below a B. If admitted to another program, the student will be admitted as a conditional
student. If the student receives a grade in a graduate course less than a B during their first 12 credits of graduate study in their new program, the student will be dismissed from graduate studies.
Student Responsibility for Knowledge of Rules and Deadlines
Students are held individually responsible for the information contained in this catalog and meeting deadlines for graduation. All parts of the catalog are subject to change from year to year as university rules, policies, and curricula change. Failure to keep informed of such changes will not exempt students from whatever penalties they may incur.

## Graduate Records Policies

## Application for Graduation

Qualified degree candidates must submit the Application for Graduation with the required signatures and a check for the graduation fee to the Graduate School Office within the following time frame:

Expected Graduation
Spring Semester (May)
Summer Sessions (August)
Fall Semester (December)

Apply Between
December 1 - March 1
April 1 - May 9
July 1 - October 1

Because this information is used for the graduate diploma, the graduate school requests that the application form be typed to avoid any errors.

Changes in Registration
A student's course schedule should be regarded as a contract. Courses may be added during the first ten (10) class days (first four days of summer sessions) of the semester by completing an appropriately signed Approval to Enroll card and filing the card in the Records Office. All changes in course enrollments must be approved by the dean of the graduate school.

Registration, Transcripts, and Grades 570-422-3537
To register for courses, request ESU transcripts (must be in writing or in person), or to check on grades, contact the Office of the Registrar, Reibman Administration Building, East Stroudsburg University, East Stroudsburg, PA 18301-2999.

## Policies Governing Graduate Courses

## Attendance

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 Office of the Registrar will notify instructors of unusual circumstances of health or family problems, if known, and if the absences are in excess of one day.

Students are responsible for every course on their class schedule at the start of the semester. If a student does not attend the first class meeting of the semester and is not present at the start of the second meeting, the professor may give that student's place to another student; however, if this occurs, the student must still take the necessary formal drop action personally. Changes in schedule cannot be effected by nonattendance in class; nonattendance without consequent formal drop action will result in a failing grade.

## Auditing Courses

Auditing is permitted only if the student has been admitted and has registered and paid the regular fees for the course. A student 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. A student who audits a course cannot repeat the course for credit.

## Course Repeats

A maximum of six (6) credits hours of graduate course work can be repeated. When a course is repeated, the new grade will replace the previous grade for the course regardless of which is the higher grade.

## Courses Credited Toward Partial Completion of the Degree Program

Only approved graduate courses from accredited institutions with the letter grades of A or B will be credited as fulfilling the requirements of course work required for the graduate degree program. A grade of "pass" in a course graded pass/fail will be credited as fulfilling the requirements of course work required for the graduate degree program provided that the grade of "pass" is officially equivalent to no less than the grade of B. Grades lower than B such as C, D, E, or F (from other institutions) will not be transferred.

If a student receives two grades below a B, the student is placed on academic probation. Students are not allowed to graduate while on academic probation. Thus, this has the same effect of not counting more than three credits of $C$ grades as fulfilling the requirements of course work required for the graduate degree program

## Incompletes

The maximum time period for completing course requirements to remove incomplete (I) grades other than thesis and internship classes is two years from the end of the session in which the I grade was assigned. After that time, an incomplete grade can be removed from the record only by registering for and
completing the course with a grade of A, B, C, D, E, P, or F. Incomplete grades that are changed to a grade of $C$ or lower will count toward determining the academic status (academic warning, probation, or dismissal) of the student. After two years from the end of the session in which the incomplete grade was assigned, the student will have to retake the class to remove the incomplete grade. Incomplete grades for thesis and internship classes may be extended beyond the two-year maximum time period with written approval of the program graduate coordinator and graduate dean.

With the approval of the instructor and graduate coordinator of the student's degree program the maximum time period for completing course requirements in thesis classes may be extended.

## Transfer Credits

No more than six (6) semester credits of graduate level course work with A or B grades completed at another accredited graduate school may be transferred and applied to a graduate degree program at East Stroudsburg University. Graduate courses transferred from another university must be acceptable to the graduate coordinator of the program and the dean of graduate studies. Transfer classes with pass/fail grades cannot be transferred and applied to a graduate degree program at ESU unless the transcript clearly indicates that the grade of P or "pass" is equivalent to no less than the letter grade of B. Undergraduate credit earned at another institution or at ESU cannot be transferred or counted toward fulfilling a graduate course requirement. Courses that are dual listed as graduate and undergraduate credit can only be transferred as graduate credit if (1) at the time that the student took the class he or she had completed all requirements for the fouryear undergraduate degree, and (2) at the time the student took the class he or she was admitted as a graduate student at the institution offering the class. However, at the discretion of the degree program department with the approval of the dean of graduate studies, credits may be accepted to satisfy deficiencies in special subject matter even though they do not meet the criteria for transfer to the graduate course work of the degree program.

To have transfer credits applied to your program and placed on your transcript:

1 The transferred course(s) must be listed on the Plan of Study or the Amendment to the Plan of Study which contains approval signatures of the student, the student's adviser, graduate coordinator, and the dean of graduate studies; and
1 An official transcript of the transferred courses must be forwarded by the institution where the course was taken to the Graduate School Office, 218 Rosenkrans West, East Stroudsburg University, East Stroudsburg, PA 18301-2999.
। Transfer credits with pass/fail or satisfactory/unsatisfactory grades cannot be transferred unless the official transcript indicates that a
pass grade is not less than the grade of $B$.

## Withdrawals

Course withdrawals, subject to the conditions described below, may be accomplished by completing a drop card, obtaining the instructor's signature, and paying a drop fee if applicable. Withdrawals must be officially recorded at the Records Office. Any student who discontinues attendance in a course without formally withdrawing will be assigned a final grade of E .

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. After the first week, through the tenth week, a student who withdraws will receive a grade of W for that course on the student's permanent record. After the tenth 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 graduate 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.

Time periods for withdrawals during a regular semester, quarter session, and summer sessions:

| Type of | Regular | Quarter | Summer | Sessions |
| :---: | :---: | :---: | :---: | :---: |
| Action | Semester | Semester | 3 weeks | 6 weeks |
| No record | 1st week | 3 days | 1st day | 2 days |
| W grade | 2nd to 10th weeks | 4th day to 5th week | 2nd day to 2nd week | 3rd day to 4th week |
| No withdrawal* | 11th to 15th weeks | 6th to $7^{1 / 2}$ weeks | 3 rd week | 5th and 6th weeks |

## Research Requirement: Thesis or Problem

Some degree programs require the completion of a thesis. The thesis candidate conducts a highly formalized research effort using either a qualitative or quantitative research methodology. In some cases the student may combine elements of both research methodologies. The thesis requires the student to state a research question or problem, review the literature related to the research question, select an appropriate methodology to gather data, analyze the data and answer the research question.

The research demands comprehensive understanding of the defined problem and requires expert knowledge, powers of scholarship, and writing skills. Quantitative methodologies utilizing statistics for the purpose of data analysis and hypothesis testing may require knowledge of and abilities in computer and statistical skills.

The non-thesis candidate conducts an applied research study, a portfolio project, an internship, or other terminal project. The design of the project focuses on a practical problem in an operational setting or the acquisition
of skills, knowledge, and abilities to prepare the student to enter into the professional discipline. This research requires expert knowledge of research, methods of inquiry, extensive knowledge of and skills in the discipline and command of the written language.

To prepare the student to complete this requirement, the graduate student's degree program requires him or her to complete a research methods course. The student is expected and strongly encouraged to register for this course, Introduction to Research 570, in his or her major field during the first term of enrollment following admission to the degree program. This course orients the student to graduate study and research in the major field and provides an opportunity for planning specific deadlines and procedures for completing the requirements for a master's degree.

The graduate school Thesis Guidelines is available through the graduate coordinator, the graduate school or ESU's website. The graduate school publishes
a set of Thesis and Final Project Guidelines, which are applicable to all students. Each department will publish specific guidelines for students in their discipline. The student should contact his or her individual graduate coordinator for specific thesis and final project guidelines. All theses must be reviewed and approved by the graduate dean. The graduate dean reviews and approves theses after the student has completed oral examinations regarding the thesis, but before the thesis is bound. After the graduate dean approves the thesis the student submits four (4) copies to the Graduate School Office for binding. (Additional copies should be submitted at the same time if the student wants personal copies.) Copies of the theses submitted for binding must be submitted on 20 -pound bond, $25 \%$ cotton content paper and of high quality print. (The minimum cotton content is $25 \%$, but the cotton content may be higher. The minimum weight of the paper is 20 -pound bond and the maximum is 28 -pound bond.) The student pays for the cost of binding his or her thesis. These copies are due at least two weeks before graduation to ensure fulfilling degree requirements. Failure to submit copies of the thesis for binding before this deadline can delay the student's diploma.

## Comprehensive Examinations

A degree candidate may be required to take a comprehensive written examination in the major field not earlier than the term in which he or she completes the course work approved in the plan of study. In special cases, a student may petition the department to take the comprehensive examination after completion of eighteen semester hours and achieving Degree Candidacy.

The comprehensive examination includes the areas of general and professional education as well as the field of specialization, although major emphasis will be on the latter.

The candidate who fails a comprehensive examination may petition the department for a re-examination. A failure eliminates the student from the degree program unless re-examination is granted.

The customary date for completion of comprehensive written examinations for those departments that require them are:

The first Saturday in November
The first Saturday in March
The second Saturday in June
It is the student's responsibility to notify the chair of the department and his or her adviser at least one month prior to the date on which the student plans to take the examination.

## Oral Examinations

Most of the degree programs require degree candidates to take an oral examination in the last term of residence. Re-examination of a candidate
following an unsatisfactory oral examination is at the discretion of the examining committee and at a time and under such circumstances as they may prescribe. Failure to pass the final oral examination may delay a student's graduation.

For candidates in a thesis program the examination is primarily related to the thesis although other areas pertinent to the degree program may be examined. The examining committee may require changes or alterations in the thesis as a result of the discussions during the oral examination.

For the candidate in a non-thesis program the examination is primarily related to the subject matter covered in the courses in the degree program although the committee may also examine the area of the candidate's individual research project.

The oral examination is scheduled by the candidate and his or her adviser through the department chairperson and the appropriate faculty. All oral examinations must be scheduled at least two weeks in advance of the exam day, and must be completed no later than two weeks preceding the candidate's commencement exercise. Thesis candidates must provide members of his or her thesis committee unbound copies of the complete thesis at least five weekdays prior to the scheduled date of the oral examination. Also, the student should allow sufficient time for corrections, review of corrections by the committee, and final review by the graduate dean.

## Student Life and Student and Community Services

## 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.

## Alumni Association

The Alumni Association is comprised of all graduates of the university. The 25 -member volunteer Board of Directors works closely with the university to promote the general interest and welfare of the university, foster fellowship among the alumni, promote a closer relationship with the people of the campus community, and recommend prospective students to the university.

The Alumni Herald newspaper, published four times a year, is mailed to all graduates without cost and contains news relating to alumni, the university, faculty, and students.

The Henry A. Ahnert Jr. Alumni Center is located on Normal Street near Hawthorn Hall and across from Koehler Fieldhouse. A new building and location for the Alumni Center is under construction.

## 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 convenient, easy, and safe way to make purchases and use services on 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, resident hall laundry facilities, library, and campus dining facilities. Students may also use it to gain access to their residence hall. For further information, call 570-422-CARD.

## Career Planning and Placement Services 570-422-3219

Career planning and placement services are offered without charge to all students and alumni. ESU graduate students are invited to contact the office to discuss career or job search plans and to establish a file, including a resume
and information of interest to prospective employers. The Career Services Office is located on the top floor of the University Center. For additional information, visit the office's website <www.esu.edu/careerservices>.

## Continuing Education, Off-Campus Classes, and Act 48 Credit

The Office of Continuing Education is located in Zimbar-Liljenstein Hall. The Office of Continuing Education provides services to non-degree students, students taking off-campus classes, and students interested in Act 48 Credit classes. For further information, call 570-422-3589 or e-mail cesmmr@po-box. esu.edu.

## Counseling and Psychological Services (CAPS) 570-422-3277

The Office of University Counseling and Psychological Services offers a range of counseling services to facilitate and enhance the educational, psychological, and interpersonal well-being of East Stroudsburg University students. 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. Anxiety, career exploration/ indecision, depression, difficulties in interpersonal relationships, eating disorders, family concerns, self-doubt, sexual concerns, and substance abuse are some of the issues students often address through counseling. In addition, the center maintains a library of vocational information materials, study-skill aids, resources, and guides addressing various psychological and interpersonal problems and concerns, and guides/handbooks dealing with various educational and vocational institutions. Lastly, the Graduate Record Examination (GRE), College Level Examination Program (CLEP), Miller Analogies Test (MAT), National Teachers Examination (NTE), and Certified Health Education Specialist Examination (CHES) are administered at least twice a year by the Counseling Center.

Members of the Counseling and Psychological Services staff are licensed psychologists and supervised professionals in graduate training. Their professional training and experience prepare them to deal with a wide range of issues faced by university students. All currently enrolled students are eligible to receive services 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 the CAPS website <www.esu.edu/caps>.

## Disabilities Services 570-422-3954 V/TTY

East Stroudsburg University complies with Section 504 of the Federal Rehabilitation Act and the Americans with Disabilities Act and is committed to ensuring equal educational opportunities for students with disabilities. Appropriate academic adjustments and program modifications will be made for those students who present complete and recent documentation of an identified disability and who request services through the Office of Disability Services.

In addition, individuals with mobility or medical disabilities, which limit their ability to climb stairs, may make an appointment via telephone with a member of the Graduate School Office, which is located on the second floor of Rosenkrans West. In order to accommodate the individual, the graduate school representative will conduct the meeting in the Office of Programs for Academic Support, located on the first floor of Rosenkrans East. Call 570-4223536 to arrange for accommodation.

## Health Services

Only graduate 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 Service Center. Students who leave the university for whatever reason for a period of more than one year are required to complete new health examination forms.

The university employs registered nurses, physicians, and a health educator to care for students' 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 diagnostic testing, which includes lab tests, $x$-rays, etc., are the responsibility of the student.

The Flagler-Metzgar Health Center maintains a dispensary where routine prescription drugs are supplied without cost. Special prescription costs, however, must be borne by the student.

Registered nurses are on duty Monday through Wednesday from 8:00 a.m.
to 8:00 p.m., Thursday and Friday from 8:00 a.m. to 6:00 p.m., and Saturday from 10:00 a.m. to 4:00 p.m. The Health Center is closed when classes are not in session.

The university physician is available to students Monday and Tuesday from 8:30 a.m. to 7 p.m., Wednesday and Thursday from 8:30 a.m. to 4:00 p.m., and Friday from 8:30 am. to 3:00 p.m. During summer session, a physician is on duty from 1:00 p.m. to 3:00 p.m., and a nurse from 8:00 a.m. to 5:00 p.m. During summer session, the Health Center is closed on Saturday and Sunday. In emergency situations, students should contact their personal physician or go to the Emergency Room at Pocono Medical Center. Transportation is available through Campus Police.

## Housing 570-422-3460

University-sponsored housing is available on a limited basis for single graduate students during the academic year. Off-campus housing assistance may be obtained from the Coordinator of Judicial and Commuter Student Affairs at 570-422-3461. Early arrangement for off-campus housing is recommended.

## Learning Center

The Learning Center provides supportive services to the entire ESU community, professional and peer tutoring and drop-in tutoring labs in mathematics, chemistry, physics, economics, and writing are available to all students. The Learning Center is open Monday through Thursday from 8 a.m. to 10:00 p.m. and Friday from 8:00 a.m. to 4:30 p.m. for tutoring, studying, and computer use. For further information call 570-422-3507.

## 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 shows, BBC world news, sports, and talk shows, as well as many music genres such as alternative, classical, top 40's, rap, and contemporary.

## 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.

## Religious Life

Religious organizations on campus include ESU Christian Fellowship and the United Campus Ministry. Religious, cultural, educational, and social programs are sponsored by the religious organizations affiliated with the university. A large number of religious denominations are represented in the East Stroudsburg and Stroudsburg area, and all welcome participation by students. For more information, call the United Campus Ministry at 570-4223525.

## Rose Mekeel Child Care Center 570-422-3514

The Rose Mekeel Child Care Center is an age-appropriate program for children $21 / 2$ to 5 years old. The Center is accredited by the National Association for the Education of Young Children and the Department of Public Welfare.

The Center, located next to Zimbar-Liljenstein Hall, is open from 7:45 a.m. to 5:00 p.m., Monday through Friday during the fall, spring, and summer sessions. The facility is also open for limited enrollment during the January, March and May inter-sessions.

The program is a hands-on, developmentally appropriate program for children between the ages of $21 / 2$ and 5 inclusive. To reserve a space and obtain information about fees, call the Mekeel Child Care Center at 570-4223514. Enrollment is limited.

## 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.

## Speech and Hearing Center

The Speech and Hearing Clinic, located in LaRue Hall, is operated by the Department of Speech-Language Pathology and Audiology 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, and communication problems resulting from hearing loss. Complete audiologic and hearing aid 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. Therapy is free to all community people. Anyone interested in clinic services should contact the clinic director at 570-422-3247.

## Student Government

The Student Senate is comprised of elected student officials, both undergraduate and graduate, and represents the student body in issues related to campus life. Senators from each class and the graduate student body 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 Activities Association. The scope of these organizations is widely varied, including publications, athletics, drama, music, recreation, as well as service, social, cultural, and scholastic honoraries.

## Theatre Program

The university provides a comprehensive program in theatre through the coordination of the Theatre Department and State II, the undergraduate dramatic organization. The program includes four major theatrical productions, a children's theatre, and summer theatre utilizing the university's main and experimental theatres.

## University Store

The University Store, located in the University Center, provides the university community with a variety of high quality goods and services at reasonable prices, with particular attention paid to academic requirements.

The primary function of the store is to provide books, both new and used, and supplies required for course work. The store also offers the following services: photo processing, newspaper and magazine subscriptions, Western Union, money orders, class rings, special ordering of clothing, books, prerecorded music, campus apparel, computer hardware and software, faxing services, greeting cards, glassware, pennants, decals, stationery, and many other assorted imprinted items.

## Veterans Affairs

The Veterans Certifying Office is located within the Financial Aid Office. 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.

## 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, and sponsors an annual women's conference and 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 570-422-3378.

## Overview of Graduate Programs

## Master Degree Programs 2002-2004 and Admission Requirements

The following graduate degree programs are offered for the 2002-2004 academic year. Please check the ESU website for new programs that may have been added after the publication of this catalog.

Requirements for Admission to Full-standing Graduate Status
The minimum criteria for admission to full-standing graduate status requires the student to submit (1) an application for admission to graduate studies and (2) official transcripts from all colleges and universities attended. In addition to these requirements, various programs have additional requirements for admission to full-standing graduate status in the program.

Degree Program Requirements for Admission to Full Standing

|  |  | Minimum Grade <br> Point Average <br> (Overall/Major) | Graduate <br> Record Exam <br> Required | Letters of <br> Recommendation <br> Required | Other <br> Requirements |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Master of <br> Arts | History | $2.5 / 3.0$ | No | No |  |
| Master of <br> Arts | Political <br> Science | $2.5 / 3.0$ | No | No |  |
| Master of <br> Science | Biology | $2.5 / 3.0$ | Yes | 3 letters | UG major in life science, <br> 2 semesters organic <br> chemistry, Letter of Intent |
| Master of <br> Science | Cardiac <br> Rehabilitation <br> and Exercise <br> Science | $2.5 / 3.0$ | No | 3 letters | Departmental application |
| Master of <br> Science | Computer <br> Science | $3.0 / 3.0$ | No | No |  |

Degree Program Requirements for Admission to Full Standing

|  |  | Minimum Grade Poin Average (Overall/Major) | t Graduate Record Exam | Letters of Recommend Required | dation Other Requirements |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Master of Science | General Science | 2.5/3.0 | Required <br> No | No | Prerequisite completion of anatomy and physiology course work |
| Master of Science | Health Education | 2.5/3.0 | Yes | 3 letters | Letter of Intent |
| Master of Science | Physical Education: Exercise Science | 2.5/3.0 | No | No | Departmental application, statement of professional goals, appropriate UG |
| Master of Science | Speech- <br> Language <br> Pathology | 2.8/3.0 | Minimum 1050 combined verbal and quantitative | 3 letters | prerequisites, TB test, <br> Act 34/FBl and Act 151 <br> clearance, professional <br> liability insurance <br> In addition, student must meet Commonwealth of PA Department of Education |
| Master of Education | Biology | $\begin{aligned} & 2.8 / 3.0^{*} \\ & 3.0 / 3.0^{* *} \end{aligned}$ | Yes | Yes | Certification requirements; Letter of Intent <br> In addition, student must meet Commonwealth of PA Department of Education |
| Master of Education | Elementary <br> Education | $\begin{aligned} & \text { 2.8/3.0* } \\ & 3.0 / 3.0^{* *} \end{aligned}$ | No | No | Certification requirements <br> In addition, student must meet Commonwealth of PA Department of Education |
| Master of Education | General Science | $\begin{aligned} & 2.8 / 3.0^{*} \\ & 3.0 / 3.0^{* *} \end{aligned}$ | No | No | Certification requirements |


| Master of <br> Education | Health and <br> Physical <br> Education | $2.8 / 3.0^{*}$ <br> $3.0 / 3.0^{* *}$ | No | No |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Master of | HPE: Sport <br> Education | $2.5 / 3.0$ | Management |  |  |

[^1]| Degree Program | Requirements |  |  | fetters of Recommendation |
| :--- | :---: | :--- | :--- | :--- | :--- |

*GPA required for initial certification students.
** GPA required for advanced certification students (already have Pennsylvania teacher certification).

## Commonwealth of Pennsylvania Department of Education Certification Requirements

The Master of Education degree requires that the student have prior teacher certification or complete teacher certification requirements prior to the granting of the Master of Education degree. As a result of this requirement for students who do not already have teacher certification, admission into any of the graduate Master of Education programs requires that the application must meet the criteria for teacher certification established by the Commonwealth of Pennsylvania Department of Education in addition to those admission standards required by ESU.

The Reading Specialist Certification/M.Ed. in the M.Ed. Reading degree program requires that a student have or be in the process of acquiring an existing teaching certificate to which the Reading Specialist could be added. It does not, however, have to be a Pennsylvania certificate.

IMPORTANT NOTE FOR INTERNATIONAL STUDENTS: Due to various Immigration and Naturalization Service restrictions, international
students may not be able to complete the requirements of student teaching required for the Master of Education degree. If the student cannot complete the requirements for student teaching, he or she may not be eligible for the Master of Education degree. International students should check with the Director of International Students and the Dean of Professional Studies to determine if such restrictions relate to them before beginning their degree program in education.

## 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 students completing graduate programs requiring teacher certification must successfully complete teacher education program admission, monitoring, and exit criteria procedures.

For full-standing admission into a graduate or post-baccalaureate certificate program requiring teacher certification students must meet the following requirements:

। Complete faculty interviews;
I Satisfactorily pass the PRAXIS I Academic Skills Assessments in reading, writing, and mathematics;
। Earn a minimum overall undergraduate QPA as identified by Pennsylvania law ( 2.8 or as determined by the department);
1 Complete six (6) credits of undergraduate or graduate courses in (a) mathematics courses and (b) six (6) credits of English (including one composition and one literature) courses;
। Complete Act 34 and/or FBI clearance and Act 151 child abuse clearance;
। Complete any other specific departmental requirements; and
। Be recommended by departmental faculty and approved by the Teacher Education Council.
Once these steps have been completed, students are admitted to candidacy in the teacher education program and are permitted to take
education courses. 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 grade point average as specified in 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 students for the Master of Education or post-baccalaureate certificate education programs 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 professional studies, who serves as the certifying officer for the university.

Requests for transfer credit to be applied toward the Master of Education or post-baccalaureate certificate program 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 Experience

The importance of providing opportunity 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 unless the student already has teacher certification. 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 by the end of the previous spring semester. Students planning to student teach in the spring semester must satisfy all teacher education program admission criteria by the end of the previous summer session. In order to student teach, students must have met the following requirements in addition to having met departmental requirements specified under the course listing for student teaching:

I Possess health, personal characteristics, and professional attitudes
considered essential for successful teaching.
। Successfully complete prerequisite courses in education and have no incomplete grades.
1 Have a minimum quality point average as identified by Pennsylvania law, Chapter 354 (some departments require a higher minimum than as stated in Chapter 354). Students should see their department chairperson for specific requirements for their overall quality point average.
। Provide evidence of a negative test for tuberculosis.
। Meet all requirements for admission to teacher candidacy as required by the major department in education.
। Satisfy Act 34 and/or FBI clearance and have satisfied Act 151 Pennsylvania History of Child Abuse Clearance.
। Have successfully submitted the necessary state clearances (Act 34, Act 151, and/or FBI) 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.

## 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 and to complete a variety of pre-student teaching requirements prior to the semester of student teaching. Those requirements include but are not limited to:

। Have personal transportation to and from the assigned school district.
। Adhere to school district policies, procedures, ethics codes, schedules,
and dress codes.
1 Purchase Student P.S.E.A. Liability Insurance.
1 Continue to hold required clearances. An unacceptable clearance will result in the student being removed from student teaching.
। Student teachers will be expected to meet the requirements of both the ESU university calendar and the school district calendar in which they are student teaching. This may mean that class holidays and breaks may not coincide.

## Teacher Education Council

The Teacher Education Council provides governance for 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.

## Collaborative Doctoral Degree in Education

East Stroudsburg University and Indiana University of Pennsylvania (IUP) have entered into a collaboration to offer the doctoral courses for IUP's doctoral program in Administration and Leadership Studies (Ed.D.) on ESU's campus. The Ed.D in Administration and Leadership Studies is designed to serve the needs of $\mathrm{K}-12$ education administrators. All course work is taken on the ESU campus. The graduate receives a degree under both the name of East Stroudsburg University and Indiana University. The doctoral program is a cohort program. Approximately 25 students are admitted to the program every two years and are required to take two classes per term for approximately two years. (The next cohort class is scheduled to start in fall 2004.) The program is designed for working professionals.

For admission information and requirements. contact the ESU-IUP Ed.D. Program Coordinator Dr. Doug Lare at 570-422-3431 or e-mail: dlare@po-box. esu.edu.

## School Nurse Certification Program

। Credits required for certification: 15 credits
। Minimum hours required for certification: 12 semester hours (prerequisites for Practicum)
। 135 hours (Practicum)
The School Nurse Certification Program has been specially designed to
provide educational experiences leading toward school nurse certification. The purpose of this program is to enhance the quality of school health programs through the leadership of certified school nurses and to increase the availability of nursing role models in the health care delivery system of school districts throughout the Commonwealth of Pennsylvania. This program focuses on meeting local and statewide needs.

## Objectives

। Synthesize concepts relative to public school and organization and administration.
1 Explain and execute the role of the school nurse in the public school system.
। Utilize the nursing process as related to health needs of pupils, school personnel, families, and environment.
। Coordinate health care services within the school system.
1 Provide instruction in relation to individual, family, and community health.
। Fulfill a leadership role in developing a comprehensive health program within the school, as authorized by administrative policy and according to financial support.

## Program of Study

The School Nurse Certification program offers five options.

1. Professional and Secondary Education (Choose one of the following.)

PSED 161 Foundations of Education (3 credits)
PSED 509 History of Education (3 credits)
PSED 510 The Teacher and the School Community (3 credits)
2. Professional and Secondary Education (Choose one of the following.)

PSED 242 Educational Psychology
PSED 516 The Learner and the Learning Process
3. Media Communication and Technology (Choose one of the following.)

MCOM 262 Educational Communications and Technology
MCOM 520 Selection and Utilization of Instructional Media for the Classroom (3 credits)
4. Health (Choose one of the following.)

HLTH 360 Methodology in Health Education (3 credits)
HLTH 539 Health Education Methods Workshop (3 credits)
5. Nursing

NURS 486 Field Experience and Internship - School Nursing (3 credits)

## Graduate-Level Options

Although the School Nurse Certification Program is not considered a graduate-level curriculum, all courses (except for the Internship) are offered at both the undergraduate and graduate levels. Students may take either undergraduate- or graduate-level courses.

। Graduate-level courses are typically offered in three-hour blocks of time, one evening per week.
। As you already have a baccalaureate degree, it may be more appropriate for you to take courses at the post-baccalaureate level. As a general rule, graduate-level courses are geared to individuals with the kind of experiences you already have.
। These courses may be used as electives for a graduate degree.

## Admission Requirements

The applicant shall have completed all requirements for the Bachelor of Science with a major in Nursing, have been awarded the degree, and possess a valid license to practice as a Registered Nurse in Pennsylvania.

। Interview
। Letter of recommendation
। Fall 2002 QPA 2.8, Fall 2003 QPA 3.0
। Mathematics requirement: 6 semester-hour credits or the equivalent in college-level mathematics.
1 English requirement: 3 semester-hour credits or the equivalent in college-level English composition and 3 or more semester-hour credits in English Literature.
। The deadline for receipt of applications is July 31 for the fall semester and November 30 for the spring semester.

## Program and Certification Requirements

। Fall 2002-2.8 QPA required for certification; Fall 2003-3.0 QPA required for certification.
I All course work needs to be completed before students enroll in the Internship. Exceptions to this must be cleared with the Department of Nursing.
। For admission into NURS 486 Field Experience and Internship in School Nursing the following is required:
A. Evidence of CPR certification
B. Results of tuberculin testing
C. Evidence of Rubella immunity (if immune, test does not need to be repeated)
D. Valid Pennsylvania Registered Nurse license
E. Documentation of a current criminal records background check
F. Documentation of a current child abuse background check

## G. Copy of prescribed Pennsylvania Department of Education plan of study where appropriate

H. Evidence of liability insurance (minimum coverage of \$1,000,000/\$3,000,000) coverage
। In order to obtain certification from East Stroudsburg University, three of the four prerequisite courses required for the program need to be taken through ESU. NURS 486 Field Experience and Internship also is required to be taken through ESU.
। Portfolio assessments will be considered for students who have worked on a full-time basis for one or more years under emergency certification or who have a substantial amount of experience as a School Nurse Assistant.
1 Application for certification needs to be completed by November 15 for December program completion date and April 15 for May program completion date.
Applications are available from the Office of the Dean of Professional Studies (570-422-3377). If this application process is deferred, the student may be held to new criteria at the time of application.

## Permanent Certification

In order to be permanently certified as a School Nurse in Pennsylvania, graduates of School Nurse Certification programs must accumulate a minimum of 24 post-baccalaureate semester credit hours within six years of initial certification. In most instances, courses taken toward School Nurse Certification count toward permanent certification as long as they have been taken after the date on which the degree was granted. Students should also consult with their employers as to whether these courses can be applied toward the various employee benefit packages (i.e. promotion, pay grade increases, etc.).

## Post-Baccalaureate Certificate Programs in Education

Applicants for admission to post-baccalaureate certificate programs leading to teacher certification for those students who already have a bachelor's degree but not teacher certification must apply for admission to the graduate school. Students may apply (1) for admissions to a Master of Education graduate degree program and a post-baccalaureate certification program or (2) for admissions to only a post-baccalaureate certification program.

Students who apply for admission to both a Master of Education graduate degree program and a post-baccalaureate certificate program may be required to complete the post-baccalaureate certificate program prior to the
graduate degree program. Students should check with the program graduate coordinator to determine whether he or she is required to complete the certification program prior to the degree. Students may complete programs of study that will lead toward an Instructional I teaching certificate. Eligible graduates may apply for an Instructional I certificate which is valid for a period of six years in Pennsylvania. This certificate must be made permanent after six years of teaching.

IMPORTANT NOTE FOR POST-BACCALAUREATE CERTIFICATE PROGRAM APPLICANTS: Students who apply only for a postbaccalaureate certificate program are not eligible to apply for a graduate assistantship.
Each post-baccalaureate certificate program has its own unique criteria for admission. Some post-baccalaureate certificate programs require that the applicant already have teacher certification as a prerequisite for admission to the program. Post-baccalaureate certification students may be required to take both undergraduate and graduate course work to complete the program requirements.

> IMPORTANT NOTE FOR POST-BACCALAUREATE CERTIFICATE PROGRAMS STUDENTS: Federal financial aid guidelines may define the student's status different than that of ESU. While the postbaccalaureate certificate program applicant is required to apply through the graduate school at ESU, federal financial aid guidelines may classify the student as an undergraduate student. Postbaccalaureate certificate program students should contact the Office of Financial Aid for further information.

Students applying for certification programs must complete both the graduate school admission requirements for post-baccalaureate certificate programs and the requirements of the ESU Teacher Education Council and the Commonwealth of Pennsylvania teacher certification requirements (see below).

## Post-Baccalaureate Certificate in Education Programs

Areas of Teacher Certification
Instructional I
Biology (7-12)
Chemistry (7-12)
Communication (7-12)
Earth and Space Science (7-12)
Health (K-12)
Mathematics (7-12)
Mentally and/or Physically Handicapped (K-12)
Elementary Education (K-6)
English (7-12)
Speech and Language Impaired (K-12)
Physics (7-12)

French (7-12)
General Science (7-12)

Social Studies (7-12)
Spanish (7-12)

Special Endorsement to Instructional I (Prior Teacher Certification Required)
Driver Education
Reading Specialist (The Reading Specialist Certificate is added to an existing teaching certificate which may be either an Instructional I or an Instructional II.)

Educational Specialist
Dental Hygiene
School Nurse (see School Nurse Certification program in section on program descriptions)
Instructional Technology (see Media Communication and Technology)
School Administration or Supervision
Elementary and Secondary Principal
Special Education Supervisor Certification*
Superintendent
*Requirements for admission and matriculation in this supervisory track are described in a separate publication called the Special Education Supervisor Certificate. This document is available from the Coordinator of Graduate Studies for the Department of Special Education and Rehabilitation Dr. Teri Burcroff 570-422-3559 or e-mail: tburcroff@po-box.esu.edu.

Behavior Analyst
East Stroudsburg University's Department of Special Education and Rehabilitation offers a program that prepares professionals working with individuals with challenging behavior to sit for the Board Certification examination in Behavior Analysis administered by the Behavior Analyst Certification Board (BACB). Students admitted to the program will complete the course work as part of the M.Ed. in Special Education or will hold a Masters degree in Special Education or a related field. The program consists of five courses delivered in a cohort program consisting of approximately 15 students. Courses are offered in the evening, frequently on a condensed nineweek schedule, with students required to take one to two courses per term for one year. The next cohort group is scheduled to start in July 2003.

## Admission Requirements Subject to Change

Admission requirements for the various graduate programs and postbaccalaureate certificate programs in education are subject to change without
notice. Please contact the graduate coordinator of the program to determine the admission standards required for full-standing admission to the program.

## Degree Programs

Biology, 570-422-3716
The graduate faculty in Biology offers two master's degree programs. Master of Science with a major in biology with an emphasis in either:

। Biology or
। Biology: Management of Environmental Resources
। Master of Education with a major in biology
Each of the three routes to a master's degree in biology has the option of:
। Thesis
। Non-thesis
। Non-research
The student is strongly advised to have a statistics course before initiating the thesis or the research problem.

## Admissions

Admission requirements for full standing include the following:
। An undergraduate major in a life science (or its equivalent);
। Completion of organic chemistry (minimum two semesters);
। Three letters of recommendation;
। A letter of intent from the student; and
। GRE scores.
After admission, the student will meet with the academic adviser to choose a plan of study.

## Master of Science

Required: BIOL 572 Thesis 1, 3 credits
BIOL 573 Thesis II, 3 credits
Major Field and Related Electives, *24 semester hours
Non-Thesis Program - 31 Semester Hours
Required: BIOL 571 Independent Research Problem (Semester hours arranged.)
Major Field and Related Electives, *30 semester hours
Independent Research, 1 semester hour
Non-Research Program - 39 Semester Hours
This program of study emphasizes the broader aspects of graduate studies in biology by requiring more courses in place of the thesis or research problem. Major Field or Related Electives, *39 semester hours

## Master of Science

Management of Environmental Resources**
A Master of Science with a Major in Biology and emphasis in management of environmental resources is available to interested students.

Thesis Program - 30 Semester Hours
Required: BIOL 572 Thesis 1, 3 credits
BIOL 573 Thesis II, 3 credits
Major Field and Related Electives, *24 semester hours
Students may be required to participate in a field experience or internship.
Non-Thesis Program - 31 Semester Hours
Required: BIOL 571 Independent Research Problem (Semester hours arranged.)

Major Field and Related Electives, *30 semester hours
Independent Research, 1 semester hour
Students may be required to participate in a field experience or internship.
Non-Research Program - 39 Semester Hours
This program of study emphasizes the broader aspects of graduate studies in biology by requiring more courses in place of the thesis or research problem.

Required: Major Field or selected electives, *39 semester hours
Students may be required to participate in a field experience or internship.
**For more information concerning the program, contact Professor Jane Huffman, graduate program coordinator, at 570-422-3716.

## Master of Education

Thesis Program - 30 Semester Hours
Required: BIOL 572 Thesis I, 3 credits
Major Field and Related Electives, *12 semester hours

General Education, 3 semester hours
Professional Education, 12 semester hours
Non-Thesis Program - 31 Semester Hours
Required: BIOL 571 Independent Research Problem (Semester hours arranged.)
Major Field and Related Electives, *15 semester hours
Professional Education, 12 semester hours
General Education, 3 semester hours
Independent Research, 1 semester hour

## Non-Research Program - 39 Semester Hours

This program of study emphasizes the broader aspects of graduate studies in biology by requiring more courses in place of the thesis or research problem.

Required: Major Field and Related Electives, *24 semester hours
Professional Education, 12 semester hours
General Education, 3 semester hours

[^2]
## Graduate Assistantships

The Department of Biological Sciences offers graduate assistantships. Duties consist of aiding the graduate faculty in their professional duties and assisting with undergraduate labs. Duties do not include teaching of undergraduate classes. For information about graduate assistantships, contact the graduate coordinator.

## Cardiac Rehabilitation and Exercise Science

For Cardiac Rehabilitation and Exercise Science, see Movement Studies and Exercise Science.

Computer Science, 570-422-3772, <www.esu.edu/cpsc/courses/ ms_req.htm>

The graduate faculty in Computer Science offers the Master of Science with a major in computer science. The degree is intended to provide depth in one or more areas within computer science and prepare the graduate for a position of greater skills and responsibility than would the bachelor's degree, as well as to provide a solid basis for those wishing to enter a Ph.D. program.

## Master of Science

There are two options for Master of Science in Computer Science: a
research emphasis option and a programming language emphasis option. For either option, the degree candidate must select a minimum of 18 credits of courses open only to graduate students.

Option I - Research Emphasis - 30 Semester Hours
Programming Languages Area
Required:
CPSC 530 Software Engineering
At least one of the following:
CPSC 531 Advanced Topics in Software Engineering
CPSC 532 Natural Language Processing
CPSC 533 Compiler Construction
CPSC 534 Compiler Construction II
CPSC 535 Parallel Computing
Operating Systems/Architecture Area
Required:
CPSC 541 Computer Architecture
At least one of the following:
CPSC 542 Operating Systems Design
CPSC 544 Realtime Systems
CPSC 545 Networks and Data Communication
Theory
At least one of the following:
CPSC 562 Theory of Computation
CPSC 563 Theory of Abstract Languages
Data/File Structures
At least one of the following:
CPSC 550 Algorithmic Graph Theory
CPSC 553 Database Systems
CPSC 554 Data Structures and Algorithmic Analysis
Topics/Electives
At least one additional course numbered 520 or higher
Culminating Activities
Required:
CPSC 570 Introduction to Research
CPSC 574 Research Project I
CPSC 575 Research Project II
Option II - 33 Semester Hours
Programming Languages Area
Required:
CPSC 530 Software Engineering
At least one of the following:
CPSC 531 Advanced Topics in Software Engineering
CPSC 532 Natural Language Processing
CPSC 533 Compiler Construction

CPSC 534 Compiler Construction II
CPSC $535 \quad$ Parallel Computing
Operating Systems/Architecture Area
Required:
CPSC 541 Computer Architecture
At least one of the following:
CPSC 542 Operating Systems Design
CPSC 544 Realtime Systems
CPSC 545 Networks and Data Communication
Theory
At least one of the following:
CPSC 562 Theory of Computation
CPSC 563 Theory of Abstract Languages
Data/File Structures
At least one of the following:
CPSC $550 \quad$ Algorithmic Graph Theory
CPSC 553 Database Systems
CPSC 554 Data Structures and Algorithmic Analysis
Topics/Electives
At least three additional courses numbered 520 or higher
Culminating Activities
Required:
CPSC 570 Introduction to Research
CPSC 574 Research Project I

## Expectations for Admission

Applicants should have a B.S. in computer science from East Stroudsburg University, or, if not, the computer science skills and mathematical maturity represented by the material in the following ESU courses:

CPSC 111 Introduction to Computer Programming and Problem Solving
CPSC 141 Introduction to Computer Organization
CPSC 151 Linear Data Structures and Elementary Algorithm Analysis
CPSC 232 Introduction to Assembler Programming
CPSC 240 Operating Systems and Computer Architecture
CPSC 251 Non-Linear Data Structures
CPSC 321 Issues in the Practice of Computer Science
CPSC 330 Programming Languages
MATH $140 \quad$ Calculus and Analytic Geometry-I
MATH $141 \quad$ Calculus and Analytic Geometry-II
MATH 220 Discrete Mathematical Structures

MATH 311 Statistics
MATH 320 Linear Algebra
Course descriptions are available in the undergraduate catalogue. A student may be admitted conditionally subject to successful completion of deficiencies in the above list.

## Graduate Assistantships

The Computer Science Department offers graduate assistantships. Contact Richard Prince, graduate coordinator, for further information.

Graduate Faculty
Department Chair: Richard Amori, M.S.
Graduate Coordinator: Richard Prince, Ph.D.
J. Emert, M.A.
F. Friedman, Ph.D.
H. Kimm, Ph.D.
R. McDonald, M.S.
N. Paul Schembari, Ph.D.
P. Williams, M.S.

## Early Childhood and Elementary Education, 570-422-3356

The Department of Early Childhood and Elementary Education offers three programs at the graduate level. These three options are:

I Master Teacher Program leading to a Master of Education in Elementary Education (33 credits)
। Extension of a Teaching Certificate to include Elementary Education (39 credits)
1 Certification in Elementary Education for individuals holding a baccalaureate degree without teaching certification ( 53 credits).
Students interested in any of these programs should contact the Elementary Education Office at 570-422-3356 for further information.

## Program Objectives

The focus of the M.Ed. Elementary Education is on becoming a master teacher in the elementary classroom. The Advanced Teacher Education Conceptual Framework applies to those graduate students who already hold an initial certification. The mission of the master educator program is to guide in-service educators to become leaders who apply research and best practice theory to make reflective and synergistic decisions that consistently support and extend the learning of all students. Through the chosen program's core courses and individualized experiences, candidates are able to create a vision of themselves as reflective, synergistic decision makers.

Individuals working toward their initial certification in Elementary Education may choose to pursue their M.Ed. simultaneously. The Beginning Teacher Education Conceptual Framework for beginning educators guides their studies until such time certification is obtained. Our mission for those pursuing initial certification is to develop beginning educators who make reflective and deliberate decisions that support and extend the learning of all students. This mission and the essential commitments guide all ESU educators along with our Beginning Educator Outcomes, the Learning Cycle, a Comprehensive Assessment model, and numerous Teacher Education initiatives.

## Master of Education in Elementary Education

## Entrance Requirements

To be accepted as a master's degree candidate in full standing, applicants must have a baccalaureate degree with certification in elementary education. Applicants must have a 2.75 overall and 3.0 major GPA. Candidates must submit a copy of their current teaching certificate and a Professional Goals Statement that reflects their professional objectives for the program.

## Program Requirements

The Master's of Elementary Education program (ELED) consists of a core area of required courses ( 15 credits) and a concentration area of 18 credits. The concentration area includes a focus of 12 elementary education credits in addition to 6 credits of education electives that are chosen to meet the student's professional needs and personal interests. The 18 credits of the concentration are selected by the graduate student (in collaboration with the ELED graduate coordinator) from one of six focus areas available for indepth study. The M.Ed. program supports the Advanced Teacher Education Conceptual Framework, developed by the ESU Teacher Education faculty.

Core courses present research-based concepts related to teaching and learning as well as introduce various tools of inquiry. Concentration courses extend the master teacher's ability to articulate, apply, and adapt theoretical constructs to the classroom setting. At the end of graduate course work, the master teacher candidate will be able to demonstrate reflective, collaborative, and creative teaching practice and professional leadership qualities.
Core Courses: 15 credits required
ELED 502 Psychology of the Elementary School Child
ELED 592 Elementary School Curriculum
ELED 570 Introduction to Research
ELED 575 Graduate Seminar
MCOM 510 Computers in Education
Concentration Courses: 18 credits required - 12 in ELED Focus and 6 in Electives

ELED Focus: The student shall, in consultation with his or her
adviser, complete 12 ELED graduate credits in one of the following focus areas:

Elementary School Teaching
Early Childhood - Birth through Age 8
Middle School Teaching
Language Literacy and the Arts
Mathematics, Science, and Technology
Differentiated Teaching and Learning
Electives: In addition, the student shall complete 6 graduate credits of electives.

## Other Requirements

## Plan of Study

Between the completion of 12-15 semester hours, students will complete a plan of study in consultation with the ELED graduate coordinator.
Comprehensive Evaluation
Students select one of the following exit criteria to complete the M.Ed. program: Professional Portfolio, Curriculum Project, or Action Research. The planning and developing of the Comprehensive Evaluation is an integral part of ELED 575, a course taken between 24-27 credits.

## Workshop Courses*

A student may have a maximum of 6 credits of workshop courses included in a plan of study.

## Suggested Concentration Areas and Course Options

Elementary Education Focus 12 credits Education Elective Courses 6 credits
Elementary School Teaching
ELED 512 Integrating the Arts in Elem Class PSED 516 Learner and Learning Process
ELED 550 Current Trends in Social Studies
ELED 521 Children's Lit. for Advanced Students

PSED 510 Teacher and School Community
MCOM 520 Selection and Utilization
of Instructional Media
ELED 540 Math in Elementary School REED 523 Analysis of Inst Techniques
ELED 530 Science in Elementary School REED Selected by Advisement
ELED 520 Current Trends in Language Arts
ELED 515 Individualizing Instruction
SPED 551 Inclusionary Practices
SPED 570 Collab. in Ed. Process
ELED 517 Creative Teaching Methods
ELED 525 Creative Drama
Early Childhood - Birth through Age 8

ELED 574 Prob. and Issues in ECE
ELED 589 Org. and Admin. of ECE Programs
ELED 586 Intern: Methods and Materials in ECE
ELED 515 Individualizing Instruction
ELED 517 Creative Teaching Methods

MCOM Selected by Advisement
SPED 567 Families in Ed. Process of Individuals with Exceptionalities SPED 568 Early Intervention

PSED 516 Learner and Learning Process
REED 521 Language and Reading Process

ELED 523 Diversity in Children's Lit.
REED 550 Foundations of Reading Recovery
ELED 557 Reducing Stress in the Classroom*
Middle School Teaching

ELED 515 Individualizing Instruction
ELED 512 Integrating the Arts
ELED 517 Creative Teaching Methods
ELED 525 Creative Drama
ELED 534 Science Seminar
ELED 550 Current Trends in Social Studies
ELED 542 Current Trends in Mathematics
ELED 549 Reducing Classroom Conflict*

PSED 565 Curr. Dev. in Mid. Schools
PSED 593 Teaching Techniques in Mid. School
PSED 510 Teacher and School Com.
MCOM Selected by Advisement
SPED 551 Inclusionary Practices
SPED 570 Collab. in Ed. Process
REED 527 Reading in Content Areas REED 530 Teaching Reading through Young Adult Literature

ELED 556 Cooperative Learning*
ELED 505 Classroom Management and Discipline Models
Language, Literature, and the Arts
ELED 520 Current Trends in Language Arts PSED 516 Learner and Learning Process
ELED 512 Integrating the Arts
REED Selected by Advisement (6-credit maximum)
ELED 521 Children's Lit. for Advanced SPED 540 Language Arts for Students
Exceptional Individuals
ELED 517 Creative Teaching Methods
SPED 551 Inclusionary Practices
MCOM Selected by Advisement
ELED 546 Learn to Read through the Arts*
ELED 523 Diversity in Children's Lit.
ELED 515 Individualizing Instruction
ELED 525 Creative Drama
Mathematics, Science, and Technology

ELED 540 Math in Elem School
ELED 530 Science in Elem School
ELED 534 Science Seminar
ELED 542 Current Trends in Mathematics
ELED 531 Life Sci.Wkshp. for Elem Teach*
ELED 532 Phys. Sci. Wkshp. for Elem Teach*
ELED 517 Creative Teaching Methods
ELED 515 Individualizing Instruction
Differentiated Teaching and Learning
ELED 515 Individualizing Instruction
ELED 560 Adaptive Education
ELED 535 Diversity in the Classroom
ELED 555 Clinical Supervision
ELED 523 Diversity in Children's Lit.
ELED 556 Cooperative Learning*
ELED 559 Enhancing Self-Esteem*
Student Design
Students in collaboration with the graduate coordinator may design a concentration area that meets their professional needs and personal interests.

SPED 570 Collab. in the Ed. Process PSED 516 Learner and Learning Process PSED 510 Teacher and School Com. MCOM Selected by Advisement

SPED 551 Inclusionary Practices
PSED 593 Teaching Techniques in Mid. School PSED 565 Curr. Dev. in Mid. School PSED 516 Learner and Learning Process MCOM Selected by Advisement
to Include Elementary Education
The Elementary Education Extended Certification Program is open to individuals who have successfully completed an undergraduate degree and who are certified in an area other than elementary education (e.g., special education, secondary education). The Certification Program consists of 39 credits and offers the option of taking courses at the undergraduate or graduate level. Some courses taken at the graduate level may be applied toward a master's degree in elementary education. All requirements and course work must be completed prior to receiving certification in elementary education. The Certification Program is guided by the ESU Advanced Teacher Education Conceptual Framework and consists of specific ELED certification courses. Field experience in elementary education classrooms may be required as determined by the graduate coordinator.

## Entrance Requirements

Candidates for this program are admitted through the graduate school and adhere to the graduate standards. Applicants must have a 3.0 major GPA. Candidates must also submit a copy of their current teaching certificate and a Professional Goals Statement that reflects their professional objectives for this program.
Certification Courses (Professional Education) - 9 semester hours

| PSED 242 Educational Psychology | or PSED 516 Learner and the Learning <br> Process |
| :--- | :---: |
| PSED 161 Foundations of Education | or PSED 510 Teacher and the School <br> Community |
| MCOM 262 Educational Communications |  |
| or MCOM 520 Selection and Utilization of |  |
| Instructional Media for the Classroom |  |

Elementary Education - 30 semester hours
ELED 132 Child Growth and Development (Prerequisite for all other Elementary
Education courses)
ELED 351 Music in Childhood Education
ELED 311 Art in Childhood Education or ELED 512 Integrating the Arts
ELED 342 Language Arts in
Childhood Education
ELED 343 Mathematics in
Childhood Education
ELED 344 Science in Childhood
Education
ELED 345 Social Studies in or ELED 550 Current Trends in Social
Childhood Education
ELED 346 Children's Literature
REED 313 Foundations of Reading Instruction (6)
or ELED 520 Current Trends in
Language Arts
or ELED 540 Math in Elementary School
or ELED 530 Science in Elementary School Studies
or ELED 521 Children's Literature for Advisement Study
or REED 523 Analysis of Instructional
Techniques in Reading and 3 reading

## Checklist for Students Extending Certification to Include Elementary Education

Prior to Admission
Meet with ELED graduate coordinator to review transcripts and discuss the ELED certification and/or M.Ed. programs, screening requirements, and opportunities.
Prior to Certification
$\qquad$ Successfully complete All ELED Requirements - no Incompletes
__ Maintain a GPA 3.0 overall
___ Professional Field Experiences determined by the graduate coordinator
$\qquad$ File Application for certification
$\qquad$ Demonstrate proficiency on PRAXIS II: Elementary Education: Curriculum, Instruction, and Assessment (10011)

Meet regularly with the ELED graduate coordinator for advisement and to discuss concerns about your academic program, department admittance procedure, or other advising matters. Visit the graduate school or ELED website <www.esu.edu/eled/index.html> for more information.

## Initial Certification in Elementary Education

## for Individuals Holding a Baccalaureate Degree without Teaching Certification

The Elementary Education Initial Certification Program is open to individuals who have successfully completed an undergraduate degree in an area other than education. The Certification Program ( 53 credits) is completed predominately at the undergraduate level with some options for graduate course work that may be applied to a Master of Education degree. Prior to receiving certification in elementary education, candidates must successfully complete all program requirements, courses, an Apprentice Semester in a Professional Development School, and a Student Teaching Resident Semester. The Certification Program is guided by the ESU Initial Teacher Education Conceptual Framework and consists of 9 credits of Professional Education, 30 credits of Elementary Education which includes an apprentice semester in a Professional Development School, and a resident semester which is 14 credits of student teaching.

## Entrance Requirements

Candidates for this program are admitted through the graduate school and adhere to graduate standards. Candidates must have a 2.8 overall and 3.0
major GPA, demonstrate proficiency on PRAXIS Series I (Reading, Writing and Mathematics) and submit a Professional Goals Statement that reflects their professional objectives for entrance into this program. After acceptance into the program, candidates meet with the ELED graduate coordinator for specific advisement.

## Program Requirements

The applicant's undergraduate degree program is reviewed to see if the student meets the General Education requirements which includes a minimum of 50 semester hours distributed in Arts and Letters, Natural and Social Sciences and to see whether any previously taken education courses may apply. Students are required to have 6 credits of Mathematics and 6 credits of English in order to meet State Standards for certification. The English credits must include 3 credits of English Composition and 3 credits of English Literature. Any student whose undergraduate transcript does not meet those requirements will be required to fulfill them, in addition to any other undergraduate deficiencies.

## Department Admittance Process

The admittance process will be discussed during advisement with the graduate coordinator. This is an essential first step in completion of the program and students must complete (if necessary) the 6 credits in Mathematics and English, before becoming eligible for admittance.

## Professional Field Experiences

All students seeking initial elementary teacher certification are required to participate in Professional Field Experiences and one apprentice semester in a Professional Development School. Courses marked by an asterisk* (below) are taken together and integrated with field work in an ESU Professional Development School. Students spend two days on campus and two days in a classroom developing knowledge, skills, and dispositions that build toward success in their resident semester.
Student Teaching Statement
A twelve (12)-credit resident semester will complete the certification program. The PRAXIS II - Fundamental Content Knowledge is required prior to the semester of Student Teaching.
Required Courses
Courses are 3 credits each unless otherwise indicated.
Professional Education: 9 semester hours
PSED 242 Educational Psychology or
PSED 516 Learner and the Learning Environment
PSED 161 Foundations of Education or
PSED 510 Teacher and School Community

MCOM 262 Ed. Communications or
MCOM 520 Selection and Utilization of Instructional Media for the Classroom

Elementary Education: 30 semester hours
ELED 132 Child Growth and Development - Prerequisite for all other ELED courses
ELED 346 Children's Literature
ELED 351 Music in Childhood Education
ELED 342 Language Arts in Childhood Education
ELED 343 Mathematics in Childhood Education
ELED 311 Art in Childhood Education*
ELED 344 Science in Childhood Education*
ELED 345 Social Studies in Childhood Education*
REED 313 Foundations in Reading Instruction* (6 credits) or WITH PERMISSION REED 523 Analysis of Reading Instructional Techniques and 3 other REED credits by advisement
Resident Semester/Student Teaching: 12 semester hours
ELED 430 Student Teaching ( 12 credits)
Checklist for Students Seeking Initial Certification in Elementary Education

## Prior to Admission

Meet with ELED graduate coordinator to review transcripts and discuss the ELED certification and/or M.Ed. programs, screening requirements and opportunities.
___ Demonstrate proficiency on PRAXIS I: Reading, Writing and Mathematics Admittance Process
$\qquad$ Department Admission
$\qquad$ Maintain Grade Point Average of 3.0
$\qquad$ Include a Student Evaluation Checklist
$\qquad$ General Education - complete if necessary Math $\qquad$ Math $\qquad$
English (comp) $\qquad$ English (lit) $\qquad$
$\qquad$ Provide proof of Negative TB test
Obtain proper clearances:
ALL Students Act 34 $\qquad$ Act 151 $\qquad$
Non-PA Residents also need FBI Clearance $\qquad$
SPSEA Membership
Hand in Admittance Packet for review and scheduling of department
interview. Packets are submitted during a predetermined time frame at the beginning of each semester. Failure to do this in a timely manner may result in delay of program.
___Pass Department Interview
Prior to Student Teaching Residency
__ Successfully complete All ELED Requirements - no Incompletes
___ Demonstrate proficiency on PRAXIS II - Fundamental Content
Knowledge (0014)
__ Successfully admitted into department
__ Maintain a GPA 3.0 overall
___ Complete Professional Field Experiences 1 : :
Apprenticeship: $\qquad$
Provide proof of negative TB test
__ Provide proof current clearances
ALL Students Act 34 $\qquad$ Act 151 $\qquad$ Non-PA Residents also need FBI Clearance $\qquad$
__ Provide proof of current SPSEA membership
Prior to Certification
$\qquad$ File Application for certification
Demonstrate proficiency on PRAXIS II:
Principles of Learning and Teaching K-6 (30522)
Elementary Education: Curriculum, Instruction, and Assessment (10011)

Meet regularly with the ELED graduate coordinator for advisement and to discuss concerns about your academic program, department admittance procedure, or other advising matters. Visit the graduate school or ELED website <www.esu.edu/eled/index.html> for more information.

## Graduate Assistantships

। Students are required to submit an application for a Graduate Assistantship position to the Graduate School of Education.
। Candidates will be selected and interviewed by the department chair and/or graduate coordinator.
। Please contact the department chair and/or graduate coordinator at 570-422-3356 for additional information.

## Graduate Faculty

M. Benson, Ph.D.
P. Pinciotti, Ed.D.
S. Brown, Ph.D.
L. Rogers, Ed.D.
S. Harlan, Ph.D.
N. Stephens, Ph.D.
P. Kelberman, Ed.D.
M. Vagliardo, Ed.D.
M. Kellow, Ph.D.
R. Walker, Ed.D.
P. Kramer, Ed.D.
A. Whitehead, Ed.D.
D. LePage, Ed.D.
C. Wilson, Ph.D.
B. Lim, Ed.D.

## General Science, 570-422-3264

The graduate faculty offers two degree programs in General Science: a Master of Education and a Master of Science. They require either 30 semester hours (thesis) or 34 semester hours (non-thesis). The degrees are recommended for science teachers who wish to pursue their professional development at the graduate level, students with a bachelor's degree in chemistry or physics who wish to prepare for entry into a doctoral degree program, or career science professionals seeking advancement.

। Applicants should have a B.A. or B.S. in chemistry or physics with a calculus background in mathematics; otherwise, undergraduate courses at the 300 and 400 level in chemistry and/or physics will be recommended as well as MATH 140, 141, and 240 before full standing will be granted.
। Graduate courses are cross-listed with undergraduate courses and are offered regularly during the day; limited evening and summer classes may be offered. Most full-time students complete the degree program within two years.

## Master of Education

Thesis Program - 30 Semester Hours
GSCI 570 Introduction to Research
GSCI 572 Thesis
General Education, 3 semester hours
Professional Education, 3 semester hours
Major Field and Related Electives, 18 semester hours
Non-Thesis Program - 34 Semester Hours
GSCI 570 Introduction to Research
GSCI 571 Independent Research Problem
General Education, 3 semester hours
Professional Education, 3 semester hours
Major Field and Related Electives, 24 semester hours

Thesis Program - 30 Semester Hours
GSCI 570 Introduction to Research
GSCI 572 Thesis
Major Field and Related Electives, 24 semester hours
Non-Thesis Program - 34 Semester Hours
GSCI 570 Introduction to Research
GSCI 571 Independent Research Problem
Major Field and Related Electives, 29-30 semester hours
The student in consultation with his or her advisory committee may choose electives from among:

I Graduate courses offered by the departments of biology, general science, geography, mathematics, and computer science.
। A maximum of three courses offered at the 300 or 400 level by the departments of biology, chemistry, geography, mathematics, computer science, and physics.
Students who choose the non-thesis track must pass a written comprehensive examination on completed course work in order to graduate. Students who choose the thesis track must give an oral defense of the thesis work as well as pass a written comprehensive examination in order to graduate.

## Admissions

। Admission to the General Science program follows the guidelines given in the Admission section and Overview of Graduate Programs section of the catalog. Applicants who do not have a degree in a scientific discipline are not admitted to the program.
। Applications are considered throughout the year and students may start in any semester.

## Graduate Assistantships

Graduate assistantships are available to qualified applicants who have science training. Duties include proctoring exams, assisting in the science laboratories, grading papers and exams, preparing equipment and reagents for laboratory classes, testing new laboratory experiments, and other tasks as required by the graduate coordinator and stockroom administrator/ technician.

## Graduate Faculty

Chemistry Department Chair: Diane W. Husic, Ph.D. 570-422-3703
Physics Department Chair: David Buckley, Ph.D. 570-422-3351
Graduate Coordinator: Sharmaine S. Cady, Ph.D. 570-422-3264

| J. Elwood | Statistical Physics |
| :--- | :--- |
| D. Erb | Organic Chemistry |
| J. Gold | Physical Chemistry |
| R. Kelly, Ph.D. | Analytical Chemistry |
| D. Larrabee | Theoretical Physics |
| R. Reed | Thermal Physics |
| A. Shaffer | Polymer Chemistry |

## Health and Physical Education

For the Health and Physical Education Program, see Movement Studies and Exercise Science.

## Health Education, 570-422-3702

The Department of Health houses both the Master of Science in Health Education program and the Master of Public Health in Community Health Education program. The mission of the Department of Health is to prepare qualified practitioners in the areas of health education and public health, who will enhance the quality of life through the promotion of health and the elimination of disparities. The department is committed to attaining this mission through teaching, research, and service.

The M.S. requires 30 semester hours if the research option is elected or 36 semester hours if the non-research option is selected. The M.S. program is designed to accommodate students who are interested in becoming health educators who can work in a variety of settings including schools, colleges, hospitals, community and industry. The program will also prepare candidates to obtain the Certified Health Education Specialist credential.

The M.P.H. program requires 48 semester hours, and the East Stroudsburg University Department of Health is the only department in the fourteenState System of Higher Education institutions permitted to offer this degree. The M.P.H. program is designed to prepare public health practitioners who have an additional emphasis in community health education. The curriculum is designed for students to develop competency in epidemiology, health administration, environmental health, social and behavioral sciences and biostatistics. (See Public Health for Master Public Health degree program information.)

## Teacher Certification

Teacher certification in health education (K-12) may be acquired in conjunction with the master's degrees. Additional course work is required for teacher certification. Students who desire initial certification will be required to meet all teacher certification requirements. Additional admission documents
and a higher QPA is required for teacher certification. (Several of the classes required for teacher certification are offered only at the undergraduate level.)

## Master of Science Health Education

The Master of Science in Health Education is a 30-36 credit hour program designed to accommodate students who are interested in health education for a variety of settings including: schools, colleges, hospitals, communities, and industry. No specific undergraduate degree is required. Students with undergraduate majors in health education, biology, computer science, psychology, nursing, nutrition, sociology, physical education, and the allied health area are encouraged to apply. Each student's background is evaluated and a plan of study is designed for the student's individual needs. Students who have not acquired the necessary competencies at the undergraduate level or completed appropriate field experiences may be required to complete work beyond the minimum requirements.

The Department of Labor has recognized the health educator as a health occupation and the curriculum reflects the responsibilities and competencies of a health educator, by addressing the knowledge and skills needed to obtain the Certified Health Education Specialist (CHES) credential. The competencies addressed are:

। Assessing individuals and community needs for health educational
। Planning effective health education programs
। Implementing health education programs
। Evaluating effectiveness of health education programs
। Coordinating provision of health education services
। Acting as a resource person in health education
। Communicating health and health education needs, concerns, and resources
। Applying appropriate research principles and methods in health education
। Administering health education programs
। Advancing the profession of health education

## Academic Course Work

The minimum requirements for the two program options within the M.S. program are as follows:

Research Option - 30 Semester Hours
Required: HLTH 538 Public Health Administration
539 Health Education Methods Workshop
550 School Health Administration and Curriculum
555 Health Education Evaluation
560 Scientific Foundations of Health Behavior

| 570 | Introduction to Research <br> Health Education Research Problem or <br> Health Education Thesis |
| ---: | :--- |
| MATH 502 or 516 572 | Applied Statistics OR Biometry |

M.S. graduate candidates must select from 5-8 credits of health education electives, and 3 credits of electives in the sciences, social sciences, professional education, administration, or communications.

|  | Non-Research Option - 36 Semester Hours |  |
| :--- | :---: | :--- |
| Required: | HLTH 538 | Public Health Administration |
|  | 539 | Health Education Methods Workshop |
| 550 | School Health Administration and Curriculum |  |
|  | 555 | Health Education Evaluation |
|  | 560 | Scientific Foundations of Health Behavior |
| 570 | Introduction to Research |  |
|  | MATH 502 or 516 | Applied Statistics or Biometry |

Graduate candidates must select from 9-15 credits of health education electives, and 6 credits of general and professional education electives. Health graduate classes are offered after $4 \mathrm{p} . \mathrm{m}$. during the fall and spring semesters. The summer school schedule offers classes after 6 p.m. and courses are on a rotating bases. Nine semester hours of graduate credit is considered to be a full-time student, completion of the degree is often within 2-3 years full time and as long as 6 years part time. All M.S. graduate candidates will be required to complete an oral comprehensive exam at the end of their course work.

## Admission

The Health Department considers applications on a rolling basis and the student may start in any semester. All students meeting the current catalog requirements will be eligible for full admission.

1 Bachelor's degree from an accredited college or university.
1 An undergraduate minimum grade point average of 2.50 ( 4.00 basis) and a 3.00 in the area of specialization during the junior and senior years.
। Submit a professional resume.
। Submit three verifiable references.
। Submit GRE scores.
I Prerequisite completion of anatomy and physiology course work.
। Full admission is a prerequisite to degree candidacy.
Conditional Admission
Conditional admission will be granted if the candidate does not meet
requirements for full admission. Continuation of study is dependent upon completion of deficiencies and maintaining a 3.0 grade point average during the first 9 semester hours of course work. Admission requirements should be completed prior to successful completion of 15 semester hours of credit.

## Graduate Assistantships

The department has several opportunities for graduate candidates to obtain a graduate assistantship. The student would be assigned to a health faculty member(s) and complete tasks as assigned in areas of literature reviews, clerical duties, recording keeping, data entry, professional development activities, etc.

## Graduate Faculty

Department Chair: A. Cardelle Ph.D., MPH
Graduate Coordinator: K. Hillman Ph.D., MPH, CHES
MPH Program Coordinator: C. Woodhouse, Ed.D., MPH
A. Bitto, M.D., MPH, D. PH, CHES
S. Godin, Ph.D., MPH, CHES
S. Shive, Ph.D., MPH
B. Waring, Ed.D.

## History, 570-422-3286, <www.esu.edu/history>

The graduate faculty offers two degree programs in history: the Master of Arts and the Master of Education. In the Master of Education program, the student has two options: the thesis program and the non-thesis program. In the Master of Arts program, the thesis is required of all students.

Individual programs and specific course selections are made under the supervision and with the approval of an adviser from among the graduate faculty in the Department of History.

## M.A. in History

Required Course Work: 30 credit hours
History 570 Introduction to Research, 3 credits
Electives: 15-21 semester hours in history. Students must elect a minimum of 9 semester hours in either group A - United States History, or group B - European History, and a
minimum
of 3 semester hours in each of the two remaining groups, including group C - Area Studies.
Related Areas: (optional) 0-6 semester hours

Thesis: 6 semester hours (Historical training consists of research, writing, and analysis. These skills are best developed by writing a thesis.)

## Final Graduation Requirements

। 30 credits with a minimum of 18 credits of courses open only to graduate students
। Thesis
। Oral defense of thesis
। Comprehensive examination
। Satisfactory completion of language requirement

## Language Requirement

Knowledge of the fundamentals of one foreign language is required unless waived as indicated below. Emphasis is upon reading comprehension. The requirement may be satisfied in one of the following ways:

1 Through at least 6 semester hours of a foreign language (with a grade of " $C$ " or better) at the undergraduate or graduate level.
। Through demonstration of reading comprehension in a foreign language using materials in the major field or graduate level.
1 Through substitution of all or part of the foreign language requirement with approved course(s) in advanced technical knowledge related to the major field.
The chair of the Department of History must approve satisfaction of the foreign language requirement by substitution. The foreign language requirement may be waived upon the approval of the adviser and the chairperson of the Department of History if a student's area of study and the thesis do not require a language.

## Admissions

See section on Graduate Programs Offered for admission requirements.

## Master of Education in History

The Master of Education in History thesis option program requires 30 semester hours with a minimum of 18 credits of courses open only to graduate students.

Required Course Work:

| Hist 570 | Introduction to Research, $\mathbf{3}$ credits |
| :--- | :--- |
| Electives: | $12-15$ semester hours in history |
| Related Electives: | $0-6$ semester hours |
| General Education and |  |
| Professional Education Courses: | 6 semester hours |
| Thesis: | 3 semester hours |

The Master of Education in History non-thesis option program requires 34 semester hours with a minimum of 18 credits of courses open only to graduate students.
Required Course Work:

Hist 570
Electives:
Related Electives:
General Education and
Professional Education Courses: 6 semester hours
Independent Research Problem:

> Introduction to Research, 3 credits $15-18$ semester hours in history $3-6$ semester hours 6 semester hours minimum of 1 semester hour

## Graduate Assistantships

The Department of History offers graduate assistantships. Duties consist of aiding the graduate faculty in their professional work. Duties do not include teaching of undergraduate classes. Criteria for successful applicant: good grades; undergraduate degree in history preferred. Contact the Department of History graduate coordinator for further information. Graduate assistantships for the fall semester are awarded in the preceding spring semester.

National Park Service Internships
Interested students may arrange an internship for academic credit with the National Park Service at Gettysburg National Military Park, Morristown National Historical Park, Valley Forge National Historical Park, and Delaware Water Gap National Park.

## Course Offerings

In the fall and spring semesters, graduate classes in history are offered in the late afternoon or evening. Summer pre-session classes are offered at night. Summer main session classes are offered in the morning or early afternoon.

## Graduate Faculty

Department Chair and Graduate Coordinator:
Lawrence Squeri: 570-422-3286 or 570-422-3284
M. Donaghay, Ph.D. J. Jarvis, M.A., ABD.
J. Henwood, Ph.D. Martin Wilson, Ph.D.
N. Hogan, Ph.D.

For more information, see Department of History web page www.esu.edu/ history>.

Media Communication and Technology, 570-422-3646
This is a joint cooperative program between the Department of Media Communication and Technology at East Stroudsburg University
and the Department of Instructional Technology at Kutztown University of Pennsylvania. The program offers students the opportunity to earn a Master of Education in Instructional Technology and/or a Pennsylvania Instructional Technology Specialist Certification (24 semester hours) and/or a Master of Education ( 33 semester hours). With appropriate course selection, completion of the academic requirements of the Master of Education degree will also satisfy the academic requirements of Instructional Technology Specialist Certification. The goal of these programs is to develop professional educators, as well as educators outside the K-12 environment (e.g., trainers in business and industry), who are proficient in the selection and implementation of instructional technologies in the K-12 school environment or workplace.

Because of the cooperative structure of the program, students may complete program courses at either Kutztown University or East Stroudsburg University.

Successful completion of a comprehensive examination is a graduation requirement for the Master of Education.

## Instructional Technology Specialist Certificate Program

The 24 -credit Instructional Technology Specialist Certificate Program is designed to prepare certified instructional technologists who will be catalysts for integrating technology into schools and training situations.

Course sequence: The Foundation Courses should be taken first. The Internship should be taken near the end of the program, when a student has learned enough theory, processes, and techniques to be able to carry out responsibilities of a technology specialist.

Courses denoted with an asterisk* are required for Instructional Technology Specialist Certification.

East Stroudsburg University Kutztown University
Required Foundation Courses: 6 credits
*MCOM 520 Selection and Utilization of *IT 514 Instructional Technology Instructional Media
*ELED 570 Introduction to Research *EDU 500 Methods of Educational Research
Required Major Courses: 12 credits

MCOM 510 Computers in Education
MCOM 532 Digital Photography and Still Images
MCOM 534 Video Production

MCOM 536 Internet for Educators
*IT 520 Instructional Design and Technology
*TT 525 Microcomputers for Educators
*IT 526 Organization and Administration of Instructional Technology Programs IT 536 Telecomputing and the Internet for Educators

MCOM 538 Desktop Publishing for Educators
MCOM 540 Multimedia for Educators
MCOM 545 Interactive Media
*MCOM 526 Organization and Administration
of Instructional Technology Programs
Electives: 3 credits for certification from the following or adviser- approved related course work

MCOM 501 Current Applications IT 435 Distance Learning for the
K-12 Educator
IT 515 Word Processing and Desktop Publishing in Education
*IT 527 Integrating Instructional
Technology into the K-12 Classroom
IT 532 Integrated Video/Computer
Productions for Educators
IT 533 Hypermedia: A Tool for the Educator
IT 547 Selected Topics in
Audiovisual Communications
IT 550 Multimedia for Educators
IT 553 Development of Projected Instructional Materials
IT 565 Theories of Learning
PSED 516 Learner and Learning Process
Required Capstone Courses: 3 credits for certification
*MCOM 585 Internship
*IT 590 Internship/Practicum

## Instructional Technology Master of Education Degree Program

This 33-credit program is designed to prepare instructional technologists as district-wide technology coordinators, educators using technology, intermediate units technology administrators, classroom teachers, and industrial trainers who will be catalysts for integrating technology into schools and training situations. Students seeking certification must see their adviser to enter into the program.

## Master of Education Degree in Instructional Technology

East Stroudsburg University and Kutztown University Joint Program (33 credits)


MCOM 581 Research Project II
*MCOM 585 Internship
Option B
*MCOM 585 Internship *IT 590 Internship/Practicum
MCOM 589 Thesis (6 credits)

IT 571 Research Project II
*IT 590 Internship/Practicum

IT 503 Thesis

## Admission Process

। Candidates must complete and submit required forms, materials, and information to the graduate office.
। Graduate Office and the department faculty will evaluate candidate's credentials for admission.
। Graduate Office will notify student of admission decision.
1 Prior to beginning degree and/or certificate course work, student and adviser must develop a plan of study based upon student's academic and experiential credentials (student should obtain a copy of Portfolio Guidelines from the MCOM Department or MCOM faculty adviser).
। Plan of study must be approved prior to admission into departmental programs.
Course work taken prior to the plan of study completion will be evaluated for program compliance during the design and development of the plan of study.

Full admission is comprised of:
। Admission into the graduate school of either East Stroudsburg University or Kutztown University.
। Admission into the degree and/or certification program through the respective Department of Media Communication and Technology at East Stroudsburg University or Department of Instructional Technology at Kutztown University.Completion of a plan of study with the approval of the faculty adviser.
Contact the MCOM graduate coordinator for additional admission information to comply with Pennsylvania Department of Education requirements for the Instructional Technology Certification program. Beginning fall 2001, these include but are not limited to:

I Minimum undergraduate overall QPA of 3.0 (Pennsylvania Act 354).
1 If not a 3.0 QPA, then a minimum completion of 9 credits of departmental degree and/or certification courses with prior written approval of MCOM and/or IT faculty adviser.
। Minimum QPA of 3.0 in the 9 credits to be considered for program admission.

Off-Campus Transfer Students

। Transfer of 6 credits maximum of non-MCOM and/or non-IT courses into the program.
1 Transfer students must prepare an electronic portfolio to present as evidence that they are prepared to enter either the certification or master's program.
1 Portfolio will be used to aid development of a student's plan of study.
After admission into the respective Instructional Technology certification and/or degree program:

। Certification candidates must complete all requirements within three years.
। Master's degree candidates must complete their course of study within four years.

## Meeting Program Requirements

Student Performance
Each student will:
। Satisfactorily complete all assignments and related course work within the allotted time and manner as deemed by the instructor.
1 Orally and in writing present to their peers and instructor, as part of their compliance with either a formative or a summative experience within each course.
। Develop a portfolio representative of their compliance with course requirements.
। Develop a separate portfolio during internship.
These experiences are part of and integral to assessment of student performance.
Student Productions
1 All courses have student production activities interwoven into classroom and laboratory experiences, and these are related to final course evaluations.
1 Each of these student productions and experiences comprise a part of the sum of required demonstrations for program completion.
। The productions are presented to classmates and instructors, and are retained in a mandatory student portfolio of the program.

## Authentic Assessment

Authentic assessment is the foundation in our building-block approach to student performance. The sequence of courses requires students to demonstrate an increased sophistication in their application of production skills, media techniques, and theories from earlier courses.

Each student will demonstrate assessment activities, which include
various types of performances, design, development and approval of portfolios prior to acceptance into internship, and completion of a separate portfolio as part of internship assessment.

## Certification Candidates

Prior to internship they must:
। Submit forms to comply with Pennsylvania Act 34 and Act 151
। For New Jersey submit the required FBI form
। Complete program standards
। PRAXIS test for those seeking initial certification
। 3.0 minimum QPA
Internship and all program requirements must be completed prior to applying for certification.

## Graduate Assistantships

The person holding the position of graduate assistant is expected to actively participate and demonstrate leadership by showing initiative in support of the graduate activities of the department. The graduate assistant is expected to demonstrate a willingness to learn, to apply his or her skills in the design of media, and to actively participate in production activities. This is a hands-on assistantship. We expect and encourage the graduate assistant to acquire new skills, to seek on-going training from faculty and staff of the department, and to demonstrate skill enrichment.

Skills
The Instructional Technology Masters Degree and/or Certificate Endorsement have an emphasis on media design and utilizing various technologies for media production. The person selected to hold the position of graduate assistant should have a range of qualifications and/or be willing to learn:

। Word processing
। Computer graphics
। Media design and development, e.g. storyboarding, scripting, treatment, lesson planning
Media production skills, e.g. video, photography
Computer presentation software, e.g. HyperStudio, PowerPoint Production and presentation hardware selection and utilization Internet access and searching Office etiquette and organization, implementation, and completion of office tasks

[^3]I Participate in media productions - e.g. photography, production of graphics (design and implementation of handouts and information pieces), and support academic activities by aiding with the design and production of materials using presentation software (PowerPoint, HyperStudio, Adobe Premiere, and Acrobat, etc.) and other software and hardware tools
) Search and research topics as assigned using the Internet and traditional reference sources
। Perform office duties of word processing, organizing files, filing, copying, equipment and software sign-out, and answering telephone Other duties as assigned
This description is subject to change, and applicants are encouraged to check with the MCOM graduate coordinator for a current description.

To apply for a graduate assistantship contact Dr. Elzar Camper, graduate coordinator.

## Graduate Faculty

## Department Chairs

| East Stroudsburg University | Kutztown University |
| :--- | :--- |
| Professor Gary Braman | Dr. Chuck Roth |
| Rosenkrans Hall-East | AV Center, Rohrbach Library |
| East Stroudsburg University | Kutztown University |
| 570-422-3393 (Voice Mail) | (610) 683-1360 (Telephone) |
| 570-422-3786 (Fax) | (610) 683-1326 (Fax) |
| gbraman@po-box.esu.edu | roth@kutzown.edu |

Graduate Coordinators
East Stroudsburg University
Kutztown University
Dr. Elzar Camper Jr. Dr. Lynn Milett
570-422-3646 (Voice Mail) 610-683-1598 (Voice Mail)
570-422-3737 (Department)
Elzar.Camper@po-box.esu.edu milet@kutztown.edu
Department Faculty
Terry C. Giffel, Ph.D.
Thomas Giovarelli, M.Ed.
Michael W. Weaver, M.Ed.

## Movement Studies and Exercise Science 570-422-3106, <www.esu.edu/mses>

The Department of Movement Studies and Exercise Science (MSES) offers
the following master degree programs:

1. Master of Education with a major in Health and Physical Education (Teacher Enhancement - Advanced NASPE Endorsement)
2. Master of Education with a major in Health and Physical Education: Concentration in Sport Management
3. Master of Science with a major in Physical Education (Exercise Science or Psychosocial Focus)
4. Master of Science with a major in Cardiac Rehabilitation and Exercise Science

All degree candidates will prepare and follow a plan of study that must be approved by his or her graduate faculty advisor.

## Master of Education <br> Major in Health and Physical Education 35 Semester Hours

The M.Ed. is available for students desiring to enhance their preparation for teaching health and physical education. The minimum course requirements for the Master of Education with a major in Health and Physical Education, are as follows:

MSES 510 Curriculum and Development
MSES 513 Evaluation of the Teaching-Learning Process in HPE
MSES 517 Analysis of Teaching
MSES 520 Seminar in PE Literature
MSES 522 Advanced Theory and Techniques
MSES 561 Seminar in Adapted PE
MSES 565 Supervision in HPE
MSES 570 Introduction to Research
MSES 571 Independent Research Project: Assessment Portfolio
MSES 574 Research Lab
HLTH 539 Health Education Methods Workshop
HLTH 550 School Health Administration and Curriculum
HLTH 555 Health Education Evaluation or
HLTH 560 Scientific Foundations of Health Behavior
Additional Requirements:
। Students entering the program are certified teachers of physical education or health and physical education.
। Students who have completed at least 6 credits but no more than 12 credits must file a plan of study.
1 Students will complete a Portfolio Exhibition as their exiting research project.

## Master of Education

## Major in Health and Physical Education with a Concentration in Sport Management - 34 Semester Hours

This concentration provides a graduate-level experience leading to a master's degree for individuals interested in pursuing careers related to sport management. This program continues to be structured in accordance with emerging National Association of Sport and Physical Education (NASPE) and North American Society of Sports Management (NASSM) guidelines. Career interest may range from athletic administration in public and private schools, colleges, and universities, to the private sector, including sport clubs and professional athletics. This program requires an on-site internship of $7-10$ credit hours and the successful completion of the Sport Management Comprehensive Examination.

The minimum course requirements are as follows and includes at least one course from the Professional Core courses and one from the Scientific Foundations courses listed at the end of the Movement Studies and Exercise Science section.

Required:
MSES 570 Introduction to Research
MSES 586 Field Experience and Internship (7-10 semester hours arranged)

Select seven of the following MSES courses (must include one course from Scientific Foundations (SF) and one from Professional Core (PC)).

MSES 519 Sport and Society (SF)
MSES 523 Administration: Physical Education and Sport Programs (PC)
MSES 546 Planning and Management of Sports Facilities
MSES 547 Sports Business and Finance
MSES 548 Sports Marketing
MSES 549 Sports and the Law
MSES 550 Sport Personnel Management
MSES 551 Application of Computers to Sports Management
MSES 553 Ethical Issues in Sports Management
MSES 559 Public Relations in Sport Management
Comprehensive Exam

## Master of Science

Major in Physical Education - 30 Semester Hours
The M.S program is available to those students who wish to pursue the study of a specialized focus within the body of knowledge underlying Movement Studies and Exercise Science. Students who seek admission to this degree program must develop and write an appropriate "Statement of Intent" that is a rationale for undertaking this course of study and an indication of the
overall plan for academic progress.
Students must choose to specialize in either an exercise science or psychosocial focus which is reflected in at least 12 credits of course work (6 of which must be in courses in movement studies and exercise science). Students must also successfully complete a thesis and a comprehensive examination.

Required: 20-22 semester hours in MSES or other approved courses
Must include 12 semester hours of specialization courses and 5-8 semester hours of electives.

Exercise Science Focus
MSES 570 Introduction to Research
MSES 572 Thesis Seminar (3 Semester Hours Arranged)
MSES 574 Research Laboratory ( 1 semester hour)
MSES 513 Evaluation in the Teaching-Learning Process in Health and Physical Education or Statistics
MSES 526 Biomechanics of Human Performance
MSES 528 Physiology of Human Performance
12 credits specialization
Thesis
Psychosocial Focus
MSES 570 Introduction to Research
MSES 572 Thesis Seminar (1-3 Semester Hours Arranged)
MSES 574 Research Laboratory ( 1 semester hour)
MSES 513 Evaluation in the Teaching-Learning Process in Health and Physical Education or Statistics
Thesis
Comprehensive Exam

## Master of Science

Major in Cardiac Rehabilitation and Exercise Science 45 Semester Hours (www.esu.edu/mses/cres)

An M.S. program in cardiac rehabilitation and exercise science is offered in conjunction with six area medical centers. This program offers traditional classroom and laboratory experiences as well as specialized clinical experiences. The Cardiac Rehabilitation Program is a limited-access program. The class is typically restricted to the top 25 qualified applicants.

Students must complete two applications for admission to the Cardiac Rehabilitation Program: the general graduate school application and a supplemental department application. The program begins as a cohort group in the summer post session and continues through the end of the following summer. Students must pass a written comprehensive examination.
Required:

Summer Post Session Courses
MSES 555 Exercise and Weight Control Workshop
MSES 556 Aerobic Fitness Workshop
Fall Semester Courses
MSES 528 Physiology of Human Performance
MSES 530 Electrocardiography, Non-Invasive Cardiac Evaluations, and Implications in Exercise and Rehabilitation
MSES 531 Cardiac Rehabilitation Clinical Laboratory I
MSES 539 Coronary Heart Disease: Its Medical Diagnosis and Management
MSES 586 Field Experience and Internship
Spring Semester Courses
MSES 532 Cardiac Rehabilitation Clinical Laboratory II
MSES 537 Stress Testing and Exercise Prescription
MSES 538 Cardiac Pathophysiology and Pharmacology
MSES 586 Field Experience and Internship
MSES 513 Evaluation in the Teaching-Learning Process in Health and Physical Education or Statistics
Summer Pre-Session Course
MSES 536 Organization and Administration of Cardiac Rehabilitation and Primary Prevention Programs
Summer Main Session Courses
MSES 533 Health and Fitness Clinical Laboratory III
MSES 595 Cardiac Rehabilitation Seminar
Summer Post Session Course
MSES 541 American College of Sports Medicine Workshop
Comprehensive Exam
For any degree program, the degree candidate must select a minimum of 18 graduate credits of courses open only to graduate students.

All graduate students in the Movement Studies and Exercise Science Department will have to demonstrate computer literacy.
Professional Core Courses
MSES 510, MSES 517, MSES 518, MSES 520, MSES 521, MSES 523, MSES 561, MSES 565

Scientific Foundation Courses
MSES 515, MSES 516, MSES 519, MSES 525, MSES 526, MSES 528, MSES 529, MSES 530, MSES 534, MSES 537, MSES 538, MSES 539, MSES 544, MSES 560, MSES 562, MSES 563, MSES 585

Graduate Faculty
E. Berman, M.D.
T. Miller, Ph.D.
K. Casebolt, Ph.D.
S. Mueller, D.Ed.
D. Cummings, Ph.D.
F. Pullo, Ed.D.
S. Davis, Ph.D.
C. Saffici, Ed.D.
G. Dwyer, Ph.D.
J. Sheska, M.Ed.
R. Fleischman, J.D., M.S.
J. Smith, Ph.D.
E. Gibbons, Ph.D.
R. Smith, Ph.D.
A. Goldfuss, Ph.D.
R. Sutton, Ph.D.
K. Harrison, M.S., ATC
J. Thatcher, M.Ed., ATC
J. Hauth, Ed.D., ATC L. Wagner, M.Ed., PT, ATC
P. Miller, Ph.D.,
G. White, Ph.D.

## Political Science, 570-422-3286, www.esu.edu/pols/index. html

The graduate faculty in Political Science offers two degree programs in political science, the Master of Arts and the Master of Education. In the Master of Arts program all students must complete a thesis. In the Master of Education program, the student may elect to do a thesis program or a nonthesis program.

Candidates must complete degree programs in accordance with one of the outlines shown below. Individual programs and specific course selections are made under the supervision and with the approval of an adviser from among the graduate faculty in the major field.

## Master of Arts

## 30 Semester Hours

Required: 3 semester hours
POLS 570 Introduction to Research: Scope and Method
Political Science Electives: (minimum) 15-21 semester hours
Students must elect at least one course from each group:
Group A American Politics and Public Administration
Group B International Relations
Group C Comparative Government and Regional Studies
Group D Political Theory
Related Electives:
Students may select up to 6 semester hours from related areas: history, economics, sociology-anthropology, geography, or other course(s) by permission of the graduate coordinator of the degree faculty.
Thesis Requirements: 6 semester hours
POLS 572 Thesis

# Master of Education <br> Thesis Program - 30 Semester Hours 

Required: 3 semester hours
POLS 570 Introduction to Research: Scope and Method
Political Science Electives: 12-18 semester hours
Students must elect at least one course from each of the four disciplinary groups.
Related Electives:
Students may select up to 6 semester hours from related areas by permission of the graduate coordinator of the degree faculty.

Professional and Secondary Education: 6 semester hours
Students must take 6 semester hours from the School of Professional and Secondary Education.
Thesis Requirement: 3 semester hours
POLS 572 Thesis I

## Master of Education <br> Non-Thesis Program - 34 Semester Hours

Required: 3 semester hours
POLS 570 Introduction to Research: Scope and Method Political Science Electives: 12-15 semester hours

Students must elect at least one course from each of the four disciplinary groups.
Related Electives:
Students may select up to 9 semester hours from related areas by permission of the graduate coordinator of the degree faculty.
Professional and Secondary Education: 9 semester hours
Students take 9 semester hours from the School of Professional and Secondary Education.

POLS 571 Independent Research Problem, 1 semester hour
Course List by Disciplinary Group
American Politics and Public Administration
POLS $532 \quad$ Seminar in Parties and Politics
POLS 533 The Presidency
POLS 534 Seminar: Presidential Elections and Politics
POLS 535
American Federalism
Seminar: Readings in Civil Liberties

POLS 537 Problems in Public Administration
POLS 554 The Legislative Process
POLS 566 Public Budgeting and Finance
POLS $586 \quad$ Field Experience and Internship
International Relations
POLS 538
POLS 541
POLS 543
United States Foreign Policy
Seminar on War and Peace
The United Nations
POLS 545 International Law and Organization
Comparative Government and Regional Studies
POLS 520 Area Studies
POLS 522 Seminar: Foreign Travel and Study
POLS 525 Seminar: The Middle East
POLS 540 Comparative Politics
POLS 548 The Politics of Developing Nations
Political Theory
POLS 528 Comparative Policy Analysis
POLS 531 Contemporary Political Thought
POLS 544 Theory of International Relations
POLS 547 Seminar in American Political Thought
POLS $550 \quad$ Seminar in International Studies
POLS 562 Political Behavior
Research and Cognate
POLS 570 Introduction to Research: Scope and Method
POLS 571 Independent Research Problem
POLS 572 Thesis I
POLS 573 Thesis II
POLS 577 Independent Study in Political Science

## Graduate Assistantships

The Political Science Department offers graduate assistantships.

## Public Health, 570-422-3560, <www.esu.edu/mph>

(See Health for Master of Science in Health)
The Master in Public Health (MPH) program is a 48-credit degree program accredited by the Council on Education for Public Health (CEPH). CEPH is the independent agency recognized by the U.S. Department of Education to accredit schools of public health and certain public health programs <www.ceph.org>. CEPH accreditation attests to the quality of an educational program that prepares public health practitioners for entry into the public health profession. Accreditation provides assurance to students that the
school or program has been evaluated and has met accepted standards established by and with the profession. Accreditation provides potential employers, with assurance that the curriculum covers essential skills and knowledge needed for today's jobs.

In addition to the core public health disciplines (epidemiology, health administration, environmental health, social and behavioral sciences, and biostatistics), the curriculum is designed to meet the emerging Council on Linkages Public Health Competencies and the graduate health education "competency framework" developed by the health education profession. Recipients of this degree are uniquely qualified members of the public health workforce as they are eligible to sit for the Certified Health Education Specialist exam. This indicates that in addition to public health skills they have the requisite skills in developing, planning, implementing, evaluating, administering, and researching public health education programs required to earn this nationally required credential.

The Master of Public Health with a concentration in Community Health Education includes a 9-credit internship requirement, a requirement to pass an oral exam and a requirement to write and present a publishable quality paper. Graduates will work in public health program management, public health education and behavioral sciences or health administration to prevent epidemics and the spread of disease or bioterrorism, to protect citizens against environmental hazards, to prevent injuries, to promote and encourage healthy behavior in communities, to respond to disasters and recovery efforts, and to assure the quality and accessibility of health services.

Students who enter the program are frequently trained in the following professional areas: social behavioral sciences (such as psychology, anthropology, or sociology), nursing, medicine, biology, journalism, teaching, or various other fields. No specific undergraduate degree is required. Professional work experience is very helpful.

The vision for the MPH program is to develop a future in which there is a demand for public health excellence in eastern Pennsylvania, and in which the ESU public health program becomes the recognized regional center for public health excellence. The program will prepare public health workforce professionals who partner with communities and use applied research and public health practice to empower communities and foster organizational collaboration.

The East Stroudsburg University MPH program prepares the public health workforce through instruction, research, and service.

Through instruction:
। Students apply approaches of community health practice to community health problems and organizations focusing on the culture of groups, organizations, and communities, and the various factors that influence or are influenced by community health education programs.

। Students demonstrate knowledge of public health structure, organization, programs, laws, policy, management, social and behavioral sciences, epidemiology, environmental health, and biostatistics.
Through research:
। The program contributes to the knowledge base of public health practice and health education by performing research in the basic and applied aspects of community health and health behavior and in the application of community health development and policy research.
Through service:
। The program provides public health services to a variety of public and private agencies in the Commonwealth and the surrounding region. These services include needs assessment, planning, implementation, research, and evaluation.
1 The program also provides continuing education and in-service programs to public health professionals in the surrounding region.
Required:
HLTH 509 Health Counseling
537 Community Health Practice
538 Public Health Administration
539 Health Education Methods Workshop
555 Health Education Evaluation
560 Scientific Foundations of Health Behavior
561 Epidemiology
562 The Physical Environment and Community Health 570 Introduction to Research
571 Health Education Research Problem
586 Field Experience and Internship
MATH 502 or 516 Applied Statistics OR Biometry
The program allows for 6-8 credits of electives that will expand their ability to function as a public health practitioner. Six credits of these electives may be from outside the department. Graduate students must successfully complete, as part of their course work, the following: a public health education internship, an oral examination covering published public health and community health education questions, a publishable quality paper, and a presentation of this paper. Full-time students can complete the program in a minimum of four semesters. Part-time students (3-6 hours/semester) may take up to six years to complete, though the average is less than three years.

## Admission

All students applying for the Master Public Health degree program must meet the current catalog requirements to be eligible for conditional admission.

Full admission to the program requires:
। Bachelor's degree from an accredited college or university.
1 An undergraduate minimum grade point average of 2.5 (4.0 basis) overall and a 3.0 grade point average in the area of specialization during the junior and senior years.
। Submit three verifiable letters of recommendation.
। Submit acceptable GRE scores.
1 Submit a professional resume describing relevant experience and skills.
Conditional admission may be granted if the candidate does not meet requirements for full admission. Continuation of study is dependent on completion of all deficiencies if any are noted.

Graduate Assistantships
The Master Public Health program has several opportunities for graduate candidates to obtain a graduate assistantship. The student would be assigned to a health faculty member(s) and complete tasks as assigned in areas of literature reviews, clerical duties, recording keeping, data entry, professional development activities, etc.

Graduate Faculty
Department Chair: A. Cardelle Ph.D., MPH
Graduate Coordinator: K. Hillman Ph.D., MPH
MPH Program Coordinator: C. Woodhouse, Ed.D., MPH, CHES
A. Bitto, M.D., MPH, D.PH, CHES
S. Godin, Ph.D., MPH, CHES
S. Shive, Ph.D., MPH
B. Waring, Ed.D.

## Professional and Secondary Education

570-422-3363, www.esu.edu/psed
The Department of Professional and Secondary Education offers the following programs: (1) Certification in Secondary Education, (2) Teaching Intern Program, (3) a Master of Education in Secondary Education, and (4) Principal Certification. In addition, East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania have entered into a collaboration to offer doctoral courses for Indiana University's doctoral program in Administration and Leadership Studies (Ed.D.) on ESU's campus.

## Secondary Education Certification

## Admission Requirements

। Quality point average of 2.5 or better in overall work and 3.0 in the undergraduate major
। Departmental faculty interview

## Program Requirements

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. Certification areas are the following:

| Biology | General Science |
| :--- | :--- |
| Chemistry | Mathematics |
| Communication | Physics |
| Earth and Space Science | Social Studies |
| English | Spanish |
| French |  |

You are urged to meet regularly with your advisers, one from Professional and Secondary Education, another from your discipline department, to ensure receiving certification in the most efficient manner. Students must be accepted to the graduate school, which includes the review of all undergraduate course work.

## Course Requirements

A total of 20 credits of professional course work is required plus a semester of Student Teaching which includes Practicum support sessions and Internship ( 13 credits). Students are also required to have taken 6 credits in Mathematics, 3 credits in English composition, and 3 credits in English literature.

Required Courses:
$\qquad$ PSED 510: The Teacher and the School Community, 3 credits
$\qquad$ PSED 516: The Learner and the Learning Process, 3 credits MCOM 520: Selection and Utilization of Instructional Media for the Classroom, 3 credits

REED 527: Reading in the Content Area, 3 credits
The appropriate secondary education methods course (below) should be taken one or two semesters before enrolling in Student Teaching. Methods courses are not offered every semester. Students are encouraged to take Seminar I before or concurrently with the "Teaching of ...." courses. Seminar I
and II may not be taken concurrently.
$\qquad$ PSED 506: Teaching of English in Secondary Schools, 3 credits
$\qquad$ PSED 586: Teaching of Communications, 3 credits
$\qquad$ PSED 517: Teaching of Foreign Language in Secondary Schools, 3 credits
$\qquad$ PSED 536: Teaching of Mathematics in Secondary Schools, 3 credits
$\qquad$ PSED 546: Teaching of Science in Secondary Schools, 3 credits
$\qquad$ PSED 566: Teaching of Social Studies in Secondary Schools, 3 credits
$\qquad$ PSED 520: Seminar in Secondary Education I, 3 credits
PSED 521: Seminar in Secondary Education II, 2 credits
$\qquad$ PSED 430: Student Teaching in Secondary Education/Middle School/ Junior High School, 6 credits
$\qquad$ PSED 431: Student Teaching in Secondary Education/Senior High School, 6 credits
The two student teaching experiences will include a support program called practicum.
Arts and Science (Dept. Code 499): Internship in Student Teaching, 1 credit
Graduates who complete the required courses in one of the majors listed above, the professional education courses, the university requirements, and the state requirements are eligible to be recommended for certification to teach in their major in middle schools, junior high schools, and senior high schools within the Commonwealth of Pennsylvania. Applications for certification are obtained from the Dean of Professional Studies Office.

## Teacher Intern Program 570-422-3363

East Stroudsburg University offers the Teacher Intern Program, an opportunity for college graduates to enter the teaching profession in the secondary schools of Pennsylvania.

This program permits one to earn teaching credits while teaching under supervision and on full salary. This hands-on approach to earning teaching credentials has been designed as an attractive alternative for the teaching profession.

## Admission Requirements

Acceptance into the program is required before seeking a teaching position in the public schools. The pre-admission screening procedures are:

। Interview by faculty (Major Discipline Department/ Professional and Secondary Education Department) committee.
। Transcript evaluation of your academic achievements and Satisfactory

## PRAXIS scores.

। A writing sample reflecting logic and handwriting skills, such as grammar and spelling, is required.
। Pennsylvania Act 34 Criminal Record and Act 151 Child Abuse Checks are required. A criminal infraction may slow or stop certification.
। A bachelor's degree from an accredited college or university with a quality point average of 2.5 overall and 3.0 in the major is required.

## Program Requirements

After admission to the Intern Program at East Stroudsburg University, successfully passing the PRAXIS Examinations, meeting professional and academic requirements, and having a clear criminal records check, one may seek employment in the secondary schools of Pennsylvania. If offered employment by a school district, one must immediately apply at the university (Dean, School of Education) for the Intern Certificate. From the time one gains employment and receives the Intern Certificate, one has three years to complete the required education credits (course work).

If one does not gain employment while holding the letter of candidacy, then teacher certification is available through the traditional route. After these steps are successfully completed one receives the Instructional I Certificate.

Certifications available are the following: Biology, Chemistry, Communication, Earth and Space Science, English, Foreign Language (French, Spanish), General Science, Mathematics, Physics, and Social Studies.

## Master of Education in Secondary Education

## 570-422-3363

This master's degree is designed for secondary (junior, middle, senior high) school teachers who wish to further develop the knowledge, skills, and attitudes necessary for growth in teaching effectiveness, and for teachers seeking Pennsylvania elementary and/or secondary principal certificates, or New Jersey principal or supervisory certificates. A minimum of 12 credits of PSED regular courses (not workshops) must be taken.

Within the framework of course flexibility and needs assessment, the individual will take experiences from the following:

Area of Concentration, 12 semester hours; Professional Education, 9 or 15 semester hours; Required Courses, 9 semester hours; PSED 516 The Learner and the Learning Process, SPED 551 Inclusionary Practices, and ELED 570 Introduction to Research. Total required is 31 or 36 semester hours, depending on the option selected.

The areas of concentration available at East Stroudsburg University presently include any academic area, administration, affective education, communications, curriculum, middle school, reading, health, special education, and other areas by arrangement. Teachers interested in securing
a master's degree and/or certification as a principal, will find this program especially attractive.

Students may acquire a General Area of Concentration by planning the program with an adviser and including courses suited to the needs and interests of the candidate. It is also possible to arrange for the transfer of 6 graduate credits from an accredited institution in any area not offered at the university. Affective Education Workshop courses can be taken as a concentration in the Master of Education program ( 12 credits); if not taken as a concentration, the maximum allowed is 6 credits of such workshop courses as they relate to your program. Pre-approval is necessary.
Option I
The extended study option requires 36 graduate credits and successful completion of a comprehensive assessment portfolio. Candidates with a quality grade point average of 3.0 to 3.25 are required to take and pass a written comprehensive exam in addition to the portfolio.

## Option II

Those candidates who elect to write an Independent Research Problem will enroll for 30 graduate credits of course work and 1 graduate credit for their Problem. Candidates are required to present three copies of their Problem for an oral review. Candidates must also successfully pass a written comprehensive examination.

## Principal Certification <br> Elementary and/or Secondary, 570-422-3363

East Stroudsburg University offers a program in School Administration leading to certification for the elementary and/or secondary principal.

The program has been designed for and will accept students who:
। Have enrolled in a master's degree program at ESU.
। Need additional course work to meet certification standards in Pennsylvania or other states.
। Desire enrichment, professional education requirements for other degree programs, or for other certification requirements and do not necessarily plan to seek certification as a principal.
Graduate credits already earned will be evaluated and accepted when applicable. Each student will have an adviser who will assist in planning the program in view of the students' needs and interests. To receive endorsement for a Pennsylvania Certificate, students will need to complete a 42 -credit program with a minimum of 18 hours completed at ESU. New Jersey's requirement that a candidate have a master's degree in administration, leadership, or management can be completed at ESU by developing a master's degree plan of study based on the Pennsylvania approved principal's certification program.

This program has been approved by the Educational Leadership Constituent Council's Association for Supervision and Curriculum Development, the national organization for administration and leadership.

For all degree programs described above, the candidate must select a minimum of 18 credits of courses open only to graduate students.
Graduate Faculty
The Department of Professional and Secondary Education is composed of faculty members who have had a wide range of experiences that enrich the program. Faculty members have served as elementary and secondary school teachers, supervisors, guidance counselors, elementary and secondary school principals, superintendents of schools, and as officers in the State Department of Education.

## Master of Education in Reading, 570-422-3416

The Department of Reading of East Stroudsburg University offers a graduate program of study leading to a Master of Education. The program also qualifies students for the Pennsylvania Reading Specialist Certificate. This certificate enables a teacher to provide reading instruction in kindergarten through grade 12. Graduate students in both programs must complete the requirements established by the faculty that meet the standards of the Pennsylvania Department of Education for the Pennsylvania Reading Specialist Certificate and the National Council for Accreditation of Teacher Education (NCATE).

The Reading Specialist Certification component of the program consists of 27 credit hours of required course work, while the Master of Education in Reading degree requires 39 credit hours. Programs are planned for students on the basis of an individual's previous course work and professional experiences.

The mission of the East Stroudsburg University Department of Reading is to create a community of learners dedicated to understanding how literacy develops and how educators can guide and support all students in acquiring their literacy abilities.

## Program Outcomes

Candidates for the Reading Specialist Certification/Master of Education in Reading demonstrate the following program outcomes:

। Understand the major theories of language development and their relationship to various models of literacy instruction.
। Develop a personal philosophy about literacy development and instruction.
1 Understand and respect the diversity of students and their language
abilities.
1 Put literacy theory into practice in a variety of educational contexts.
1 Integrate the language arts across the curriculum.
। Plan and implement appropriate literacy instruction based on students' needs.
Use multiple, appropriate procedures to assess and evaluate students' effort, progress, and achievement in literacy.
Investigate and implement research on current practices in literacy instruction.
Incorporate technology into literacy instruction.
Communicate and work collaboratively with parents, teachers, administrators, and community personnel in a literacy program.

## Program Requirements

The requirements for admission into the Master of Education in Reading program are the same as the general requirements for admission to the ESU graduate school. Additionally, admission into the Reading Specialist Certification program requires an Instructional I Pennsylvania teaching certificate. As a full-time student, a candidate for the Reading Specialist certificate and/or the Master of Education can usually complete the program in one calendar year. Both programs for part-time students are subject to a 6year time limit. The program's classes during the fall and spring semesters are offered in the evening.

The Department of Reading allows students to begin their program in any semester. For admission to the program with full standing, students must meet the minimum GPA as required by the ESU graduate school and submit two letters of recommendation at the time of application. Conditional admissions to the program are made on a case- by-case basis by the Department of Reading.

## Master of Education

## 39 Semester Hours <br> (Qualifies Student for PA Reading Specialist K-12 Certificate)

Required:
ELED 570 Introduction to Research
REED 521 Language and the Reading Process
REED 522 Theoretical Models of Reading and Literacy Processes
REED 523 Analysis of Instructional Techniques in Reading
REED 524 Reading Clinic Practicum (6 credit hours)
REED 526 Development of the School Reading Program
REED 527 Reading in the Content Areas
REED 529 Assessment and Evaluation of Literacy

REED 580 Research Problems in Reading
Electives:
Nine semester hours of electives which may be taken in reading education, elementary education, secondary education, special education, and media, communication and technology.

# Reading Specialist Certification 

27 Credits
(Qualifies Student for PA Reading Specialist K-12 Certificate)
Required:
REED 521 Language and the Reading Process
REED 522 Theoretical Models of Reading and Literacy Processes
REED 523 Analysis of Instructional Techniques in Reading
REED 524 Reading Clinic Practicum, 6 credits
REED 526 Development of The School Reading Program
REED 527 Reading in the Content Areas
REED 529 Assessment and Evaluation of Literacy
REED 580 Research Problems in Reading
Final Program Requirement: Portfolio Exhibition

## Graduate Assistantships

The Department of Reading offers graduate assistantships on an annual basis. Applicants must apply to the graduate school and schedule an interview with the graduate coordinator of the department. Graduate assistants are expected to meet the qualifications for acceptance into the department's program. Responsibilities of the graduate assistant may include conducting research, preparing learning centers, assisting with clerical needs, proofreading, and editing.

## Graduate Faculty

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Jesse C. Moore, Ed.D.
Professor and Chair of Reading, Graduate Coordinator
jmoore@po-box.esu.edu
Mary Beth Allen, Ed.D.
Associate Professor of Reading
mballen@po-box.esu.edu
Maureen McLaughlin, Ed.D.
Professor of Reading
mmclaughlin@po-box.esu.edu
Stephanie Romano
Assistant Professor of Reading
sromano@po-box.esu.edu
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## Secondary Education

For Secondary Education, see Professional and Secondary Education.

## Special Education, 570-422-3558

The graduate program in the Department of Special Education and Rehabilitation currently consists of a Master of Education and three certification tracks that may or may not be part of a Master of Education program. The department currently offers three options for completion of the M.Ed. Entry into the program as a full-standing graduate student requires undergraduate certification in Special Education. During the academic year courses are offered in the evening. In addition, the department has an extensive summer program with courses offered during the day.
Number of Credit Hours to Complete
Range of 30-59 dependent upon previous educational certifications/ background.
Purpose of Degree/Certification
Certification in Special Education is required to teach students with disabilities in Pennsylvania. A Master of Education enhances skills, is necessary for salary increments, and is required by most school districts.
National Accreditation
The graduate special education certification program is NCATE accredited.

## Department Mission Statement

To provide every student with the best preparation for meeting the needs of a diverse population of individuals and their families.

## Special Education Certification (Instructional I)

Undergraduate prerequisites include two courses in each of Math and English beyond the introductory level. Undergraduate course work/certification will be examined to determine the individual course work requirements for each prospective candidate. Full-time (12 credits per semester) students can complete the program within a range of two semesters to five semesters. Candidates already certified in Elementary Education do not need to complete a student teaching experience. All other certification areas and those without a student teaching experience on their transcript will be required to participate in student teaching unless the department has approved a waiver. Passing PRAXIS examinations scores is required for certification. To complete the Master of Education with Special Education, an individual plan of study is devised and will comprise 36 credits of course work including the graduate-level course work completed for the

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Special Education Certification.
Professional Requirements
    ELED 502 Psychology of the Elementary School Child
    PSED 516 The Learner and the Learning Process
    Select one from the following four courses:
    PSED 504 Philosophy of Education
    PSED 509 History of Education
    PSED 510 The Teacher and the School Community
    PSED 511 Educational Sociology
    MCOM 510 Computers in Education
    REED 521 Language and the Reading Process
    REED 527 Reading in the Content Areas
Major Requirements
    SPED 550 Nature and Needs
    SPED 551 Inclusionary Practices
    SPED 554 Curriculum and Instruction for Mild Disabilities
    SPED 555 Curriculum and Instruction for Severe Disabilities
    SPED 568 Early Intervention
    SPED 574 Applied Behavior Analysis Principles I
    SPED 581 Measurement and Evaluation
    SPED 584 Seminar: Vocational and Career Education
Student Teaching
    SPED 420 Student Teaching I
    SPED 421 Professional Practicum
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## Special Education Supervisory Certification

Prerequisite to admission in the Supervisory Certification program is a minimum of three (3) years of special education teaching experience with an Instructional I or II certification in special education or an out-of-state equivalent, three letters of recommendation, and full admission to the graduate school.

SPED 570 Collaboration in the Education Process
SPED 574 Applied Behavior Analysis Principles I
SPED 580 Seminar: Administration and Organization in Special Education
SPED 589 Curriculum Issues in Special Education
SPED 596 Internship in Special Education Supervision
PSED 590 Supervision of Instruction

## Applied Behavior Analysis Certification

The Applied Behavior Analyst certification program can be completed as a concentration within a Master of Education for candidates holding
certification in Special Education or as a stand-alone program for candidates holding a master's degree in Special Education or a related field. Completion of course work makes the candidate eligible to apply to the Behavior Analyst Certification Board (BACB) for entrance into the Board Certification examination. This program is a cohort program with each cohort group beginning the course sequence in the main summer session. The five-course sequence is then completed in the next four semesters. The BACB currently offers the examination in November and May of each year.

SPED 574 Applied Behavior Analysis Principles I
SPED 575 Applied Behavior Analysis Principles II
SPED 576 Research Problems in Special Education
SPED 577 Application of Behavior Principles with Low Incidence Disabilities
SPED 577 Systems Issues in Behavior Support

## Master of Education with Certification

## 36 Credits

This program of study is designed for the candidate above seeking an M. Ed. with Instructional I certification. From the course work listed above for certification, eight Special Education courses will comprise the major. In addition, the following courses are required.
Requirements:
ELED 570 Introduction to Research
Select one of the following four:
PSED 504 Philosophy of Education
PSED 509 History of Education
PSED 510 The Teacher and the School Community
PSED 511 Educational Sociology
Program Electives:
Two courses ( 6 credits) in a related field are required. Examples of related field include but are not limited to: elementary education, professional and secondary education, media communication and technology.

## Master of Education

## 36 Credits

This program of study is designed for the candidate who holds certification in Special Education and is seeking to enhance and improve upon their professional practice. This program of study requires a core of M.Ed. course requirements ( 6 credits), and a core of Major course requirements ( 9 credits), five Major course electives ( 15 credits), and two Program electives
( 6 credits). This program can be combined with the Supervisory certification, the Applied Behavior Analyst certification, or an individually devised program designed with assistance from an academic adviser. The individually designed program takes into account the work experience and professional goals of the candidate to tailor the course work to the needs of the student. A program template, including core requirements, follows.
Requirements:
ELED 570 Introduction to Research
Select one of the following four:
PSED 504 Philosophy of Education
PSED 509 History of Education
PSED $510 \quad$ The Teacher and the School Community
PSED 511 Educational Sociology
Major Requirements:
SPED 551 Inclusionary Practices
SPED $570 \quad$ Collaboration in the Education Process
SPED 582 Seminar in Current Trends in Special Education
SPED Elective Seminar
SPED Elective Seminar
SPED Elective
SPED Elective
SPED Elective
Program Electives:
Select two courses (6 credits) from related field.

## Master of Education

30 Credits - Thesis
M. Ed. Requirements (see above)

Major Requirements: 18 credits
SPED 551 Inclusionary Practices
SPED 574 Applied Behavior Analysis
SPED 576 Research Problems in Special Education
SPED 582 Seminar: Current Trends in Special Education
SPED 572 Thesis I and
SPED Elective or SPED 573 Thesis II
Program Electives:
Select two courses (6 credits) from related field.

## Admissions

Admission decisions are made on a rolling basis for all programs except the Applied Behavior Analysis program. The ABA program submission deadline is March 1 for summer (main session) admission.

1 GPA undergraduate minimum 3.0
I Undergraduate prerequisites
। English Composition (3 credits)
। English Literature (3 credits)
। Mathematics (6 credits)
। Written statement - a one-page typewritten description of career goals, reason for pursuing graduate work in special education, personal and professional attributes that will contribute to the profession.

## Assistantships

There are currently six assistantship positions in the Department of Special Education and Rehabilitation. Two of the assistantships are administrative reporting to the department chair or the graduate coordinator and are open to students of any major. The four remaining positions are intended for special education majors only. The assistantship is an opportunity to work closely with the professors in the program on a variety of special educationrelated activities, ranging from research to program development or program activities.

## Graduate Faculty

T. Burcroff, Ph.D., BCBA
D. Cavaiuolo, Ph.D.
D. Cavanagh, Ed.D.
M. Eric Kruger, Ed.D.
G. Scala, Ed.D.
D. Steere, Ph.D.
tburcroff@po-box.esu.edu
dcavaiuolo@po-box.esu.edu
cavanagh@po-box.esu.edu
ekruger@po-box.esu.edu
gscala@po-box.esu.edu
dsteere@po-box.esu.edu

## Speech-Language Pathology, 570-422-3247, <www.esu.edu/ spa>

The Department of Speech Pathology and Audiology offers a Master of Science in Speech-Language Pathology. The program is designed to meet the needs of non-traditional and part-time students. The academic and clinical components of this degree are designed to meet the requirements of the American Speech-Language-Hearing Association's Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP). Students will also be eligible for a Pennsylvania license in speech-language pathology. In addition, students may choose to complete requirements for the Instructional I Certificate (Teacher of the Speech-Language Impaired) in Pennsylvania schools (with the completion of certain education courses, a student teaching semester, and required state testing). The choice of the school certification option may lengthen the student's degree program.

The program is fully accredited in Speech-Language Pathology by the American Speech-Language-Hearing Association.

The mission of the Graduate Program in Speech-Language Pathology is to provide an academic and clinical education program that prepares graduates to earn the ASHA CCC-SLP, and serves as a clinical and professional resource to the community.

## Master of Science in Speech-Language Pathology

The program typically takes five semesters to complete if pursued full time (fall, spring, summer, fall, spring). The program takes approximately nine semesters to complete if pursued part time. If the student chooses the teacher certification option, an extra semester may be required. Classes are generally offered in the late afternoon and evenings to accommodate parttime students. Practicum experiences require daytime hours in most cases.

The following summarizes the academic, clinical, and comprehensive examination requirements for the degree of Master of Science in SpeechLanguage Pathology.

Academic Course Work (minimum of 47 credit hours)
The academic course work requirements are designed to meet the ASHA requirements for the CCC-SLP. Students may transfer up to 6 credit hours of appropriate graduate course work from another ASHA accredited program, subject to departmental approval. No more than 3 graduate credits of course work with a grade of " C " or lower may be on the transcript in order to be eligible for the degree. No more than one SPPA course may be repeated to improve the grade. SPPA 550 MUST be repeated if a student receives a grade of "C" or lower.
Required Courses: 39 credit hours
SPPA 510 Neural Bases of Communication Disorders (3)
SPPA 533 Professional Issues in Communication Disorders (1)
SPPA 534 Clinical Audiology (2)
SPPA 535 Aural Rehabilitation (3)
SPPA 541 Phonological Disorders, Assessment and Intervention (3)
SPPA 542 Language Disorders in Children (3)
SPPA 543 Language Disorders in Adults (3)
SPPA 544 Fluency Disorders (3)
SPPA 546 Voice Disorders (3)
SPPA 550 Advanced Clinical Practicum (2) (Must be taken at least twice)
SPPA 560 Diagnostic Procedures in Speech-Language Pathology (2)
SPPA 561 Diagnostic Practicum (2)
SPPA 562 Dysphagia (3)
SPPA 584 Research Methods and Materials in Speech-Language Pathology and Audiology (3)
SPPA 586 Advanced Clinical Externship (1-6)

## Elective Courses: minimum 8 credit hours

SPPA 521 Augmentative/Alternative Communication (3)
SPPA 523 Multicultural Issues in Speech-Language Pathology (3)
SPPA 563 Adolescent Language Learning Disabilities (3)
SPPA 568 Alaryngeal Speech Rehabilitation (2)
SPPA 569 Motor Speech Disorders (3)
SPPA 572 Thesis (3)
SPPA 574 Orofacial Anomalies (2)
SPPA 575 Communication Disorders Resulting from Traumatic Brain Injury (3)
SPPA 577 Independent Study (1-3)
SPPA 582 Management of School Programs in Speech-Language Pathology (2)
SPPA 583 Caseload Management in Medical Speech-Language Pathology (2)
Clinical Practicum
Each student is required to meet the clinical education requirements for the ASHA CCC-SLP ( 375 hours of clinical observation and practicum) in order to receive the degree. All students will complete at least two practicum experiences at the ESU Speech and Hearing Center (through SPPA 550 Advanced Clinical Practicum) and at least one off-campus practicum experience that includes adult clients (through SPPA 586 Advanced Clinical Externship). A variety of clinical externship sites is available. The program faculty must approve all off-campus practicum sites. Students who pursue the teacher certification option must complete two full-semester off-campus externships (one in the adult setting and one in a school setting).
Comprehensive Examination
To receive the degree, all students must successfully complete the ASHA National Certification Examination in Speech-Language Pathology. The passing score is set by ASHA.

Admissions
Students must be admitted both to the ESU graduate school and to the M.S. in Speech-Language Pathology program. Students should obtain a complete application packet (which includes applications to the graduate school and the M.S. in Speech-Language Pathology program) by calling the Speech Pathology and Audiology Department at 570-422-3247 to request an application. Application deadline is February 1 for fall admission. All application documents, transcripts, and supporting materials must be received no later than this date for consideration for admission. Spring admission is not offered. Admission decisions are generally made in March.

The following admission criteria will be applied:
। Bachelor's degree

। QPA 2.8 overall; QPA 3.0 in undergraduate major
। GRE scores of at least 1050 combined for verbal and quantitative
। Three letters of recommendation
। Statement of professional goals
। Undergraduate background:
1 child development or developmental psychology
l linguistics
I statistics
I speech science
1 introduction to audiology
। introduction to communication disorders
। speech and language development
I phonetics or phonology
1 anatomy and physiology of speech/hearing mechanism
1 articulation/fluency disorders
। clinical practicum
I natural sciences (6 credits)
1 behavioral sciences (6 credits)
। composition/writing
। college-level math course
Students who do not meet all of the criteria listed under the undergraduate background above may gain conditional admission but must
remedy any deficiencies prior to filing a plan of study with the graduate school.

## Graduate Assistantships

A limited number of graduate assistantships is available through the department. These are awarded based upon merit and achievement to fulltime students in the graduate program. Graduate assistants do not teach classes, but complete projects and tasks assigned by professors. The graduate assistantship is awarded for the first year of full-time study, with the possibility of extension through the first summer. Prospective students should apply for a graduate assistantship at the time of original application to the program, using the application form provided by the graduate school or apply on-line.

## Graduate Faculty

R. Ackerman, Ph.D., CCC-SLP
A. Millett, M.S., CCC-SLP
J. Page, Ph.D., CCC-A/SLP
P. Remshifski, M.S., CCC-SLP
E. Shuey, Ph.D., CCC-SLP
J. Simpson, Ed.D., CCC-SLP

## Course Descriptions

## Art

ART 511 Fine Arts \& Ideas (3:3:0)
Members of the Art, Music and Theatre Faculties offer this integrated study of humanistic values in the Visual and Performing Arts. Students will have the opportunity to focus on specialized areas of interest through discussion and research. This course is also listed as MUS 511 and THTR 511. (Not regularly offered.)
ART 512 Women Artists: A Historical Survey (1.5:1.5:0)
This course is a more "in-depth" historical survey of works by women artists to help students to develop an awareness of and an appreciation of the role of women in art. A research paper or special related art project will be required. (Not regularly offered.)

ART 513 Twentieth-Century American and European Women Artists (1.5:1.5:0)
This course will entail studying works of art done during the twentieth century by women in Europe and America in greater depth. A research paper or special related art project will be required. (Not regularly offered.)
ART 577 Independent Study (Semester hours arranged.)
This course consists of directed research and study on an individual basis. (Not regularly offered.)

## Biology

BIOL 501 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, Klienfelter's Syndrome, and Tay-Sachs Disease. Prerequisite: BIOL 331, Genetics.
BIOL 502 Man and His Environment (3:3:0)
This course is a study of the various environmental problems, such as air and water pollution, in relation to ecological principles. Viewpoints of ecologists, sociologists, political scientists, and engineers will be presented.

BIOL 503 Molecular Genetics (3:3:0)
This course is designed specifically to lead the advanced student into current literature especially selected to present evidence of the unique synthesis and degradation of nucleic acids and proteins, and that the primary effect of the "gene" occurs at the biochemical level.
BIOL 504 Developmental Genetics (3:3:0)
This course is constructed to focus the energies of the student on the role of DNA during cell differentiation and to critically examine the evidence for the theme that differential gene function is the basis of cell differentiation, and consequently of embryonic development.
BIOL 505 Developmental Biology, Animal (3:2:3)
A course designed to investigate the problem of control of development, cell differentiation, and growth. Lecture will consist of a review of current literature bearing on the problem. Laboratory will concentrate on growth and differentiation in the adult animal. Prerequisite: Permission of instructor.
BIOL 506 History of Biology (3:3:0)
This course is a study of the history and philosophy of biological science oriented toward case histories and salient developments in fields of scientific endeavor. This course is designed to offer the student an opportunity to gain an appreciation for the emergence of scientific theories and to present a basis for a conceptual view of the chosen area of specialization.
BIOL 507 Organic Evolution (3:3:0)
This course seeks to develop a synthetic theory of evolution: to describe the sources of variability; to organize genetic variability in the population; to evaluate isolation, hybridization, and ploidy.
BIOL 508 Biological Instrumentation (3:2:3)
This course deals with the basic principles concerning the theory, methods and uses of instruments in biological analysis.
BIOL 509 Computer Applications in Biology (3:2:3)
This course is designed to provide students with the ability to apply computer technology to common problems in the biological sciences. The course will include biological applications in literature and database searches, computer simulation and modeling, teaching of biology, reviewing available software and hardware, and interfacing of computers for data collecting in the laboratory.
BIOL 510 The Physical Environment and Community Health (3:3:0)
This course reviews traditional and evolving public health concerns related to the physical environment. Major areas of concern are solid waste, housing, water, air, accidents, food sanitation, overpopulation, and global concerns.

BIOL 511 Animal Ecology (3:3:0)
This course is designed to acquaint the student with the principles of population dynamics, community structure, bioenergetics, and other advanced concepts of ecology.

BIOL 512 Plant Anatomy (3:2:3)
This course consists of studies of the external and internal structure of vascular plants with emphasis on development of the mature plant and its functional security. Attention to primary and secondary plant bodies; xylem, phloem and cambium; leaf, stem, and root.
BIOL 513 Predator-Prey Relationships (3:3:0)
Predator-prey relationships are prime examples of coevolution and evolutionary arms races. The study of such relationships provides insights into evolutionary and ecological mechanisms of animal interactions. These interactions will be looked at within the framework of Optimal Foraging Theory.
BIOL 514 Pathogenic Microorganisms (3:3:0)
This course is a study of the pathogenic microorganisms exclusive of the protozoa. Emphasis is on isolation and identification of the forms infecting man. The morphological, cultural, biochemicals, serological and pathological characteristics will be stressed in the laboratory.
BIOL 515 Protozoology (3:2:3)
This is a course in the pathogenic protozoa of man and domestic animals. Particular emphasis will be on developing proficiency in recognition of forms and morphological characteristics. The natural history and economic importance will be stressed as well as selected life cycle studies.
BIOL 516 Introduction to Molecular Biotechnology (3:2:3)
This 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. Lectures will include key projects and illustrate the application of biotechnology to problems of disease prevention and vaccine production.
BIOL 517 Helminthology (3:2:3)
This is a laboratory and lecture course designed to acquaint the student with the parasitic helminth of man and animals. Emphasis will be upon identification and life cycle studies. Individual projects encouraging in-depth study of a particular parasitological phenomenon are an integral part of the course.
BIOL 518 Cytology (3:3:0)
This course is designed to acquaint students with the subject of cellular structure; to give the students an understanding of the more modern concepts of cellular organization; and to bring to students the modern techniques of investigation of the detailed structure and processes of the cell.
BIOL 519 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 mechanisms for pathogenicity are studied.
BIOL 520 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 systematic levels are discussed.
BIOL 521 Introductory Mycology (3:2:3)
This course is a survey of higher and lower fungi and includes field collections of fleshy fungi with laboratory physiological studies and identification. Emphasis on Fleshy Basidiomycates and Fungi Imperfecti.
BIOL 522 Plant Physiology (3:2:3)
This course is a study of the functions of higher plants, including water relations, photosynthesis, respiration, nutrition, hormones, and growth regulators as well as the practical applications of plant physiology. Special emphasis will be given to areas of current research interest.
BIOL 523 Plant Ecology (3:2:3)
This course is designed to instill a knowledge of the principles and fundamentals of plant
ecology and the methods of vegetation analysis.
BIOL 524 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.
BIOL 525 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.
BIOL 526 Wildlife Biology (3:2:3)
A management approach to wildlife resource biology. The emphasis is in life histories, investigative techniques, and field research methods. Most North American game species are included. Prerequisite: introductory biology sequence.
BIOL 527 Natural History of Western Fauna (6:0:12)
This program provides for a graduate and undergraduate course which 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.
BIOL 528 Zoogeography (3:3:0)
The course deals with the geographical distribution of animals. It is designed to explain the pattern of animal distribution, how that pattern has been formed, and why it was formed. It also will deal with the question of what present animal distributions indicate about past climates and environments. A secondary but supporting area will be that of the ecology of invasions. This includes present-day migrations of animals from former to new habitats.
BIOL 529 Human Physiology (3:3:0)
This course is a study of the function and interrelationships of the organ systems of the human body with particular emphasis on the muscular, circulatory, endocrine, nervous, and respiratory system.
BIOL 530 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 microorganisms, agriculture, and the environment.
BIOL 531 Ecological Physiology (3:2:3)
Various physiological processes such as temperature control, salt and water balance, will be studied by examining the modifications that make specific animals better adapted for survival in a particular environment.
BIOL 533 Comparative Physiology (3:3:0)
This course studies the relationships of physiological processes and adaptations of animals to their ecology and phylogeny.
BIOL 534 Cell Physiology (3:3:0)
This course is a study of the basic principles governing the activities of cells in terms of physical and chemical processes. Particular emphasis is placed on current as well as classic publications in the field.
BIOL 535 Endocrinology (3:3:0)
This 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.

BIOL 536 Endocrinology of Sexual Reproduction (3:3:0)
This course studies the comparative anatomy and physiology of the vertebrate reproductive system; the chemistry and action of hormones concerned with reproduction. Prerequisite: BIOL 535 or consent of instructor.
BIOL 537 Immunology (3:3:0)
This is a course designed to develop a basic understanding of the immune system and its relationship to disease. In addition to the basic concepts of immunoglobulin and antibody
structure and their related reactions, everyday problems, such as ragweed and penicillin allergy, immunization procedures, as well as serologic tests involving antigen-antibody reaction will be considered.
BIOL 538 Physiological Biochemistry (3:3:0)
This course is a study of the properties and interrelations of the major biochemical processes such as the Kreb's cycle, electron transport system, glycolysis, urea cycle, and photosynthesis. Also studied are the properties and synthesis of proteins, amino acids, lipids, carbohydrates, and nucleic acids as well as enzyme kinetics and thermodynamics.
BIOL 539 Physiological Biochemistry Lab (1:0:2)
Experiments will be performed in conjunction with the Biochemistry lecture course (BIOL 538). These experiments will cover the cell physiology techniques and concepts. Not accepted for general education.
BIOL 540 Cell Physiology Lab (1:0:2)
Experiments will be performed in conjunction with the Cell Physiology lecture course (BIOL 534). These experiments will cover the cell physiology techniques and concepts. Not accepted for general education.
BIOL 541 Ecology of Water Pollution (3:2:2)
This course is a study of the effects of various types of pollution on the fresh water, 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.
BIOL 542 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.
BIOL 543 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.
BIOL 544 Biology of Water and Wastewater (3:2:2)
This course is a study of fungi, bacteria, algae, protozoa, insects, and worms as they are used in the treatment of wastewater and as they affect or interfere with the purification of drinking water. Physical, chemical, and biological factors that affect these organisms in the respective facilities will be monitored and various tests of the efficiency of the treatment will be introduced. Field trips to a variety of water and wastewater facilities will be taken.
BIOL 545 Ecology of Fishes (3:2:3)
This course deals with the taxonomic, physiological, ecological land behavioral aspects of fishes; it includes laboratory and field trips.
BIOL 546 Limnology (3:2:3)
This course deals with the basic principles of physical limnology in relation to several types of communities in lakes and streams; laboratory and field trips.
BIOL 547 Biology of the Plankton (3:2:3)
This course deals with the pelagic organisms in lakes and oceans and the factors controlling their distribution and production; course will cover planktonic plants and animals (e.g. algae, protozoa, rotifers, crustacea, and fish larvae) and the part they play in the economy of natural waters; laboratory and field trips.
BIOL 548 Biology of Aquatic Insects (3:2:3)
This course deals with the taxonomy, life history, and general biology of aquatic insects; laboratory and field trips.
BIOL 549 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.
BIOL 550 Field Entomology (3:2:3)
Taxonomic approach of insects coupled with field collection and identification. Study includes ecology, morphology, systematics, and lab techniques. An introductory course with no prerequisites.
BIOL 551 General Entomology (3:2:3)
This course is a study of insects with respect to morphology, physiology, taxonomy, and ecology; insects of economic importance used as examples. A basic course leading to several aspects of entomology such as insect morphology, economic entomology, insect physiology, medical entomology, etc.
BIOL 552 Insect Morphology (3:2:3)
This course is a study of the internal and external structures of insects as related to specimens in the laboratory.
BIOL 553 Insect Physiology (3:2:3)
This course deals with a functional aspect of insect life, including various life processes such as digestion, nutrition, excretion, circulation, respiration, behavior, reproduction, development, and metamorphosis, as related to the morphological and anatomical structures.
BIOL 554 Medical Entomology (3:2:3)
This course is a study of arthropods that affect the health of man and animals. The study includes a brief account of the introductory entomology and that of the ticks, insects, and mites of medical importance, both as vectors, and as the casual agents of pathological conditions. Some aspects of the control methods from the Public Health point of view are also examined and investigated. It seeks understanding of the principles of the vector host relationship.
BIOL 555 Economic Entomology (3:2:3)
This course is a study of the insects of economic importance with respect to their identification, life history, biology, harmful or beneficial effects, and control. The scope comprises of agriculture, forestry, veterinary, medical, and household insects. The principles of insect control with recent approaches are also discussed.

## BIOL 556 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.
BIOL 557 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. Prerequisites: 8 credits of introductory biology.
BIOL 558 Wildlife Diseases (3:3:0)
This course includes the 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.
BIOL 559 Wildlife Disease Laboratory (1:0:3)
This course is designed to demonstrate the immunological and biochemical factors in disease diagnosis. Common laboratory tests in hemotology, 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.

BIOL 561 Mechanisms of Disease Laboratory (1:0:3)
This course is designed for nursing students. It 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 CD-ROM programs will be utilized in this course. Corequisite: BIOL 524.
BIOL 562 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 records, 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.
BIOL 563 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.
BIOL 564 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.
BIOL 565 Immunology Laboratory (1:0:3)
BIOL 567 Fish Health Management (3:2:3)
BIOL 571 Independent Research Problem (Semester hours arranged.)
This course is designed to acquaint the student with recent methods of research in particular areas of investigation, to instruct in the writing of acceptable research reports, and to acquaint the student with the literature directly related to a particular problem.
BIOL 572 Thesis I (3:0:0)
BIOL 573 Thesis II (3:0:0)
BIOL 577 Independent Study in Biological Science (Semester hours arranged.)
Under the auspices of a qualified member of the faculty of the graduate school, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in biological science. Topics should be established prior to enrollment. Prerequisite: Permission of the chair of the graduate faculty in biological science.
BIOL 584 Experimental Immunology (1:0:3)
This is a laboratory course designed to complement lectures and provide the student with experience in immunological methods.
BIOL 585 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 growth curve and animal virus growth curves will be performed.
BIOL 586 Field Experience and Internship (Semester hours arranged.)
An integral part of the field experience and internship requires that the student work under supervision with a federal, state, or private organization in some biologically related aspect of the respective organization. Students will coordinate their course work acquired at East Stroudsburg University with specific field experiences. A formal written report must be submitted at the culmination of the experience.
BIOL 591 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 organisms and plants. Some Saturday laboratories will be required.

BIOL 592 Mechanisms of Disease II (3:3:0)
This course is a continuation of Mechanisms of Disease I. The mechanism of diseases affecting organ systems will be studied. An account of important aspects of the pathology of human disease will be discussed.
BIOL 593 Biology of Tropical 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, Florida, or Kenya. The course will be offered on demand during appropriate winter, spring, or summer sessions.
BIOL 597 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.
BIOL 598 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.
BIOL 599 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). Corequisite: BIOL 598. 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 Biological Sciences Department and, unless specified otherwise in the course description, BIOM courses will count as biological sciences courses toward a major within the department.
BIOM 501 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 benthic invertebrates.
BIOM 502 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.
BIOM 503 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.
BIOM 504 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. Prerequisite: SCUBA certification.
BIOM 558 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 United States. Prerequisites: Two semesters of introductory biology and Introduction to Oceanography.

BIOM 559 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, field work, and laboratory are integrated, and students gain practical computer experience by analyzing ecological 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.
BIOM 560 Marine Ecology (3:2:3)
This course is a study of the physical parameters 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. (Will be accepted for general education.)
BIOM 561 Marine Botany (3:2:3)
The taxonomy, physiology, ecology, and economic importance of marine and coastal plants 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.
BIOM 562 Marine Invertebrates (3:2:3)
This 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 on the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species.
BIOM 563 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 on board an ocean research vessel, and data processing and reporting of the cruise results. Shipboard sampling techniques and instrumentation used by biological oceanographers are introduced.
BIOM 564 Developmental Biology of Marine Organisms (3:2:3)
This course deals with the basic 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.
BIOM 565 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.
BIOM 566 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.
BIOM 567 Marine Pollution Research Cruise (3:2:3)
Investigations will be conducted before, during, and after the dumping with fate and behavior (dispersion and degradation) studies of the pollutants. Bio-assays 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 grades.
BIOM 568 Marine Ornithology (3:2:3)
This course 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 field work providing visual and vocal identification, lecture material will include information on distribution, behavior, physiology, and anatomy.
BIOM 569 Field Methods in Oceanography (3:2:3)
This course provides students with a general rationale for and 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; these projects include planning and execution, analysis and interpretation of data, and presentation of the results.

## BIOM 570 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 environments and the ways in which various organisms have become adapted for exploiting marine resources.
BIOM 572 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 effect of temperature, salinity, light, nutrient concentration, current predation, and competition on the abundance and distribution on coral reef organisms.
BIOM 573 Marine Mammals of the Atlantic (3:2:3)
The distribution, population size, physiology, evolution, adaption, and ecological relationships of marine mammals will be studied. Laboratory and field work will include an off-campus field trip to facilitate studying marine mammals (Baltimore Aquarium and Woods Hole).
BIOM 574 Introduction to Oceanography (3:2:3)
This course is designed to familiarize the student with the marine environment and current development in the marine sciences. Topics for study will include the physical parameter of the ocean, ocean basic topography. life in the sea, and resources in the oceans.
BIOM 575 Behavior of Marine Organisms (3:2:3)
Discussions 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. Prerequisite: General Biology.
BIOM 576 Marine Microbiology (3:2:3)
A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration, and identification with emphasis on marine bacteria. Prerequisite: General Microbiology.
BIOM 578 Anatomy of Marine Chordates (3:2:3)
The basis 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.
BIOM 579 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 populations of various types of habitats in relation to primary and secondary productivity.
BIOM 580 Oceanography (3:2:3)
This course is an introduction to the physical, chemical, biological, and geological processes and interactions in the oceans. Topics include the history of oceanography, charts and navigation, the physical and chemical properties of sea water, 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 sea, and marine ecology.
BIOM 581 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 Foraminifera (Sarcodina) but other groups, including the Radiolaria, Diatoms, and Ostracods, will also be considered. Laboratory and field aspects of the course will include sample collecting, preparation, and analysis.
BIOM 582 Field Studies in Oceanography (3:2:3)
This course consists of a three-week session involving detailed planning and preparations for an oceanographic research cruise of approximately one week duration, the actual research
cruise on board the R.V. Annadale, 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.
BIOM 583 Wetland Ecology (3:2:3)
The structure and function of coastal wetland ecosystems are emphasized. The ecological impact of humans on these wetlands are interrelated with management strategies. Field exercises are stressed.
BIOM 587 Tropical Invertebrates (3:2:3)
This course emphasizes the systematics and ecology of tropical communities. A variety of collection and observation methods are used to sample tropical inshore and reef areas. Prerequisites: Marine Invertebrates, Invertebrate Zoology, or consent of instructor.
BIOM 588 Coastal Vegetation (3:2:3)
The vegetation under the marine influence is identified and the factors limiting and controlling distribution of this vegetation are determined.

BIOM 589 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. Graduate students in the course will develop an independent research project related to a specific aspect of the course. A written and/or oral report on the project will be given.
BIOM 590 Marine Aquaculture (3:3:0)
This course will include the theory and 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.

BIOM 594 Biology of Molluscs (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.

## Cardiac Rehabilitation and Exercise Science

## Courses are found under MSES.

## Communication Studies


#### Abstract

CMST 510 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 577 Independent Study in Communication Studies (1-3:variable:0) Under the direction of a qualified member of the department faculty, the student will pursue an advanced program of reading, study, and research related to the understanding and knowledge of communication studies.


## Computer Science

CPSC 521 Computer Graphics (3:3:0)
This course is an introduction to computer graphics. Basic principles for design, use, and understanding of graphics 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. Prerequisite: Ability to program in " C ".

This course introduces students to dynamic, linear, and integer programming algorithms. There will be programming practice involving these algorithms.
CPSC 524 Image Processing (3:3:0)
Sophisticated image processing and machine vision techniques are now available for an increasing array of industrial, military, and medical applications. This course provides fundamentals of image processing, machine vision, and various algorithms for their implementation. Prerequisite: MATH 320 or equivalent.
CPSC 525 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.

## CPSC 527 Robotics (3:3:0)

This course is an introduction to robotics on a technical level. The history of robotics, computeraided manufacturing, robot components, sensors, programming systems, applications, and future implications of robotics technology will be studied. There will be hands-on experience with a robot.
CPSC 528 Artificial Intelligence and Heuristic Programming (3:3:0)
This course is an introduction to artificial intelligence and heuristic programming techniques. Search strategies, games, heuristic mechanisms, and automated deduction will be studied. There will be programming practice. For graduate credit, a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 529 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.
CPSC 530 Software Engineering (3:3:0)
This course studies the principles of software engineering and various programming methodologies. Top-down, structured programming will be emphasized and applied to the design and analysis of efficient algorithms. There is also an introduction to computational complexity. For graduate credit, a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 531 Advanced Topics in Software Engineering (3:3:0)
This course will introduce the students to the current theoretical models and approaches used in the design, construction, and management of large, complex systems with long life cycles. Topic areas include requirements specification, design, configuration management, technical reviews, quality assurance, testing, and metrics. Case studies will be undertaken to compare the various approaches. Prerequisite: CPSC 530.

## CPSC 532 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, tier, and graph processing, and an introduction to syntactic and semantic processing. For syntax, Backus-Naur form grammars, sentence generation/ recognition, augmented transition networks, and parsing strategies will be studied. For semantics, case grammar theory, and parsing strategies will be studied. There will be case studies of current systems as well as programming practice. For graduate credit, a student will be required to write a term paper or execute a project.
CPSC 533 Compiler Construction (3:3:0)
This course is an introduction to the methods and techniques involved in translating high-level languages, such as " C ", into executable machine code. Lexical scanning, parsing, symbol table construction, object code generation, and optimization will be studied and a compiler will be written. For graduate credit, a student will be required to write a term paper or execute a
project which reflects deeper investigation of the topics covered in the course.
CPSC 535 Parallel Computing (3:3:0)
This course is an introduction to parallel computing, a rapidly growing area of computer science. Principles of parallel computer architecture and parallel algorithms for various applications will be studied. There will be practice in parallel programming. Prerequisites: CPSC 251, 541, MATH 320.
CPSC 541 Computer Architecture (3:3:0)
This course involves the study of computer systems structure, organization, implementation, and performance. Von-Neumann machines, from the early EDVAC to current microprocessors will be considered. Parallel processors and other specialized architectures will also be studied.

## CPSC 542 Operating System Design (3:3:0)

This course will thoroughly examine the principles of the design of computer operating systems. Emphasis will be placed on process allocation and scheduling, concurrent programming, memory management, device management, file management, and protection. How the principles are implemented in an existing operating system will be examined.
CPSC 544 Realtime Systems (3:3:0)
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. For graduate credit, a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 545 Networks and Data Communications (3:3:0)
This course examines the characteristics of microprocessors, including integrated circuit technology, architecture, programming, and applications. Specific microprocessors will be studied and programmed. "Hands-on" experience in building and operating microcomputer systems will be provided. Networks and distributed processing will be considered in relationship to microcomputer applications. For graduate credit a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 550 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. For graduate credit, a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 553 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, effects of redundancy and database design. Representative examples of the relational and network approaches to database management will be examined. For graduate credit, a student will be required to write a term paper or execute a project which reflects deeper investigation of the topics covered in the course.
CPSC 554 Data Structures and Algorithm Analysis (3:3:0)
This course will analyze a variety of algorithms from the standpoint of what data structures are used and how they are implemented. Students will be introduced to the classes of NP-hard and NP-complete problems and to the theories of complexity analysis.

## CPSC 560 Applied Computer Cryptography (3:3:0)

The focus of this course is developing computer algorithms for generating random numbers, symmetric and asymmetric 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 562 Theory of Computation (3:3:0)
This course will introduce abstract counterparts of physical machines and algorithms. Turing machines and other automata will be presented. The notions of algorithms, computability and unsolvability will be rigorously defined and studied. Some problems not solvable by instruction-obeying machines will be examined.
CPSC 563 Theory of Abstract Languages (3:3:0)
This course is an introduction to sets of strings of symbols, their representations, structures, and properties. Abstract languages, formal grammars, productions, the Chomsky hierarchy, generation and recognition mechanisms for languages, and the relationship of formal languages to automata will be studied.
CPSC 570 Introduction to Research (3:3:0)
This course will introduce the student to the professional (open) literature as well as other sources in computer science. The student will investigate an area or problem and assimilate, integrate, and present the findings in a scholarly seminar. This course may be taken more than once with approval of the department. Prerequisite: At least one course successfully completed at the graduate level in Computer Science.
CPSC 574 Research Project I (3:3:0)
This course will introduce the student to the professional (open) literature as well as other sources in computer science. The student will investigate an area or problem and assimilate, integrate, and present the findings in a scholarly seminar. This course may be taken more than once with approval of the department. Prerequisite: CPSC 570.
CPSC 575 Research Project II (3:3:0)
This course is a continuation of CPSC 574 - Research Project-I.

## Elementary Education

## ELED 502 Psychology of the Elementary School Child (3:3:0)

This course deals with the principles and theories of human development; dimensions of growth; cognitive, social, and personality development of the child from five to thirteen; the impact of sociocultural change on the home and school as these relate to the developing child.
ELED 505 Classroom Management and Discipline Models (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.
ELED 512 Integrating the Arts into Elementary Education (3:3:0)
This course deals with integrating all the arts into the elementary school curriculum with or without arts specialists. It concerns itself with education in, through, and about the arts for aesthetic and motivational purposes.
ELED 515 Individualizing Instruction in Elementary Education (3:3:0)
This course will examine individual differences, types of learning styles, and various strategies which are used to individualize instruction. Students will work on individual projects which can be applied directly to their own teaching assignment. Although emphasis is placed on elementary education, many topics will apply to the K-12 classroom.
ELED 517 Creative Teaching Methods for the Advanced Student (3:3:0)
This course examines current research in creativity. Students are encouraged to investigate their own creative process and develop strategies for enriching teaching strategies. Best teaching practices for enhancing creativity in the classroom are studied.
ELED 520 Current Trends in Elementary School Language Arts (3:3:0)
This course examines current elementary school language arts curricula, newer approaches to organization of elementary schools and classrooms for implementation of learning in the language arts; modern techniques of teaching, listening, speaking, and written communications; investigation of research studies in elementary school language arts.
ELED 521 Children's Literature for Advanced Students (3:3:0)
This course presents a critical evaluation of materials which will meet the needs of teachers
and children in the use of literature in the curriculum. Special attention is paid to the social and personal issues in the child's life and the use of bibliotherapy in the elementary classroom. Emphasis is also placed on building a literature-based classroom curriculum.
ELED 523 Diversity in Children's Literature (3:3:0)
This course enhances the learners' knowledge of the uses of children's literature within the elementary classroom. Literature representative of diverse cultural and ethnic groups will be explored, evaluated, and utilized. Prerequisite: Completion of an undergraduate or graduate course in children's literature or permission of the professor.
ELED 525 Creative Drama (3:3:0)
This course develops knowledge and skills in using creative drama and theatre activities with children to enhance and assess dramatic learning ability. Dramatic behaviors, theatre skills, imagery ability, imagination, group skills, and the connection between imagination and action are actively explored.
ELED 530 Science in the Elementary School (3:3:0)
This course probes in depth the content and methodology of elementary school science. Emphasis will be given to the development of a classroom science program that will further the child's ability to solve problems logically, objectively, independently, and creatively.
ELED 531 Life Science Workshop for Elementary Teachers (3:3:0)
This course is designed to enhance the teaching of life science concepts in the elementary schools. Participants will experience a variety of hands-on activities and develop a set of activity-based materials for use in their own classrooms. Instruction in environmental education will also be provided. (Workshop Course)
ELED 532 Physical Science Workshop for Elementary Teachers (3:3:0)
This course is designed to enhance the teaching of physical science concepts in the elementary schools. Participants will experience a variety of hands-on activities and develop a set of activity-based materials for use in their own classrooms. There will also be opportunities to explore the use of emerging technologies such as microcomputer-based laboratories and interactive multimedia. (Workshop Course)
ELED 533 Designing and Implementing Programs for Professional Development
(Arranged)
This workshop will emphasize the knowledge and skills needed for teachers to participate in designing and facilitating their own professional development programs. Teaching styles and activities will be explored, while participants utilize self-assessment to evaluate their needs and establish goals. Strategies for implementation will be discussed. (Workshop Course)
ELED 534 Seminar in Elementary School Science (3:3:0)
Current issues, problems, research, and theoretical and philosophical aspects of elementary science education are discussed. Prerequisite: Approval of instructor.
ELED 535 Classroom Diversity: Creating a Positive Environment (3:3:0)
This course encourages educators to identify their own values, prejudices, and goals; to examine their thoughts and/or misconceptions about culturally diverse communities. Designed to help them create school climates that celebrate diversity and meet the needs of students of different races, ethnicities, gender, and ability levels.
ELED 540 Mathematics in the Elementary School (3:3:0)
This course places emphasis on recent developments in the teaching and learning of elementary school mathematics. Additional emphasis will be placed on the evaluation of mathematical learning, instruction, and programs. Course participants will also become familiar with the use of technology and how to integrate its use appropriately in an elementary mathematics program.
ELED 542 Current Trends in Elementary School Mathematics (3:3:0)
An investigation and analysis of current local, state, and national mathematics projects and their implications are made. Prerequisite: ELED 540 Mathematics in the Elementary School.
ELED 544 International Collaborative Learning Project (1-3:1-3:0)
This course enables students to participate in a unique learning event 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. Prerequisite: Permission of instructor. (Workshop Course)
ELED 546 Learning to Read through the Arts (3:3:0)
The workshop prepares teachers to develop and use an individualized reading program designed to improve reading skills through the integration of a total arts program with a total reading program.
Upon completion, participants are qualified to adopt the Learning to Read Through The Arts program of the U.S.O.E. National Diffusion Network. (Workshop Course)
ELED 547 Success-Oriented Reading: Whole Language Development (Semester hours arranged.)
The workshop 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 581 or ELED/PSED 582. (Workshop Course)
ELED 549 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. Prerequisite. ELED 581. (Workshop Course)
ELED 550 Current Trends in Elementary School Social Studies (3:3:0)
Participants in this course will review current research in social studies education and discuss current trends in relation to national standards. Participants will also utilize social studies learning strategies and develop activities consistent with current literature.
ELED 552 Together: Mainstreaming in Schools (3:3:0)
The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction enables 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 to devise, through group interaction, a plan for implementation of mainstreaming in the particular schools. (Workshop Course)
ELED 553 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 learning styles. (Workshop Course)
ELED 555 The Clinical Supervision of Elementary Student Teachers (3:3:0)
Course participants will examine the objectives of the student teaching program and relate them to the specific roles and needs of both student teachers and cooperating teachers. The primary emphasis of the course will be on developing the skills necessary to work with student teachers using the clinical supervision model. Participants will become effective at accurately collecting data on classroom verbal interaction, teacher non-verbal behavior, questioning techniques, movement patterns, student involvement, student behavior, time allocation, classroom management, and teacher effectiveness.
ELED 556 Cooperative Learning (3:3:0)
This course allows educators to explore methods useful in establishing cooperative learning in the classroom. Cooperative learning provides the educators with a framework for maximizing student achievement through the use of critical thinking, problem solving skills, and teamwork. The course will introduce the educator to the fundamentals of control theory as it applies to cooperative learning, and will provide the educator with the opportunity to develop
a teaching plan or implementing cooperative learning in the classroom. (Workshop Course)
ELED 557 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 through creative thinking and effective classroom management. The course provides techniques for reducing classroom stress in both teachers and students. Prerequisites: PSED 161, 242. (Workshop Course)
ELED 559 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 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. (Workshop Course)
ELED 560 Adaptive Education for Exceptional Students (3:3:0)
This course is designed for the teacher of the non-specialized class. Emphasizes the skills and understanding necessary for the following: recognition of various forms of exceptionality in children; establishment of good interpersonal relationships; selection and adaptation of suitable curriculum materials, content, and methodology; and awareness of proper procedures in referring exceptional students for specialized help.
ELED 569 Research Laboratory in Early Childhood and Elementary Education (1:0:3)
The preparation of the research proposal includes the development of purpose and design of the proposed research problem or thesis. This course must be repeated until "satisfactory" grade is earned; failure to design an acceptable proposal results in "no record" which carries no credit or penalty. Prerequisite: Completion or concurrent enrollment in ELED 570.
ELED 570 Introduction to Research (3:3:0)
This course is an introduction to the basic principles and major methods used in investigation of educational problems. Attention is given to the significant steps involved in compiling a research proposal. Required of all graduate students in the degree program. In compliance with the graduate school policies, students are advised to complete this course early in their program. Prerequisite: ELED 502. Elementary Education majors only.
ELED 571 Research Problems (Semester hours arranged.)
This course involves the solution of a problem that requires the utilization of research methodology. Emphasis is placed upon the kinds of problems that frequently confront the elementary school teacher in the normal teaching situation. Required of all students in the Non-Thesis program. It may be repeated with permission of the chair of the program faculty. It requires prior completion of ELED 570.
ELED 572 Thesis (3:0:0)
This focuses on the procedure, analysis, and writing of the thesis and includes an extensive study of a problem that merits the utilization of thesis-level investigative skills.
ELED 574 Problems and Issues in Early Childhood Education (3:3:0)
This course consists of a review of recent research in early childhood education and an examination of current controversial issues, with an attempt at synthesis.
ELED 575 Graduate Seminar (3:3:0)
This course explores models of assessment and evaluation in education. It also develops the framework and focus for graduate students' degree program comprehensive evaluation. Prerequisites: ELED 570 and completion of at least 18 graduate credits.
ELED 577 Independent Study in Elementary Education (Semester hours arranged.)
Under the auspices of a qualified member of the faculty of the graduate school the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in elementary education. Topics should be established prior to enrollment. Prerequisite: Approval of the department chair.
ELED 580 Guidance in Elementary Education (3:3:0)
This course emphasizes that the teacher is a focal point and primary source of guidance in
the elementary school. Supportive functions of the supervisor, principal, nurse, elementary school counselor, psychologist, community service agencies, and mental health agencies are examined. Procedures for referrals and typical case reports are studied. Emphasis is placed on preventative measures through early recognition and treatment of children needing special guidance services.
ELED 581 Introduction to Schools Without Failure (Semester hours arranged.)
The workshop 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 school personnel 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 the school and between the school and the community. (Workshop Course)
ELED 582 Discipline in the Classroom (Semester hours arranged.)
This workshop is designed for participants to take part in learning activities that will enable them to develop positive techniques for preventing and handling student behavior problems. (Workshop Course)
ELED 583 Theory and Practice of Schools Without Failure I (Excellence in Teaching)
(Semester hours arranged.)
This workshop 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, Identify Society, and Reality Therapy. Participants will be introduced to a hybrid teaching style designed to elevate teaching to maximize learning in the classroom. (Workshop Course)
ELED 584 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. (Workshop Course)
ELED 585 Planning for Change (3:3:0)
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 assessed through a group process. Systems for change will be developed utilizing personal influence and power. The workshop also helps participants acquire additional skill in expanding their knowledge and use of Reality Therapy in the educational environment. (Workshop Course)
ELED 586 Internship: Methods and Materials in Early Childhood Education (6:3:12)
This course consists of practical experience in a laboratory situation with young children. Emphasis is on understanding behavioral patterns of young children, development of insight into various theories and methods in early childhood education, and familiarization with varied materials. Prerequisite: Approval of department chair.
ELED 589 Organization and Administration of Early Programs (3:3:0)
This course emphasis is on organization and administration of high- quality preschool 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.
ELED 592 Elementary School Curriculum (3:3:0)
This course will center around a survey of the elementary school curriculum with emphasis on fundamental principles of curriculum development. Historical materials related to the curriculum are used to illustrate trends and innovations. Attention will be given to articulation in curriculum.

## English

This course is intended to enhance the student's knowledge of comedies, tragedies, and histories of Shakespeare besides the handful taught and retaught in our schools. Students will also study recent Shakespearean criticism.
ENGL 512 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. This course is also listed as PSED 512.
ENGL 515 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, newsgroups, MOOs.
ENGL 554 British Literature - New Perspectives (3:3:0)
This graduate course will provide new perspectives for the study of British literature. The new perspectives will include recent critical theories, fresh contexts, and reconceived canons. The emphasis and period(s) considered may vary each semester the course is offered.
ENGL 560 Studies in Folklore (3:3:0)
This course combines analysis and discussion of folklore theory with field collection of traditional narratives to train students to recognize genuine folklore and its features.
ENGL 562 American Literature - New Perspectives (3:3:0)
This graduate course will provide new perspectives for the study of American literature. The new perspectives will include recent critical theories, fresh contexts, and reconceived canons. The emphasis and period(s) considered may vary each semester the course is offered.
ENGL 563 Studies in Contemporary Literature (3:3:0)
This graduate course will consider the major intellectual and esthetic developments in recent literature. Each semester it is offered, the instructor will choose one particular genre, group of writers, or new literary development and concentrate on it for intensive study.
ENGL 564 Contemporary Literary Theory for Teachers (3:3:0)
This course will consider major developments in recent literary theory and seek to apply them to realistic pedagogical methodology concerning the reading and writing of literature in public schools.
ENGL 565 World Literature-New Perspectives (3:3:0)
This course is an examination of literature other than British and American, such as African, Asian, Native American, Middle Eastern, Classical, South American, Caribbean, European. The instructor may choose to examine a particular literary tradition, the literary points of view of a region, a theme running through several literary traditions, or a particular way of reading and responding to a body of literature.
ENGL 566 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.
ENGL 577 Independent Study in English (Semester hours arranged.)
Under the auspices of a qualified member of the department faculty, the student pursues a pattern of reading, study and research related to the understanding and knowledge of English.

## General Science

GSCI 501 Laboratory and Classroom Techniques in Science Teaching (3:3:0)
This course is designed toward the practical aspects of effective science instruction. It deals with the means and devices employed in the instructional process. Simulated classroom situations are developed and prepared by the student representative of imaginative science teaching.
GSCI 502 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 on topics being reported on in professional journals in advance of their textbook presentations.
GSCI 504 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 evaluation, compact stars and black holes, galactic and extragalactic astrophysics, and cosmology. Prerequisites: PHYS 121, PHYS 262, and MATH 141.
GSCI 512 Contemporary Topics in Biochemistry (3:3:0)
This course will elaborate on the chemical principles fundamental to understanding biochemical processes and their regulation. Topics covered may include enzyme mechanisms and kinetics, molecular aspects of signal transduction, organization and maintenance of the genome and regulation of gene expression and recombinant DNA techniques. Reading of current journal articles, class discussions, and oral presentations will be integral components of this course. As a contemporary topics course, students may take this course during a different semester for an additional 3 credits. Prerequisite: Students should have had a previous course in biochemistry, such as CHEM 315 or 317.
GSCI 520 The Development of Modern Physical Science (3:3:0)
This course examines the past works and philosophical thought of noted physical scientists. Emphasis is placed on the nature of scientific discovery and the processes of science.
GSCI 521 Statistical Physics (3:3:0)
Large-scale thermodynamic systems are studied by taking averages over numerous important parameters pertinent to statistically treatable systems. Topics include: characteristic features of macroscopic systems, statistical description of systems of particles, microscopic theory and macroscopic measurements, general thermodynamic interaction, elementary kinetic theory of transport processes.
GSCI 522 Thermal Physics (3:3:0)
This course deals with heat and thermodynamics and application to special systems; kinetic theory of gases and statistical mechanics; fluctuation and transport processes.
GSCI 524 Physical Measurement (3:2:2)
This course is designed for those in industry and for students whose responsibilities include or will include measurement (inspection, design, etc.) and for in-service teachers whose work will be enhanced by greater insight into these areas which are included in the syllabus.
GSCI 525 Electromagnetic Theory I (3:3:0)
An application of Maxwell's equations to problems in electrostatics and electrodynamics, including boundary value problems with dielectrics and conductors is presented.
GSCI 526 Electromagnetic Theory II (3:3:0)
Students study the propagation of electromagnetic waves, wave guides, antenna theory, and physical optics.
GSCI 530 Energy Resources and Applications (3:3:0)
This course develops the history of present energy dependence of the United States and some foreign countries. It will also develop the underlying physics concepts. A number of future scenarios are investigated numerically and carefully. Use is made of the WAES report and the ECOMSETS computer projections.
GSCI 531 Organic Chemistry (3:3:0)
This course deals with the theoretical and practical aspects of mechanisms and sterochemistry as applied to the reactions and syntheses of organic compounds.
GSCI 533 Physical Organic Chemistry (3:2:3)
This course is a survey of physical organic chemistry including reaction mechanisms, structurereactivity correlations, and organic photochemistry. Laboratory experiments will stress the use of modern instrumental techniques in the elucidation of structures and mechanisms.

GSCI 536 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. Graduate students will be required to complete a paper in addition to other assignments.
GSCI 541 Analytical Chemistry I: Quantitative (4:2:4)
This course is a study of the theories and methods of gravimetric 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.
GSCI 542 Inorganic Chemistry (3:3:0)
Structural and bonding principles, type of reactions, reaction mechanisms and their chemical interpretation will be introduced. The descriptive chemistry of selected elements and their inorganic compounds will be discussed.
GSCI 543 Environmental Quality (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, and solid waste.
GSCI 546 Seminar: Curricular Trends in Science (3:3:0)
This course is a study of the current effort in science curriculum design. Major curricular projects in the various sciences are explored in terms of philosophy, objectives, and content selection. Research and pertinent periodical literature in the curricular aspects of instruction in the sciences are examined.
GSCI 547 Workshop in Science Teaching (Semester hours arranged.)
This course is directed toward the practical aspects of effective science instruction, providing for firsthand participation in real or simulated teaching situation. The course is characterized by an updating of the student's background in specific areas of science teaching and the development of the skills, theory, and techniques necessary to implement recent curricular developments.

GSCI 548 Teaching Science for Involvement — A Cooperative Approach (3:3:0)
This is an activity-oriented course aimed toward the development of competence and confidence in the science underlying practical applications. A major concern is the development of science literacy through group interaction and experience with practical equipment. The course is designed for those interested in both secondary and elementary school science teaching.
GSCI 549 Environmental Science (3:3:0)
This course deals with the chemical and physical aspects of the identification, characterization, and controls of pollutants. Topics include air, water, radiation, pesticides, food additives, solid waste, and toxic substances. Prerequisites: CHEM 124, 126 or equivalent.
GSCI 551 Selected Topics: Chemistry (3:3:0)
GSCI 552 Selected Topics: Physics (3:3:0)
GSCI 553 Selected Topics: Biology (3:3:0)
GSCI 554 Selected Topics: Earth Science (3:3:0)
Emphasis is placed upon the development of scientific content and theory. The course work will include coverage of traditional course offerings from within the disciplines most relevant to the contemporary aspects of the science, complemented by a critical view of certain of the discipline's basic tenants.

GSCI 555 Physical Chemistry: Quantum Mechanics (3:3:0)
This course is a study of selected topics in theoretical chemistry including quantum mechanics, group theory and symmetry, and chemical bonding including molecular orbital theory. The use of computer programs in the illustration of chemical principles will be emphasized. Cross-listed as CHEM 452. Graduate students must complete a research paper or project. Prerequisite: CHEM 353 or permission of instructor.
GSCI 561 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 potentiometry, plarography, chromatography, conductometry, and spectroscopy.
GSCI 565 Polymer Chemistry (3:3:0)
The basic concepts of polymer chemistry are introduced in this course. Topics included will be the mechanics 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.
GSCI 570 Introduction to Research (3:3:0)
This course is an orientation to graduate study and research designed to acquaint the student with the methods and materials of graduate study. It is required of all graduate students in a degree program.
GSCI 571 Independent Research Problem (Semester hours arranged.)
This course deals with the utilization of selected research techniques to attack a specific problem. Preparation and presentation of a formal report. It is required of all students in the non-thesis program. Requires prior or concurrent completion of GSCl 570.
GSCI 572 Thesis (3:0:0)
This course focuses on the development of the thesis problem and design of experiment, collecting of data, analysis, and organization of data and writing of the formal thesis report.
GSCI 573 Thesis II (3:0:0)
See GSCI 572. This course is concerned with completing the thesis to the satisfaction of the student's advisory committee. GSCI 572 is a pre- or co-requisite.
GSCI 577 Independent Study in General Science (Semester hours arranged.)
Under the auspices of a qualified member of the faculty of the graduate school, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in general science. Topics should be established prior to enrollment. Prerequisite: Permission of the chair of the graduate faculty in general science.
GSCI 580 Radioisotopes (3:2:3)
Studies of the origin of nuclear emissions, properties of nuclear radiation will be discussed. Measurements of their properties such as absorption and attenuation coefficients will be made. Skill in the use of the single and multichannel analyzers will be developed and used in determining nuclear spectra. Reading of current publications in the field will be essential to the essence of this course. An experimental project or paper will be required of all graduate students.
GSCI 581 Quantum Physics (3:3:0)
The wave nature of the universe and its probabilistic interpretation are considered. Topics include postulates of Quantum mechanics, the one-dimensional oscillator, the hydrogen atom, the Pauli principle, and atomic spectroscopy.
GSCI 591 Special Problems in Physics (3:3:0)
This course introduces the student to detailed and complete treatments in problems which require expertise from several areas.
GSCI 593 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. Topics covered: Nuclear models, nuclear decay, nuclear reactions, elementary particles.

## Health

HLTH 505 Non-Medical Healing Arts (1:1:0)
This course examines the role of osteopathy, acupuncture, faith healing, and other health services 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 the 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.
HLTH 506 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.
HLTH 507 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.
HLTH 508 Women's Health Concerns (3:3:0)
This course is designed to address unique health concerns of women in today's society. Specific topics such as alcoholism, anorexia nervosa, pre-menstrual syndrome (PMS), domestic violence, child abuse, rape, menopause, and many others will be included.
HLTH 509 Health Counseling (1:1:0)
The purpose of this course is to provide health professionals with the knowledge of counseling theory and skills of counseling techniques to improve the quality of healthcare, facilitate healthrelated decision-making and the enhancement of relationships between client and the health professional.
HLTH 530 Nutrition Across the Life Span (3:3:0)
This course will emphasize the application of nutrition theory across the lifespan, highlighting exercise and weight control, disease prevention, pregnancy and infancy, childhood, adulthood, and the senior years. An opportunity to examine nutrition curricula for public school teaching will be provided.
HLTH 531 Instructor Training for Classroom Emergency CARE (3:3:0)
This course provides educators with the necessary basic skills and knowledge to appropriately respond to emergency situations that might arise within the classroom and other school environment. In addition to technical skill development, the focus of this course is on teacher training skill development. Information and materials are provided to enable educators to implement emergency care content into related health areas. There is also an opportunity to become certified in standard first aid and instructor authorization in CPR.
HLTH 532 Death and Dying Education (3:3:0)
This course is designed to increase awareness and develop appropriate values, attitudes, and behaviors concerning death. Special emphasis will be placed on providing educators with information and materials which will enable them to implement death and dying content into related health areas.
HLTH 533 Alcohol, Drugs and Narcotics Education (3:3:0)
This course is designed to provide an insight into the nature, extent and significance of the drug problem in society. In-depth consideration will be given to the pharmacological, psychological, and sociological and legal aspects of drugs. Special attention will be devoted to the topics of: alternatives to drug use, communication techniques, community organizations and resources for rehabilitation and treatment of drug users, curriculum in drug education for grades $\mathrm{K}-12$, review of drug education media, and principles and procedures for developing community programs for effective drug education.
HLTH 534 Sex Education in Schools (3:3:0)
The development, present status, and trends of sex education in school programs and in the community with reference to social values and attitudes are presented. It includes attention to the development of organized programs, resources, and materials.

HLTH 536 Seminar: Health Education (3:3:0)
The course is an individual and group study of problems and materials in personal, school, and community health.

HLTH 537 Community Health Practice for Health Educators (3:3:0)
The course is a study of the theory and principles of community health practice and the application of those principles to contemporary health organization and problems. Approaches to successful community health practice are examined with the various factors that influence or are influenced by community health education programs.
HLTH 538 Public Health Administration (3:3:0)
This course is designed to provide the student with a comprehensive background in public health legislation, organization, and programming. Emphasis is placed on the dynamic nature of public health within the total physical, social, economic, and political context.
HLTH 539 Health Education Methods Workshop (3:3:0)
This course is a study of teaching strategies for health education and their application to various settings. Students will develop teaching modules for implementation.

HLTH 540 Behavior Modification in 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.
HLTH 542 HIV and AIDS Prevention and Education (3:3:0)
This course is designed to provide a comprehensive overview of HIV and AIDS infection in Pennsylvania, New Jersey, and the United States. The course will provide information on recent research on modes of HIV transmission and risk-reduction strategies. Particular emphasis is placed on the design and evaluation of HIV prevention and education programs geared toward high-risk populations including youth, women, and minorities.
HLTH 544 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 social health perspective with a primary focus on developing and implementing programs that enhance the health of the elderly.
HLTH 550 School Health Administration and Curriculum (3:3:0)
The purpose of this course is to assist the student in more thoroughly understanding the administration of the school health program and the content, structure, and development of the health education curriculum. Emphasis is placed upon a comparison of the conceptual approach to other approaches for curriculum development.
HLTH 551 Health Resources and Service Planning and Management (3:3:0)
Students are introduced to the principles, logic, and history of health resource allocation and health services planning, and the fundamentals of health systems management. Each student learns how to use appropriate health data tracking systems, and to apply and evaluate these systems in practical settings.

HLTH 552 Health Budgeting and Fiscal Management (3:3:0)
Students will become acquainted with macro- and micro-economic factors influencing the health care industry, and how these factors influence health budgeting and fiscal management of health service organizations. Students learn budget-making and the budgetary process in public and private health services; capital development and planning; and the procedures of fiscal management as administrative control.
HLTH 553 Health Ethics, Policy and Law (3:3:0)
The student learns how professional, ethical, constitutional, legal, and governmental aspects of health influence the administration of health service organizations, the formation of health
policy, and the planning of health services.
HLTH 555 Health Education Evaluation (3:3:0)
This course is designed to familiarize students with the methods of evaluation used in health education and the implications for student evaluation and program planning. A strong emphasis is placed on the development of various types of instruments of evaluation used in health education. Prerequisite: Statistics
HLTH 556 Qualitative Methods in Research and Evaluation for Health Education (3:3:0)
This course is a review of the use of qualitative methodology in research and evaluation of health education. Emphasis of the course is on the use of these methodologies to enhance student understanding of the physical and social dynamics (ecology) which influence health education planning and implementation. The course will also include skill development for selected techniques.
HLTH 557 Computers in Health Education (3:3:0)
This course provides health education professionals with selected PC-compatible software packages that are being used in a variety of professional settings where community and school-based health education and promotion are being conducted. Particular emphasis will be placed on the application of various health promotion software packages to conduct health risk appraisals, stress assessment and reduction, nutrition assessment, and life skills training. In addition, the course will provide an introduction to the application of spreadsheets and statistical software in assessing program effectiveness of community and school-based health education intervention.
HLTH 560 Scientific Foundations of Health Behavior (3:3:0)
This course is designed to familiarize students with the health sciences related to health education and promotion, and to provide experiences in the use of the literature related to the health sciences. The primary focus of the course is on human behavior as it influences health and is influenced by health education and promotion programs.
HLTH 561 Epidemiology (3:3:0)
This course is a study of the principles and methods of epidemiological investigations for human health problems. The incidence and prevalence of both infectious and non-infectious health problems are covered. Emphasis of this course is on student application of the principles of epidemiology.
HLTH 562 The Physical Environment and Community Health (3:3:0)
This course reviews traditional and evolving public health concerns related to the physical environment. Major areas of concern are: solid waste, housing, water, air, accidents, good sanitation, overpopulation, and global concerns.
HLTH 565 Occupational Health Education and Promotion (3:3:0)
The course is an application of health education and promotion strategies to the workplace. Emphasis is placed in developing student skills for design of programs in occupational settings. An overview of existing programs is included. Students will be expected to apply course material to a specific industrial situation.
HLTH 570 Introduction to Research (3:3:0)
This course is an orientation to research in health education. The emphasis is on developing and interpreting research projects with particular concern for the implications of design, methods, and procedures. Students are expected to demonstrate research skills by developing a research proposal and presenting the proposal in a scholarly manner.
HLTH 571 Health Education Research Problem (Semester hours arranged.)
This experience is designed to acquaint the student with recent methods of health research. Tasks will include the completion of an acceptable research report. Prerequisite: HLTH 570.
HLTH 572 Health Education Thesis (Semester hours arranged.)
This experience consists of doing research for and writing of a thesis concerning a significant problem in health education. Prerequisite: HLTH 570.
HLTH 577 Independent Study in Health Education (Semester hours arranged.)
With the guidance of a member of the graduate faculty 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. Prerequisite: Health Department graduate faculty approval.
HLTH 580 State-Level Cardiopulmonary Resuscitation Instructor's Training (1:1:0)
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, Pennsylvania Affiliate.
HLTH 586 Field Experience and Internship (Semester hours arranged.)
This course consists of the practical experiences obtained through supervised work in the school or community. The credits and hours of the experience shall be based on the student's experience and programmatic needs; however, no more than 3 credits may be applied to health education degree programs.

## Health and Physical Education

Courses can be found under MSES.

## History

HIST 501 Colonial America (3:3:0)
This course is a study of the founding and growth of English, Spanish, and Dutch colonies in North America. Special attention will be given to motives behind European expansion and the development of institutions and trends, which later contributed to the formation of the new nation.

HIST 502 Era of Jacksonian Democracy (3:3:0)
This course is an intensive study of the age of Jackson, 1818-1848; expansion, sectionalism, social and political reform; emphasis on analysis of original documents.
HIST 503 American Progressivism (3:3:0)
This course is a study of conditions underlying the progressive aims. It investigates major domestic problems of the late-19th and early-20th centuries within the framework of the emergence of the United States as a major power in the world and the impact of Progressivism.
HIST 504 Normalcy and the New Deal (3:3:0)
This course is a study in depth of American domestic trends during the contrasting "Prosperity" and "Depression" decades with special attention to the changing socioeconomic scene. The rich primary source materials available for this period will be used in individual projects.
HIST 505 The Rise of the New Nation (3:3:0)
This course is a study of the War of Independence, and the political, social, and economic foundations of the new nation.
HIST 507 History of American Ideas (3:3:0)
This course consists of readings about selected ideas that motivated American thought and action from the colonial period to the present day. Changes in meaning of older American ideas will be examined.
HIST 508 Seminar: Civil War and Reconstruction (3:3:0)
This course consists of research in selected topics related to the coming of the Civil War, military and diplomatic phases of the Civil War, and presidential vs. congressional reconstruction.
HIST 509 U.S. Constitutional History and Law (3:3:0)
This course investigates distinguishing aspects of the American constitutional system; judicial processes and decisions of major cases of the Marshall and Taney courts; interpretation of the fourteenth and other amendments; and evaluation of the contemporary court.
HIST 511 Seminar: Pennsylvania History (3:3:0)
This course is an intensive study of Pennsylvania as a colony and a state; its economy, politics, society, and culture; emphasis is on research and analysis.
HIST 514 The Classical Mediterranean (3:3:0)
This course is a study of the political, social, and economic development of the Greek and

Roman worlds.
HIST 517 French Revolution and Napoleon (3:3:0)
This course will cover the "ancient Regime" and the forces that led to its destruction, the revolution's impact upon Europe, and the change effected by Napoleon in France and Europe.
HIST 519 Nationalism and Democracy in 19th-Century Europe (3:3:0)
This course analyzes the impact of the liberal and nationalist movements on the political, economic, and social institutions of 19th- century Europe.
HIST 520 Area Studies I (3:3:0)
(A specific area will be announced). This course examines selected problems of historical and political development in major world areas. Emphasis is placed on political institutions - their background, development, and significance.
HIST 521 Area Studies II (3:3:0)
Same as Area Studies I.
HIST 522 Seminar: Foreign Travel and Study (6:0:12)
This course is a trip abroad. Study at foreign colleges and universities will focus on the history and government of the countries visited, and their economic growth and integration. Emphasis is placed on formal and informal discussion and analysis of contemporary indigenous problems.
HIST 526 American Naval and Maritime History (3:3:0)
This course surveys the maritime and naval development of the United States from colonial to the present time. Emphasis will be placed on the growth of American merchant shipping and naval power and its relationship to political, economic, military, and cultural developments.
HIST 527 The United States Since 1940 (3:3:0)
This course examines political, economic, and social changes in the United States from 1940 to 1980. World War II, the Cold War, the Vietnam War, and cultural changes of the 1960s and 70s are the foci of this course.
HIST 533 Ancient Civilization (3:3:0)
This course is a study of the origins of Western Civilization as manifested in the political, social, artistic, religious, scientific, philosophical, and literary achievements of the ancient Near East and the Mediterranean.
HIST 534 Origins of the British Welfare State (3:3:0)
A study of the social, economic, and political development of the British reform tradition as an answer to the conditions created by the first Industrial Revolution. It will focus primarily on the 19th century but will continue to trace the development of the welfare state up to the present.
HIST 535 Britain in the Age of Discovery and Revolution 1485-1715 (3:3:0)
The course will present a detailed study of the political, diplomatic, economic, and social aspects of British society between 1471 and 1714. Particular emphasis will be placed on the monarchy, Parliament, the Revolutions of the 17th century, and the emergence of Britain as a Great Power.
HIST 536 Twentieth-Century Britain (3:3:0)
From the peak of imperialism in 1900, the course will trace the Liberal revival, the coming of the First World War and its impact on Britain, the coming of democracy, economic and political problems of the Inter-War Period, World War II and its aftermath will be examined as a case study in national decline. Britain's entry into the European community will be assessed.
HIST 537 Europe in Crisis 1914-1939 (3:3:0)
This course is a study of World War I, the problems related to war-guilt and responsibility, peace making in Paris, the League of Nations era, and the rise of authoritarian ideologies and governments - Bolshevism, Fascism, and Nazism.
HIST 539 Europe in Crisis 1939-1989 (3:3:0)
This course is a study of the origins and conduct of World War II, division of Europe by the Iron Curtain, Cold War politics, dissolution of the European colonial empires, Common Market and unification of Europe, break-up of the Soviet orbit, and the era of détente.

HIST 540 Problems in Russian and Soviet History (3:3:0)
This course is a study of selected major problems in Russian and Soviet history: origins and expansion of the Russian State, Russian imperialism, Russian culture, pre-Revolutionary movements, the Bolshevik revolution, the Stalinist period, and more recent developments.

HIST 541 Twentieth-Century Imperialism (3:3:0)
A study of the "New Imperialism" of the late-19th and early-20th century and its decline after World War II. The course will also focus on the military, social, and economic nature of imperialism and the emergence of a neo-imperialism since 1945.
HIST 545 China in Revolution (3:3:0)
After a brief examination of the nature of traditional China, the course deals with the Revolutionary upheaval that has followed the overthrow of the Empire in 1912. The development of the Kuomingtang movement, the rise of the Chinese Communists, and the struggle for power. Particular emphasis is placed on the People's Republic since 1949 and its problems, failures, and accomplishments.
HIST 570 Introduction to Research: Historical Methodology and Research (3:3:0)
This course is a study of the work of renowned historians, techniques of research in history; training in the critical handling of primary and secondary resource materials, and formal presentation of the results. It is required of all graduate students in history degree programs.
HIST 571 Independent Research Problem (Semester hours arranged.)
This course utilizes selected historical research techniques to attack a specific problem. A formal report is prepared and presented. It is required for all students in the non-thesis program.
HIST 572 Thesis I (3:0:0)
This course consists of development of a thesis topic; gathering of information; organization of material; evaluation of data; writing of a formal thesis report.
HIST 573 Thesis II (Semester hours arranged.)
See HIST 572. This course consists of completion of the thesis. Emphasis on originality, depth of research, and contribution to knowledge.
577 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 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 faculty. (Requires permission of the chair of the graduate faculty in order to be included for credit in the degree program.)

## Hotel, Restaurant, and Tourism Management

HRTM 588 Research Skills in Psychology and Hospitality (Semester hours arranged.)
This course provides students with an opportunity to participate in a variety of hospitality research projects undertaken in conjunction with establishments and organizations in the Hospitality and Travel Industry. (Not regularly offered.)

## Mathematics

MATH 502 Applied Statistics (3:3:0)
This course deals with the interpretation and application of elementary statistical techniques, and the solution of problems relative to correlation, inference, prediction, and analysis of variance. (Offered fall semester.)
MATH 516 Linear Statistical Modeling Methods with SAS (3:3:0)
This course is intended for 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. Prerequisite: Satisfactory completion of a college course in statistics. (Offered spring term - even years.)
MATH 520 Number Theory (3:3:0)
This course includes a consideration of the fundamental laws of integers, the linear Diophantine equation, the Euclidean algorithm, prime numbers, divisibility, congruences, the Theorems of Fermat and Wilson, primitive roots, and indices. (Not regularly offered.)
MATH 530 Trends in Secondary Education (3:3:0)
This course will examine current and proposed secondary mathematics curricula and models of teaching and learning mathematics. Major foci will be mathematical problem solving and integrating technology into the mathematics curriculum. (Not regularly offered.)
MATH 531 Teaching Mathematics Using Technology (3:3:0)
Designed for in-service secondary mathematics teachers, this course will cover the use of graphing calculators, computer algebra and geometry systems, how to incorporate them into the classroom and how the availability of technology will change the mathematics that will be taught. (Not regularly offered.)
MATH 551 Transformational Geometry (3:3:0)
Introductory transformational geometry for teachers of mathematics will be covered. The transformations are over the 2-Dim and 3-Dim extended Euclidean Spaces. The transformations will be classified and factored by their invariants. The computer software, Mathematica ${ }^{\text {TM }}$ or similar software, will be used to do the linear algebra. Applications will be made to computer graphics. (Not regularly offered.)
MATH 570 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 320, MATH 240, and CPSC 111 or CPSC 211. (Not regularly offered.)
MATH 571 Numerical Methods II (3:3:0)
This course is a continuation of the Numerical Methods I and deals with algorithms for interpolation, differentiation, integration, ODE, and foreign values. (Not regularly offered.)
MATH 577 Independent Study in Mathematics (Semester hours arranged.)
Under the guidance of a qualified faculty member, the student pursues a program of readings, study, and research related to professional knowledge and understanding in Mathematics. Topics should be established prior to enrollment. Prerequisite: Permission of the chair of the Department of Mathematics.

## Media Communication and Technology

## MCOM 501 Current Applications (1:1:0)

This course will provide an introduction to future and current issues and topics in the application of media communication and technology. To highlight communication issues, students will be exposed whenever possible to varied presentation strategies. The application of media communication and technology to academic and business situations will be demonstrated. This course may be taken for credit more than once if a student wishes to study another current issue.
MCOM 510 Computers in Education (3:3:0)
This course presents an overview of the application of computers to various instructional and classroom administrative tasks. Instructional programs used in all levels of instruction are analyzed. Special emphasis is given to microcomputers and their impact on education.
MCOM 520 Selection and Utilization of Instructional Media for the Classroom (3:3:0)
Techniques of integrating non-print instructional media into the teaching/learning situation are
investigated. Emphasis is given to the evaluation, selection, and use of films, filmstrips, slides, overhead transparencies, and other forms of non-print media.
MCOM 526 Organization and Administration of Instructional Technology (3:3:0)
This course defines the administrative and management roles, responsibilities, and tasks of an instructional technologist. This course also provides an introduction to and overview of the challenges and opportunities to instructional technologists who serve as administrators and managers in academic and business/industry settings.
MCOM 532 Digital Photography and Still Images (3:3:0)
This course will provide students with an overview of many different methods for selection, production, manipulation, utilization, and presentation of still images for instructional applications. Students will learn varied techniques of locating, acquiring, and producing digital and non-digital still photographic images.
MCOM 534 Video Production (3:2:2)
This course will cover the aspects of video production used by educators and trainers to produce quality motion media. A review of research, pre-production organization, production techniques, and post-production editing will be included. Students will have the opportunity to produce motion media in this course.
MCOM 536 Internet for Educators (3:3:0)
Students will be introduced to the fundamentals of using the Internet to access and share information with emphasis being given to how this technology can be used as a classroom tool. Project design, commercial services, free services, and online procedures will also be emphasized.

## MCOM 538 Desktop Publishing for Educators (3:3:0)

Students will learn the basics of using the microcomputer for producing print media, which can be used in the classroom. Assignments will give students hands-on experience in producing effective educational publications. Topics include: publication design, use of type, and instruction on page layout problems.
MCOM 540 Multimedia for Educators (3:3:0)
Students will learn the basics of producing multimedia on the microcomputer, which can be used in the classroom. Assignments will give students hands-on experience in producing educational multimedia. Topics include: multimedia design, production of elements, and combining those into an instructional design.
MCOM 545 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.
MCOM 580 Research Project I (3:3:0)
Students will perform an investigation and comprehensive search of the literature of two technology topics. Written scholarly papers will be developed and the results of one of the investigations will be presented orally. This is the first in a two-course sequence required of those who do not write a thesis.
MCOM 581 Research Project II (3:0:0)
Students will further develop one of the topics investigated in the course Research Project I. The results of this course will be a product that will have pragmatic application in the area of instructional and/or training technology. This course is required of all students in the non-thesis program.
MCOM 585 Internship (3:3:0)
Students will work in an environment that provides professional experiences related to the student's field of interest and study, be assigned instructional technology tasks, and document the activities of an instructional technology and/or training media professional. An external non-department member media professional and appropriate department faculty member will jointly supervise the students.

MCOM 589 Thesis (6:0:0)

This course consists of thesis topic development, information gathering, material organization, data evaluation, formal thesis report writing, and completion of the thesis. Thesis procedures must adhere to the Thesis Guidelines as defined by the Office of the Graduate School and the Department of Media, Communications and Technology. Students register for 6 semester hours in one semester with approval of advisor.

## Movement Studies and Exercise Science

MSES 501 Organization and Administration in Athletic Training (3:3:0)
This course is a requirement for students pursuing national certification as an athletic trainer. This course deals primarily with the administrative competencies necessary to accomplish successful day-to-day operation of an athletic training program and facility. (Offered spring term only.)
MSES 502 Therapeutic Modalities in Sports Medicine (4:3:2)
This course is a requirement for students pursuing national certification as an athletic trainer. 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 physically active individuals who are injured. (Offered spring term only.)
MSES 503 Therapeutic Exercise in Sports Medicine (4:3:2)
This course is a requirement for students pursuing national certification as an athletic trainer. 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 of physically active individuals. (Offered fall term only.)
MSES 504 Advanced Perspectives: Recognition, Evaluation, and Management of Injuries and Illness in the Physically Active (4:3:2)
This course is a requirement for students pursuing national certification as an athletic trainer. This course is designed to explore the identification and treatment of common injuries sustained by the physically active. The information and skills are intended for those students with a relatively high level of sophistication in sports medicine.
MSES 505 Motivational Techniques for Physical Educators (2:2:0)
This course is designed to acquaint physical educators with a knowledge of motivational techniques. Course content includes applications in self-motivation, individual, and group as well as situational strategies unique to teaching physical education or coaching a sport. (Offered summer term only.)
MSES 506 Theory and Techniques of Coaching (3:3:0)
This course will provide a basic overview of the theories and strategies necessary to become a successful coach. The welfare of the athlete being the primary focus. Sport areas covered will be philosophy, psychology, pedagogy, physiology, medicine, and management. After successful completion of this course, the student will receive an American Sport Education Program Diploma. (Offered summer term.)
MSES 510 Curriculum Development in Physical Education (3:3:0)
The role of physical education in the context of the school program and the process of establishing purposes, selecting experiences, as well as program designing and evaluation are emphasized. (Offered summer term.)
MSES 511 Movement Education: Elementary School Physical Education (3:3:0)
This course is a study of issues and concepts in movement education in contemporary perspective. Proposed theoretical structures of movement education are treated with reference to emerging views of purpose and projected development within the United States. (Not regularly offered.)
MSES 512 Constructing Sequential Learning to Implement a Conceptual Approach to the Teaching of Physical Education (3:3:0)
This course will develop the skills of pre-service teachers and enhance the ability of physical
educators to provide sequential learning plans to implement a conceptual approach to the teaching of physical education. Students will demonstrate their creations. In seminar fashion students will discuss, evaluate, and adjust created plans. This course will simulate the work of professionals as they design sequential learning experiences ( $\mathrm{K}-12$ ). (Offered summer term.)
MSES 513 Evaluation in the Teaching-Learning Process in Health and Physical Education (3:3:0)
Course content will include basic statistical techniques for analyzing and interpreting cognitive, psychomotor, and affective variables in health and physical education. Use of these evaluative tools will be applied to the teaching-learning situation, curriculum and program evaluation, competency evaluation, diagnosis, placement, individualization of instruction, and other current instructional practices. (Offered spring term.)
MSES 514 Assessment and Documentation of Student Achievement (3:3:0)
This course is intended for teachers who wish to enhance their knowledge and ability related to educational measurement and evaluation. The selected learning experiences will demonstrate the role evaluation plays in the instructional process. Assessment and documentation effectiveness depend largely on the teacher's ability to construct and select tests and other evaluation instruments that provide valid measures of intended learning. Discussion and decision making related to test selection and construction will enhance teacher's knowledge and ability.
MSES 515 The American Woman in Sport (3:3:0)
The American woman in sport, including the history of her participation, relationship to changing female roles and ideals, attitudes toward competition for women, roles of women's sport organizations, and motivations of sportswomen is examined. (Not regularly offered.)
MSES 516 Advanced Kinesiology and Pathokinetics (3:3:0)
This course applies the anatomical knowledge of the human locomotor system and mechanical principles to the quantitative and qualitative analyses of normal and pathological motion. (Not regularly offered.)
MSES 517 Analysis of Teaching Behavior in Physical Education (3:3:0)
This courses focuses on the study of teaching behavior during the teaching-learning transaction. It includes the theory, application, analysis, and evaluation of behavioral concepts and their implication for teaching. Class discussion will focus on learning theories, motivational theories, the spectrum of teaching styles, structure of subject matter, personality, idiosyncratic behavior, gesture behavior, and discipline. (Offered fall term.)
MSES 518 Philosophy and Physical Education (3:3:0)
This course is a review of contemporary philosophical positions and their implications for professional decision-making in physical education. Focus on the course is upon an awareness of and a concern for the development of the student's personal professional philosophy. (Not regularly offered.)
MSES 519 Sport and Society (3:3:0)
The nature, function, and relationships of sport and society with reference to the consideration of sport in social and cultural context and the social variables which affect participation are studied. (Offered fall and summer terms.)
MSES 520 Seminar: Physical Education Literature (3:3:0)
Selected articles from the literature in physical education and related fields are critically reviewed. The student will study how and will write an article and submit it for publication. Professional areas considered are: adaptive, administrative, athletics, cultural, facilities, philosophy, psychology, skills, and sociology. (Offered spring term.)
MSES 521 Professional Perspectives for Physical Education (3:3:0)
The course is a study of issues, trends, and persons in the profession of Physical Education in historical and contemporary perspective; the structure of the profession and its related fields are treated with reference to emerging views of purpose, responsibility, and projected development in the United States. (Not regularly offered.)
MSES 522 Advanced Theory and Techniques of Physical Education (3:3:0)
This course provides the practicing teacher-coach an opportunity to study advanced theories
and techniques relative to the activities commonly included in the public school physical education program. (Not regularly offered.)
MSES 523 Administration: Physical Education and Sport Programs (3:3:0)
This course employs a theoretical approach to the development of administrative thought as it relates to physical education and sport programs; emphasis is on the understanding of concepts and models from the social sciences, and their implications for leadership in the educational setting; the development of a personal philosophy of administration. (Offered fall and spring terms.)
MSES 525 Psychology of Human Performance (3:3:0)
This course treats the research and theoretical consideration of the psychological variables in human performance, with special reference to the bodyself in movement, and the psychology of sport. (Offered summer term.)
MSES 526 Biomechanics of Human Performance (3:3:0)
This course focuses on the study of basic physical laws relative to human motor performance. Factors such as equilibrium, linear motion, angular motion, ballistic movement, and fluid mechanics are considered as they affect internal body mechanics of the human and his/her interaction with environmental objects. Prerequisite: Kinesiology. (Offered spring term.)
MSES 528 Physiology of Human Performance (3:3:0)
Emphasis is given to study of metabolism and cardiovascular and respiratory human physiology. Prerequisite: Physiology of Exercise. (Offered fall term.)
MSES 529 Motor Learning (3:3:0)
Learning and motor performance are studied with emphasis on the development of motor skill and related theories of learning and behavior. It includes analysis of the learning process in relation to motor development and the role of the teacher. (Not regularly offered.)
MSES 530 Electrocardiography, Non-Invasive Cardiac Evaluations, and Implications in
Exercise and Rehabilitation (3:3:0)
Basic electrocardiographic concepts of the normal EKG, arrhythmias, conduction defects, ischemia infraction, hypertrophies, exercise, drug effects, and rehabilitation are discussed and demonstrated. Noninvasive procedures of echocardiography and thallium scanning and their importance in diagnosis and rehabilitation are presented. CRES students only/permission of instructor. (Offered fall term.)
MSES 531 Cardiac Rehabilitation Clinical Laboratory I (3:0:9)
This lecture/lab experience is conducted in the Human Performance Lab and prepares students to participate in a variety of multidisciplinary clinical environments. Development of pertinent skills and discussion of relevant concepts pertaining to cardiac rehabilitation and exercise for other special populations are presented to prepare students for experiences at area hospitals and medical facilities. CRES students only. (Offered fall term.)
MSES 532 Cardiac Rehabilitation Clinical Laboratory II (3:0:9)
This lecture/lab conducted in the Human Performance Lab continues the discussion and development of skills necessary to continue preparation of CRES students for clinical rotations of area hospitals and medical facilities. CRES students only. (Offered spring term.)
MSES 533 Health and Fitness Clinical Laboratory III (3:0:9)
Students observe and experience the programmatic, organizational, and administrative aspects of the Health and Fitness program at Pocono Medical Center. The "wellness" concept is stressed by learning evaluation and measurement techniques as well as participation in educational and counseling settings. (Offered summer term.)
MSES 534 Sports Medicine (3:3:0)
This course is a survey of topics included under the broad umbrella of Sports Medicine, representing both scientific and clinical branches of the field. Emphasis is placed on factors which can enhance performance, promote, and protect the welfare of participants in exercise, dance, recreational, and competitive sport. (Offered fall term.)
MSES 535 Differential Assessment of Musculoskeletal Injuries (3:3:0)
This course is designed to differentiate between movement disorders and the diseases 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. (Offered spring term.)

## MSES 536 Organization and Administration of Cardiac Rehabilitation and Primary

Prevention Programs (3:3:0)
This course analyzes general principles and procedures of cardiac and primary prevention programs. The organization and administration of specific cardiac programs will be discussed. CRES students only. (Offered summer term.)
MSES 537 Stress Testing and Exercise Prescription (3:3:0)
An in-depth analysis of exercise stress testing for cardiacs, symptomatics, and asymptomatics is presented along with principles and practices of exercise prescription. Traditional as well as more recently developed stress-testing procedures are discussed. CRES students only/ permission of instructor. (Offered spring term.)
MSES 538 Cardiac Pathology and Pharmacology (3:3:0)
Lectures and discussion emphasize major cardiac diseases and their affect on cardiovascular function. The role of exercise in the rehabilitation from these cardiac disorders is analyzed and evaluated. Traditional and newer drugs and their pharmacological actions are presented as they relate to rehabilitation and treatment. CRES students only/permission of instructor. (Offered spring term.)
MSES 539 Coronary Heart Disease: Its Medical Diagnosis and Management (3:3:0)
This course presents a broad overview of coronary heart disease etiology, diagnosis, treatment, and prognosis related to cardiac rehabilitation. Students will be introduced to material that will serve as a foundation for advanced courses in pathophysiology, electrocardiography, stress testing, and clinical laboratories. CRES students only/permission of instructor. (Offered fall term.)
MSES 541 American College of Sports Medicine Workshop (2:1:2)
The Exercise Specialist Workshop will provide structured experiences in the classroom, laboratory, and gymnasium to improve knowledge and understanding of graded exercise testing, exercise prescription, and physical activities as used in prevention and rehabilitative programs as outlined in the American College of Sports Medicine Guidelines. (Offered summer term.)
MSES 544 Seminar: Current Athletic Injury Prevention and Management (3:3:0)
Techniques of prevention, examination, and rehabilitation of athletic injuries and current topics in sports medicine are all considered. This course also examines total care of the athlete, ethics, morals, and legal liability in sports. Prerequisite: Basic course in the prevention and care of athletic injuries, or permission of the instructor. (Offered spring and summer terms.)
MSES 546 Planning and Management of Sports Facilities (3:3:0)
The course is designed to provide the student with knowledge of the planning and management of facilities for school physical education, athletic, and intramural/recreational programs. Buildings, grounds, and equipment, as well as maintenance of these facilities will be discussed. Students will visit and tour a facility. (Offered fall, spring, and summer terms.)
MSES 547 Sports Business and Finance (3:3:0)
This course is designed to provide the student with knowledge of the business and financial considerations of various sports enterprises. (Offered spring term.)
MSES 548 Sports Marketing (3:3:0)
The course is designed to provide the student with knowledge of sports marketing as it relates to spectator and participant. It will also give the student knowledge and understanding of the marketing considerations of various sports organizations. Fund raising applications will also be discussed. (Offered fall and every other summer term.)
MSES 549 Sports and the Law (3:3:0)
The focus of this course will be on legal concepts and principles related to the administration, coaching, and teaching of sports. Legal issues involving personnel, facilities, equipment, transportation, medical aspects, liability, and gender will be examined. Legal terminology and
the court systems will be included. (Offered fall and every other summer term.)
MSES 550 Sport Personnel Management (3:3:0)
This course focuses on various leadership styles, managerial communication, and interaction skills and their relative effectiveness in sports organizations. Attention is directed to specific personnel tasks such as hiring, development, and evaluation of sport staff, and personnel issues of current importance. (Offered spring and summer terms.)
MSES 551 Application of Computers to Sports Management (3:3:0)
This course is designed to provide students with computer knowledge and skills applicable to sports management. The advantages and application of computers in sports programs will be emphasized. Opportunities for understanding and running existing computer programs will be provided. This course also offered through summer Home Study. (Offered summer term.)
MSES 553 Ethical Issues in Sports Management (3:3:0)
This course will focus on the identification of ethical issues in sports situations, analyzing the actions and decisions as to value orientations and ethical stance, and identifying and formulating a consistent ethical base for one's own functioning as a sport administrator. (Offered spring term.)
MSES 555 Exercise 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. 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 fatness provides practical as well as theoretical experience. (Offered spring and summer terms.)
MSES 556 Aerobic Fitness Workshop (2:1.5:1)
This workshop provides a theoretical and practical framework for measurement and evaluation of aerobic fitness in children and adults of both sexes. Field tests that can be administered by teachers and paraprofessionals 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. Opportunities for self-evaluation of aerobic fitness will provide technical and administrative insights. (Offered spring and summer terms.)
MSES 557 Reducing Coronary Heart Disease Workshop (2:1.5:1)
This workshop is to study exercise as a means of evaluation, prescription, and diagnosis for the major threat to health in the United States today - heart disease. Recent studies with their findings and implications will be reviewed. 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 necessity for changing life styles. Prevention rather than treatment for heart disease will be stressed. (Offered summer term.)
MSES 558: Advanced Topics in Sports Nutrition and Exercise Metabolism (3:3:0)
This course is designed to provide the student with the advanced knowledge and understanding of contemporary topics in sports nutrition and exercise metabolism as they relate to sports and exercise performance. Topics will include macronutrients, micronutrients, sports drinks, hydration, disordered eating, herbal, commercial nutritional supplements, meal planning, and exercise metabolism as they relate to sports competition and physical activity. (Offered spring term.)
MSES 559 Public Relations in Sport Management (3:3:0)
This course will focus on public relations concerns specific to athletic administrators, managers of sport facilities, and coaches. Content includes establishing a framework for public relations processes, communicative tools and techniques, and relationships with the media. (Offered summer term.)
MSES 560 Physical Activity and Aging (3:3:0)
In this course, students will examine the scientific evidence relating the role of physical activity, exercise, and fitness to the aging process, longevity, and the quality of life. Application of
assessment and training techniques, attitude assessment, and motivation will be included. Students should have some prior background in either gerontology or physical education. Prerequisite: Prior background in either Physical Education or Gerontology. (Offered summer term.)

MSES 561 Seminar: Adapted Physical Education (3:3:0)
The anatomic and physiologic bases for identifying and programming the handicapped child are studied. Both modified and remedial procedures are considered. Selected handicapped individuals serve as subjects for the practical aspects of the course. (Offered summer term.)
MSES 562 Seminar: Therapeutic Agents in Athletic Training (4:4:0)
This course is designed to present the student with the application of scientific theories, as they apply to the rehabilitative strategies and the treatment protocols associated with the use of various physical agents (light, heat, sound, electricity, etc.) in the treatment of sports- and activity-related injuries. (Offered spring term.)
MSES 563 Seminar: Therapeutic Exercise in Athletic Training (4:4:0)
This course is designed to present the student with the scientific theories, the treatment strategies, and application protocols associated with the use of various forms of therapeutic exercise in the rehabilitation of sport-related and activity-related injuries. (Offered fall term.)
MSES 564 Seminar: Medical and Surgical Aspects of Sport and 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 NATA-BOC Certification as an athletic trainer or MSES 230 and MSES 430.
MSES 565 Supervision in Health and Physical Education (3:3:0)
History, philosophy, and general principles are considered as basic to the development of different patterns or organizations for effective supervision. The course includes a survey of the problems, confronted in supervision, and a critical analysis of the full scope of methods available for solving such problems. Emphasis is placed upon the various aspects of human relations in supervisory function. Evaluation techniques, characteristics, and areas are reviewed and analyzed. (Offered spring term.)
MSES 566 Environmental Exercise Physiology (3: 3: 0)
This course includes a study of the physiological responses of the human body to maximal and submaximal exercise in various environmental conditions: heat, cold, varying humidity, air pollution, altitude (hypobaria), and hyperbaria. Focus will be on general and specific mechanisms of adjustment of circulation, respiration, fluid regulation, and metabolism. Both theoretical and laboratory experiences will be provided. Prerequisites: BIOL 111 and MSES 301. Also recommended: BIOL 112. Permission of MSES graduate coordinator also required.
MSES 567 Experimental Exercise Physiology (3:2:2)
This course is offered as one of several requirements for completion of an exercise physiology concentration for the B.S. in Physical Education. Experimental investigation will include topics of exercise metabolism, instrument calibration, heart and circulation, body composition, electrocardiology, respiration, and exercise tolerance testing as they relate to response and adaptations of physical exercise.
MSES 568 Evaluation and Measurement 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 illness.
MSES 569 Evaluation and Measurement 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 physically active 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 illness.
MSES 570 Introduction to Research (3:3:0)
This course provides an orientation to graduate study and research in Health Education and Movement Studies and Exercise Science. This seminar is designed to acquaint the graduate student with the methods and materials of graduate study and scientific inquiry. It is required of all graduate students in the degree program. (Offered fall and summer terms.)
MSES 571 Independent Research Problem (Semester hours arranged.)
This course utilizes selected research techniques to attack a specific professional or academic problem. It includes preparation and presentation of a formal report. Consult adviser well in advance of registration. This course is required for all students in the research or project program, and it may be repeated with permission. Prerequisite: MSES 570, 574. (Offered fall, spring, and summer terms.)
MSES 572 Thesis Seminar (1-3 Semester hours arranged.)
This course utilizes selected research techniques to address a specific professional or academic problem. It includes preparation and presentation of a formal report. Students must consult adviser well in advance of registration. This course is required for all students in the research or project program, and it may be repeated with permission. Prerequisite: MSES 570, 574. (Offered fall, spring, and summer terms.)
MSES 574 Research Laboratory (1:0:3)
The preparation of the research proposal including the development of the purpose and design of the proposed research problem or thesis is the focus. This course must be repeated until "satisfactory" grade is earned. Prerequisite: Completion of MSES 570 or current enrollment. (Offered fall, spring, and summer terms.)
MSES 577 Independent Study in Health or Physical Education (Semester hours arranged.) Under the auspices of a qualified member of the faculty, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in health or physical education. Topics should be established prior to enrollment. Prerequisite: Permission of the faculty member and the department. (Offered fall, spring, and summer terms.)
MSES 581 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. Additional emphasis will center about a presentation of 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. (Not regularly offered.)
MSES 582 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 about a critical review of the research relevant to the gymnastic discipline. Lecture-demonstration and similar methods of instruction are employed. (Not regularly offered.)
MSES 584 Anaerobic Training Workshop (2:1.5:1)
This workshop provides a theoretical and practical framework for measurement and evaluation of anaerobic conditioning, flexibility, plyometrics, and strength training. Field and laboratory tests that can be administered by athletic coaches, teachers, and fitness professionals are practiced, analyzed, and discussed. (Offered spring term.)
MSES 585 Seminar in Strength and Conditioning (3:3:0)
The relationship of exercise, rest, fatigue, nutrition, and heredity to physical performance is studied. Current methods of physical conditioning will be discussed. Programs for fitness and athletic conditioning are developed and discussed. (Offered spring and summer terms.)
MSES 586 Field Experience and Internship (Semester hours arranged.)
This course is designed to provide the student with practical experience with a federal, state,
or private organization in some related aspect of physical education and/or sports medicine. Students will coordinate their course work acquired at East Stroudsburg University with specific field experience. This program will be supervised by a member of the MSES Department. Prerequisite: Permission of the department. (Offered fall, spring, and summer terms.)
MSES 595 Cardiac Rehabilitation Seminar (3:3:0)
This course focuses on current concepts, controversies, and issues in cardiac rehabilitation. The lecture-discussion format utilizes appropriate literature as sources for dialogue, and prerequisite courses serve as a basis for analyzing relevant theoretical and practical concerns. CRES students only. (Offered summer term.)

## Music

MUS 501 Choral Music Symposium (1:1:0)
This course will be a comprehensive choral training symposium for church choral directors and school choir directors. Clinicians, including composers, will direct sessions in choral rehearsal techniques and performance practices and conduct studies on curriculum materials.
MUS 502 Instrumental Music Masterclass (1:1:0)
This course is a masterclass 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 503 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.
MUS 504 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.
MUS 511 Fine Arts and Ideas (3:3:0)
Members of the art, music, and theatre faculties offer this integrated study of humanistic values in the visual and performing arts. Students will have the opportunity to focus on specialized areas of interest through discussion and research. This course is also offered as ART 511 and THTR 511.
MUS 577 Independent Study (Semester hours arranged.)
Under the direction of a member of the department faculty, the student will pursue an advanced program of study in an area of special interest in music.

## Nursing

NURS 520 Analysis of Aging (3:3:0)
This course is designed to analyze the aging process with a multi-disciplinary approach. Physiological, psychological, 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.

## Political Science

POLS 514 Seminar on Local Government (3:3:0)
This seminar will provide students with an opportunity to examine the operation and concerns of local government in detail. The focus will be on the challenges caused by rapid population growth and economic development. Students will examine the juxtaposition of local government in the American system, the adequacy of local government structures, landuse policy, taxing practices, and environmental and social issues. There will be interaction with local government officials.

POLS 516 Administrative Law (3:3:0)
Administrative Law is concerned with the administrative agencies. It studies the powers of agencies, the limits on their powers, the rules that bind agency action, and the remedies available to those injured by administrative power. For the purpose of this course, administrative law is the law governing the creation of, power of, and limitations upon public bureaucracies, not the regulations they produce.
POLS 520 Area Studies I (3:3:0)
(A specific area will be announced). This course investigates selected problems of historical and political development in major world areas. Emphasis is placed on political institutions - their background, development, and significance.
POLS 522 Seminar: Foreign Travel and Study (3:0:6) or (6:0:12)
This course involves travel and possibly study at foreign colleges and universities. The focus will be the history and government of the countries visited, and their economic growth and integration. Emphasis is placed on formal and informal discussion and analysis of contemporary indigenous problems.
POLS 525 Seminar: The Middle East (3:3:0)
This course will offer an advanced study and analysis of selected Middle East states. Emphasis will focus on political culture, modernization efforts, and nationalism both in terms of regional identity and in terms of its broader international consequences.
POLS 528 Comparative Policy Analysis (3:3:0)
This seminar concentrates on the theory, techniques, and content of a body of research broadly concerned with factors that determine the variation in patterns of public policy across jurisdictions and over time. Students read materials that focus on how cultures, economic systems, and political institutions differ and how these differences affect public policies.
POLS 531 Contemporary Political Thought (3:3:0)
This course is a study of twentieth-century thought concerning the role of the state in society. It includes discussion of ethical as well as pragmatic considerations, analysis and appraisal of liberalism, conservatism, fascism, socialism, communitarianism, multi-culturalism, feminism, and other ideologies. Political structures and functions are considered in connection with social values and objectives.
POLS 532 Seminar in Parties and Politics (3:3:0)
This course analyzes political parties as a part of the political process, political parties as an integral force in society, the transformation of societal values into public policy through the operation of the party system, electoral systems, and their relationship to the political system, voting behavior, changing styles in party strategy, campaigning, and suggestions for electoral reform.
POLS 533 The Presidency (3:3:0)
This course is an analysis of the presidency; its nature in both its personal and institutional dimensions; the growth of the office; the politics and problems of seeking the office of the presidency; the President's roles as chief executive, party leader, legislative leader, and leader in the international political system. Since this course is also offered for undergraduate credit, differentiation of course requirements may be made.
POLS 534 Seminar: Presidential Elections and Politics (3:3:0)
This course is a study of the presidential elections of unusual significance in U.S. history; preelection politics, partisan maneuvers, the platform, and selection of candidates; examination of the campaign and election process; discernment of distinguishing characteristics as well as common patterns; evaluation and comparison of results and future applicability.
POLS 535 Intergovernmental Relations (3:3:0)
This course examines the distribution of powers between the federal government and the states. It includes a review of the historic development of American federalism as well as its current trends and conflicts. Emphasis in the course is placed on evaluating the administrative processes that bind federal, state, and local governments together.
POLS 536 Seminar: Readings in Civil Liberties (3:3:0)

Attention is given to changed conditions and new influences affecting American liberty in the twentieth century. It includes an analysis of issues in economic, social, and political liberties. Emphasis is on constitutional logic and change and on evaluation of the role of the state and the responsibility of the citizen in defining civil liberties. Selections of issues are adapted to student interest and timeliness of problems.
POLS 537 Problems in Public Administration (3:3:0)
This course is a survey and analysis of the major contributions in traditional and contemporary organization theory; examination of decision making, leadership, and human behavior in complex organization; the study of Public Administration as an integral part of the public policy process; problems in budgetary politics; and personnel administration, administrative law, and democracy in the administrative state.
POLS 538 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 U.S. diplomatic history, treaties and executive agreements, traditional and new diplomatic practices, foreign policy and international organization, and the extent of democratic control of foreign affairs.
POLS 540 Comparative Politics (3:3:0)
This course consists of a comparative analysis of Western European political systems with special emphasis upon the environmental factors that have shaped these systems and the identification of relevant categories, such as ideology and the organization of political authority, from which generalizations may be derived.
POLS 541 Seminar on War and Peace (3:3:0)
This course investigates case studies of tension areas in world affairs, such as unresolved conflict, crucial areas of friction and crucial border situations, the causes of wars and diplomatic efforts for solutions. It includes an evaluation of conflicts and prospects for the preservation of peace.
POLS 543 The United Nations (3:3:0)
This course investigates the establishment, operation, and responsibilities of the United Nations, its organs, agencies, and commissions; the development of the Charter since its inception and analysis of its emerging structure; the problems of increasing membership; the strengths and weaknesses of the Charter, the evaluation of U.N. successes and failures; and the prospects for the future.

## POLS 544 Theory of International Relations (3:3:0)

The nature of the state system will be examined including the nature of the state, nationalism, national power, sovereignty, and national interests. Students will examine the nature of controls that restrain states and produce a tolerable international order, evaluate major foreign policy and international organizations and the extent of democratic control. Prerequisite: One course in international affairs or permission of instructor.
POLS 545 International Law and Organization (3:3:0)
This course is a study of rules that govern sovereign states in their legal relations with each other as well as the historic development and current status of the law of nations. Key cases are studied to illustrate rules. The course includes a survey of the development of international institutions from the 19th-century public unions to the more recent specialized agencies, procedures for settlement of disputes, development of law in and outside the community of nations, and the study of international organizations as a political phenomenon of the 20th century.
POLS 547 Seminar in American Political Thought (3:3:0)
An in-depth exposure to major segments of American political thought, with a special emphasis on the emergence of Liberalism. This evolution would be considered in successive courses, as determined by the professor. A possible breakdown might be as follows: relevant English, revolutionary, Constitutional and Whig thought, transcendentalism, the Civil War and individualism, pragmatism, New Deal Liberals and other recent writings.

POLS 548 The Politics of Developing Nations (3:3:0)
This course is a comparative analysis of political development in the Third World with particular focus upon the role of revolutionary warfare and politics, charismatic leaders, military elites, and ideology.
POLS 550 Seminar in International Studies (3:3:0)
This course consists of studies of international dimensions of human experience. It includes an investigation of various aspects of human interactions with emphasis on political, economic, philosophical, educational, and other areas. The approach is interdisciplinary and includes projects and practical experiences. Students may receive credit in political science or in other fields in which they complete projects with permission of cooperating departments.
POLS 554 The Legislative Process (3:3:0)
This course concentrates on the U.S. 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.
POLS 562 Political Behavior (3:3:0)
This course is an examination of the formation and causes of cleavages and consensus in the American political system; the study of political attitude formation and political partisanship; and how these phenomena affect voting behavior and political activism. Students will have an opportunity to develop simple statistical skills and apply statistical analysis to survey research data using SPSS.

## POLS 566 Public Budgeting and Finance (3:3:0)

This course treats 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. This course provides graduates with an overview of the budgeting process from revenue sources to expenditure controls. Special emphasis is placed on systematic budgeting techniques such as ZBB and MBO. It requires each student to become acquainted with accounting techniques used in public agencies.
POLS 567 Public Personnel Administration (3:3:0)
This course explores the policies, programs, and techniques used in managing human resources in the public and non-profit sectors. It addresses issues of personnel leadership, neutrality, and accountability. It includes challenges resulting from legislation, collective bargaining, and changing demographics in the workforce.
POLS 570 Introduction to Research: Scope and Method (3:3:0)
This course is an orientation to graduate study and research. This seminar is designed to acquaint the graduate student with the methods and materials of graduate study and scientific inquiry in political science. The course is required of all graduate students in the degree programs.
POLS 571 Independent Research Problem (Semester hours arranged.)
This course utilizes selected social science research techniques to attack a specific problem. A formal report is prepared and presented. The course is required for all students in the nonthesis program. Requires prior or concurrent completion of POLS 570.
POLS 572 Thesis I (3:0:0)
This course consists of the development of a thesis topic, gathering of information, organization of material, evaluation of data, and writing of a formal thesis report.
POLS 573 Thesis II (3:0:0)
See POLS 572 Completion of Thesis.
POLS 577 Independent Study in Political Science (Semester hours arranged.)
Under the auspices of a qualified member of the department faculty, the student pursues a pattern of reading, study, and research related to professional knowledge and understanding in political science. Topics should be established prior to enrollment. Prerequisite: Departmental approval; permission of the chair of the department.
POLS 586 Field Experience and Internship (Semester hours arranged.)

This course is designed to provide the student with practical experience in a governmental agency or other organization with local, state, or national governmental or political concerns. Prerequisite: A minimum of 6 semester hours completed on the graduate level in political science with at least a "B" average. Enrollment in department graduate program.

## Professional and Secondary Education

Courses can be found under Secondary Education.

## Reading

REED 521 Language and the Reading Process (3:3:0)
This course is designed to examine the nature of language, acquisition of language, dialects, and the influence these factors have on reading ability. Recent applications of linguistic theory to reading instruction are also covered. Competency prerequisites.
REED 522 Theoretical Models of Reading and Literacy Processes (3:3:0)
In this course, students consider the historical perspective, the current theories, and the future directions of reading instruction. Participants examine diverse approaches to reading, engage in productive discussion, and explore the knowledge base from which reading educators work.
REED 523 Analysis of Instructional Techniques in Reading (3:3:0)
This course is a survey of the major areas of difficulty in the reading process, a study of the methods suitable for attaining desired goals in reading, and an evaluation of teaching materials.
REED 524 Reading Clinic Practicum (6:0:12)
This course consists of a guided and supervised practical application of principles and theories of teaching reading. Competency prerequisites.
REED 525 Research Seminar in Reading (3:3:0)
This course provides an understanding of the best methods to use in interpreting and using research reports. It includes a study and evaluation of available research in the field of reading. Competency prerequisites.
REED 526 Development of The School Reading Program (3:3:0)
This course defines the various reading specializations, the duties and responsibilities of the Reading specialists, and provides students an opportunity to develop and administer reading programs suitable for specific school situations. Competency prerequisites.
REED 527 Reading in the Content Areas (3:3:0)
Emphasis in this course is placed on the evaluation of reading material in the content areas for the purpose of determining the principal comprehension skills and thought processes necessary for understanding and ways in which content area teachers can assist students to function effectively in these skills and processes.
REED 529 Assessment and Evaluation of Literacy (3:3:0)
This course is designed to give practice in the use of formal and informal assessments in appraising a child's skill in reading and related areas. The utilization of a literacy profile, which serves as the basis for instructional practices, is emphasized. Competency prerequisites.
REED 530 Teaching Reading through Young Adult Literature (3:3:0)
Participants in the course will examine how to engage young adults in the reading process through literature-based instruction. Among the 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.
REED 546 Learning to Read through the Arts (3:3:0)
This course prepares teachers to develop and use an individualized reading program designed to improve reading skills through the integration of a total arts program with a total reading program. Upon completion, participants are qualified to adopt the Learning to Read Through the Arts program of the U.S.O.E. National Diffusion Network. Accepted for general education.
REED 547 Success-Oriented Reading: Whole Language Development (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 581 or ELED 582. This course is also listed as ELED/PSED 547.

REED 550 Foundations of Reading Recovery I (3:3:0)
This course introduces the principles and procedures of the Reading Recovery program which is based on Marie Clay's theory of emergent and beginning literacy. The course is taught by a certified Reading Recovery Teacher Leader and is conducted at a Reading Recovery site. Enrollment is limited and departmental approval is required.
REED 551 Foundations of Reading Recovery I (3:3:0)
This course extends and refines the student's understanding and use of the principles and procedures of the Reading Recovery program introduced in REED 550. The course is taught by a certified Reading Recovery Teacher Leader and is conducted at a Reading Recovery site. Enrollment is limited and departmental approval is required. Students who successfully complete both REED 550 and REED 551 will be certified as Reading Recovery Teachers.
REED 565 Special Topics in Reading (Semester hours arranged.)
These courses deal with specific aspects of reading instruction to meet the needs of graduate students or to determine the value of introducing them as part of the university curriculum. Competency prerequisites.
REED 570 Reading Workshop (Semester hours arranged.)
A professional program designed to examine intensively current trends in reading instruction for in-service teachers.
REED 575 Reading Colloquium (Semester hours arranged.)
This course is designed to deal with pertinent contemporary problems in reading. Resultsoriented techniques for setting performance objectives and analyzing performance competencies will be stressed. Competency prerequisites.
REED 577 Independent Study in Reading (Semester hours arranged.)
Under the auspices of a qualified member of the faculty of the graduate school, the student pursues a pattern of reading, study, and research related to professional knowledge and understanding in reading. Topics should be established prior to enrollment.
REED 580 Research Problems in Reading (3:3:0)
The course is designed to assist the student in identifying important problems in the field of reading, critically analyzing available research, and synthesizing possible solutions. Competency prerequisites.
REED 589 Field Experience in Reading ( $3: 1: 4$ )
This course is a two- (or 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 on his/her work (2) following observation, the student will 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.

## Recreation

RECR 501 Outdoor Environmental Education Workshop (3:2:2)
This course will develop teaching and leadership techniques for outdoor environmental education through participation in a variety of activities. The student will develop practical projects for use in his/her own teaching or outdoor leadership situation. The class will visit local conservation and natural resource sites. (Not regularly offered.)
RECR 541 Outdoor Recreation (3:3:0)
This course is a study of the organization and administration, history, theory, philosophies, programs, and facilities of outdoor recreation agencies. The course will include field trips to representative outdoor recreation areas. (Not regularly offered.)

RECR 542 Organization and Administration of Recreation (3:3:0)
This course is a study of the organization and administration, history, theory, philosophy, settings, and problems of recreation and leisure. Emphasis on recreation facilities, finance, legislation, public relations, and the selection and training of staff. (Not regularly offered.)

## Safety

SFTY 505 Principles of Safety (3:3:0)
An overview of the safety field - its philosophy, disciplines, and research; an examination of the causes and extent of accidents and the principles and methods of prevention. This course will not be accepted for general education credit.
SFTY 511 Safety in Sports (3:3:0)
The philosophy of and research in sports safety are studied. Human and environmental factors and their interrelationships in sports injury and its control; risk-taking and decision-solution strategies; application of accident prevention and injury control to selected sports; and contributions of sports medicine to safety.
SFTY 515 Human Factors in Accident Prevention (3:3:0)
This course is a study of personal factors related to safe and unsafe living and driving; the effect of attitudes, emotions, motivations, and adjustments on behavior; research on accident causation; investigation of principles and methods employed in identifying, understanding, and modifying unsatisfactory attitudes and behavior; accident preventions.
SFTY 521 Methods and Materials in Traffic Safety (3:3:0)
This is a course in the survey of and research in the accepted methods of instruction, including lab work in simulation, range, and multimedia teaching, as well as an examination of various literature dealing with safety.
SFTY 531 Traffic Safety (3:2:3)
This course focuses on basic teacher preparation coverage of the standard thirty and six high school courses; it includes all facets of classroom instruction and research, as well as behind-the-wheel-teaching progression and techniques.

## Secondary Education

PSED 502 Comparative Education (3:3:0)
This course deals with current educational systems throughout the world, and an analysis of the forces which have influenced these systems.
PSED 503 Comparative Education Abroad (3:Arr:0)
This overseas fieldwork permits one to gain experience in his/her professional area overseas. One is assigned to a counterpart teacher/administrator abroad for three weeks. During this time one may engage in independent teaching, team teaching, small-group work, individualized instruction and assistance with activities in the host school. Time should be available to discuss with staff in the overseas school such things as program, teaching methods and materials, organization of schools, and problems of education and curriculum.
PSED 504 Philosophy of Education (3:3:0)
This course is concerned with the philosophical consideration of the rights and duties of the child, the parent, the school, and the society. It examines the purpose of education in a democratic society from the varying views of modern schools of philosophy. Problems related to the organization, administration, and methods of teaching are explored in their philosophical context.
PSED 505 Classroom Management and Discipline Models (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.

PSED 506 Teaching of English in the Secondary Schools (3:3:0)
Teaching of English 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 510, 516.

## PSED 509 History of Education (3:3:0)

The course will examine, evaluate, and analyze American educational history from colonial times to the present day with recognition of pioneer efforts and people who have played an important part in the development of the American education process.
PSED 510 The Teacher and the School Community (3:3:0)
This course analyzes a wide spectrum of human relations within the broad area of basic education. Common professional problems are discussed. It also includes an examination of the values and beliefs of the community as related to the public school.
PSED 511 Educational Sociology (3:3:0)
This course is a study of the public school in its strategic position in society and the social changes that directly affect the educational system and process. Community social service organizations that complement the role of the schools are explored and examined.
PSED 512 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.
PSED 514 Educational Statistics (3:3:0)
This course includes an introduction to the statistical method including descriptive statistics and an introduction to statistical inference; frequency distributions in one and two variables; measures of central tendency and variability; dispersion; regression and correlation; the binominal and normal distribution; randomness; estimation of parameters; standard errors; testing hypotheses about means and differences between means, type I and type II errors; "T," chi-square, "F" distributions; and analysis of variance.
PSED 515 Educational Evaluation (3:3:0)
This course deals with the interpretation and selection of standardized tests in achievement and other facets of evaluation. The efficient construction of classroom tests. Current trends in educational evaluation.
PSED 516 The Learner and the Learning Process (3.3:0)
A review of various views (humanistic, behavioral, cognitive) of the learner and learning theorists (Skinner, Rogers, Bruner, Piaget). Case studies of actual teaching learning problems are brought to the class by the participants for examination and discussion by the group.
PSED 517 Teaching of Foreign Language in the Secondary Schools (3:3:0)
This course is designed for persons who which to teach foreign languages in the schools, grades K-12. Students are provided with a theoretical foundation for teaching techniques and opportunities are provided for lesson presentations, preparation of teaching materials, planning units, evaluating instruction, and observing teaching. Prerequisites: PSED 510, 516, and 6 hours of 300- and 400-level courses in the target language area.
PSED 520 Seminar in Secondary Education I (3:2:2)
This seminar includes the study and application of lesson planning, teaching strategies and style, and questioning skills. Seminar includes a required field experience (amounting to 30 hours) in the course. Students taking this course must sign up one semester in advance. Permission of instructor required for enrollment. Prerequisites: Foundation of Education, Educational Psychology, permission of instructor.
PSED 521 Seminar in Secondary Education II (2:2:0)
This course includes the study and application of strategies of student assessment, technology, communication techniques, classroom management theories, and the elements of an inclusive classroom. Seminar II includes a required field experience in a multicultural setting. Students
taking this course must sign up one semester in advance. Prerequisite: Seminar in Secondary Education I or permission of the instructor.
PSED 525 Classroom Behavior of the Secondary School Student (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 exhibit 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. Prerequisites: PSED 161, 242.
PSED 530 Basic Workshop in Emotional Intelligence: Implications for the Classroom
Teacher (3:3:0)
This course provides general human relations training as related to enabling teachers to enhance the social and emotional development of elementary and secondary students. The course will provide teachers with the knowledge, skills, and strategies for developing their students' emotional intelligence competencies, e.g., impulse control, persistence, zeal, selfmotivation, and social deftness. (Workshop Course)
PSED 531 Advanced Workshop in Affective Education (Semester hours arranged.)
The workshop offers participants preparation for the utilization of a humanistic, positive communication system in the classroom. Three themes, Awareness, Mastery, and Social Action, are utilized in facilitating student learning via improved communications and problem- solving techniques. (Workshop Course)
PSED 532 Yo Peudo, A Bilingual Peer Leadership Program (Semester hours arranged.)
This course is specifically designed for educators who work with bilingual/bicultural Spanish students at the junior and senior high level. Experiential activities are utilized to get participants in touch with the rich, complicated, and sometimes confusing world of the bilingual/bicultural student. Participants learn to help students build and strengthen leadership skills in an environment of positiveness, acceptance, and responsibility. Prerequisite: Undergraduate or graduate sociology or anthropology course. (Workshop Course)
PSED 533 Designing and Implementing Programs for Professional Development (Semester hours arranged.)
This course will emphasize the knowledge and skills needed for teachers to participate in designing and facilitating their own professional development programs. Teaching styles and activities will be explored, while participants utilize self-assessment to evaluate their needs and establish goals. Strategies for implementation will be discussed. (Workshop Course)
PSED 535 Classroom Diversity: Creating a Positive Environment (3:3:0)
This course encourages educators to identify their own values, prejudices, and goals; to examine their thoughts and/or misconceptions about culturally diverse communities. Designed to help them create school climates that celebrate diversity and meet the needs of students of different races, ethnicities, gender, and ability levels. (This course is offered both as a Workshop Course and a non-workshop graduate class.)
PSED 536 Teaching of Mathematics in the Secondary Schools (3:3:0)
This course deals with new mathematics programs and evaluations, 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 510, 516.
PSED 541 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 in developing 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 the school and between the school and the community. (Workshop Course)
PSED 542 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. (Workshop Course)
PSED 543 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. (Workshop Course)
PSED 544 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 theory will be presented. (Workshop Course)
PSED 545 Planning for Change (3:3:0)
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 assessed through a group process. Systems for change will be developed utilizing personal influence and power. The workshop also help participants acquire additional skill in expanding their knowledge and use of Reality Therapy in the educational environment. (Workshop Course)
PSED 546 Teaching of Science in the Secondary Schools (3:3:0)
This 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 510, 516.
PSED 547 Success-Oriented Reading: Whole Language Development (Semester hours arranged.)
This course will provide opportunities for participants to explore the reading process from a variety of current viewpoints to help the participants develop their own personal classroom teaching programs and to put these ideas into practice. Prerequisite: ELED/PSED 581 or 582. (Workshop Course)
PSED 548 Reality Therapy in the Classroom (3:3:0)
This workshop is designed to increase proficiency in the use of Reality Therapy in the classroom. (The course presumes an understanding of philosophy and basic steps.) Emphasis will be placed on acquiring the skills in the implementation of the Reality Therapy approach in the educational environment. Prerequisite: ELED/PSED 582. (Workshop Course)
PSED 549 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. Prerequisite: PSED 581. (Workshop Course)
PSED 552 Together: Mainstreaming in Schools (3:3:0)
The purpose of the workshop is to cause meaningful interaction of special and regular educational teachers. Their interaction enables teachers to review and to develop positive models for their particular schools that allow for exceptional and non-exceptional children to learn together and respect and know each other. A major emphasis will be to devise, through group interaction, a plan for implementation of mainstreaming in the particular schools. The course is cross listed with ELED 552 and SPED 552. (Workshop Course)
PSED 553 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 learning styles. Prerequisites: ELED 232/PSED 242. Graduate Prerequisite: ELED 581, PSED 541.

## PSED 554 Foundations of Curriculum Construction (3:3:0)

This course is designed for teachers, chairs, or supervisors who are interested in shaping curriculum development ( $\mathrm{K}-12$ ) and responsible for its evaluation. The theory for planning change in curriculum and evaluating the effects of curriculum will be viewed with concern being given to gathering evidence of need for change, research in change, models for initiating change, and models/theories for evaluating present and changing curriculum. Prerequisite: Graduate standing. Not for general education.
PSED 555 Practicum in Curriculum Development (3:3:0)
This is a course designed to permit individuals or groups ( $\mathrm{K}-12$ ) to work on specific problems in curriculum development and/or implementation, including curriculum planning, selection and construction, implementation of new courses, curriculum and programs, development of proposals for change, and in-service projects. Teams from schools are encouraged to enroll. (Class hours arranged.)
PSED 556 Cooperative Learning (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 cooperative learning. Class experiences produce new teaching plans based on control theory and demonstrate that learning teams can provide top achievement, and provide methodology for critical thinking and problem solving. (Workshop Course)
PSED 557 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 exhibit 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. Prerequisites: PSED 161, 242. (Workshop Course)
PSED 559 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 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. (Workshop Course)
PSED 560 Seminar in Research in Curriculum and Instruction (3:3:0)
This is a graduate seminar in current research developments in the field of curriculum and instruction. The techniques and literature of research will be employed to analyze the stability and direction of developmental trends in curriculum and instruction.
PSED 565 Curriculum Development in the Middle School (3-6:3:0)
Designed to meet the needs of teachers who are developing programs and materials for the middle school, emphasis is placed upon the process of curriculum planning; objectives of education, diagnosis of curriculum development, selection of curriculum experiences, organization, and evaluation of curriculum content.
PSED 566 Teaching of Social Studies in the Second 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 the secondary schools. Stress is placed on new developments in the field and on experience in applying concepts and methods learned. Prerequisites: PSED 510, 516.
PSED 570 Field Assessment of Mastery in Education (3:3:0)
This course is a performance-based assessment of proficiency in education in which observations are made of specified professional skills in actual classroom situations. It includes interaction analysis, videotaping, and conferences. Prerequisite: Completion of 15 graduate credits. (Class hours arranged.)

PSED 571 Independent Research Problem (Semester hours arranged.)
This course is designed to assist students in the selection of an important problem in secondary education. Using recent methods in research techniques, the student will complete a facultyapproved research project. Prerequisite: ELED 570.
PSED 572 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 with PSED 521 - Seminar in Secondary Education II. This experience will provide students with the opportunity to select an appropriate research model and design a research project that will enhance pedagogical practice. Students enrolled in PSED 572 will implement the plan and evaluate results for application in the classroom. Prerequisite: Concurrent enrollment in PSED 521 and successful completion of PSED 520.
PSED 574 Professional Experiences in Educational Administration I (3:1:4)
This experience is designed to provide the student with practical experience in supervision and/or administration in a school setting. It is a field experience under the supervision of an ESU faculty member in cooperation with an area school administrator. Prerequisites: PSED 585, $588,590,591$ or 594, and 596. Completion of these courses. Permission of the department.

## PSED 575 Professional Experiences in Educational

## Administration II (3:1:4)

This experience is designed to provide the student with practical experience in supervision and/or administration in a school setting. It is a field experience under the supervision of an ESU faculty member in cooperation with an area school administrator. Prerequisite: Professional Experiences in Educational Administration I.
PSED 576 Teaching Strategies for Secondary Teachers (3:2:2)
Endeavors to redesign instruction in order to make maximum learning more accessible to every pupil. Methods for developing a personal instructional system which fits the subject and the pupils will be outlined.
PSED 577 Independent Study (Semester hours arranged.)
Under the auspices of a qualified member of the faculty of the graduate school, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in Professional or Secondary Education. Topics should be established prior to enrollment. Prerequisite: Approval of the department chair.
PSED 579 Current Trends in Secondary Education (3:3:0)
This course serves as a basic and comprehensive source on current trends and innovative practices in the secondary schools. New opportunities and responsibilities for students, modifications of the traditional organization, alternative high schools, and places for learning beyond the schoolhouse are but a few areas that are discussed.
PSED 580 Professional Assessment in Secondary Education (3:3:0)
Professional Assessment is designed to cause and to facilitate self-assessment coupled with assessment from the field (where the educator is employed) and assessment by the university. The student will become thoroughly involved in the procedure of self-assessment and will in fact be introduced to degree program competencies (master teacher competencies). The self and external professional assessment will lead to individualized professional development, competency mastery, and to degree obtainment. Prerequisite: Undergraduate degree; admission to graduate school. (Class hours arranged).
PSED 584 Secondary School Curriculum (3:3:0)
This course deals with the overriding educational philosophy which governs curriculum formation. The decision-making process in curriculum improvement will be evaluated; processes for curriculum improvement will be reviewed and/or developed; and evaluative techniques will be identified.
PSED 585 Educational Administration (3:3:0)
An introduction and overview of the public school system and its management. The course provides for the orientation of prospective and current educational administrators for their
roles of leadership. The course also requires field experiences in administration. Prerequisite: Graduate standing.
PSED 586 Teaching of Communications in the Secondary Schools (3:3:0)
Teaching of Communications addresses the presentation of methods and materials in the planning, teaching, and evaluating of learning activities in the cognitive, affective, and psychomotor realms of communication behavior, and observation of teaching in the secondary schools. Prerequisites: PSED 510, 516.
PSED 587 School Public Relations (3:3:0)
This course presents public relations as a comprehensive concept of interpretation for the public schools. Tenets, means, agents, and agencies to produce increased social understanding and appreciation of the educational function among school personnel and the general public are discussed.
PSED 588 School Law (3:3:0)
This course is an analysis of the legal rights, responsibilities, and liabilities of student, parent, teacher, administrator, and school board. Consideration is given to the statutes, school code, and court decisions which affect education and all persons related to the education process.
PSED 589 The Supervision of Student Teachers (3:3:0)
Attention is focused on an analysis of the various functions of the cooperating teacher while working with elementary or secondary student teachers. Emphasis is placed upon new techniques for working with student teachers, systems for recording, analyzing and reporting classroom teaching behavior, understanding the needs of student teachers, and individualizing student teaching experiences. Prerequisite: Bachelor's degree and a teaching certificate.
PSED 590 Supervision of Instruction (3:3:0)
This course is an introduction to the theory and function of supervision in the modern public school system, K-12. Application of emerging concepts and principles of modern school supervision to practical situations in which administrators, supervisors, coordinators, and teachers are working are presented.
PSED 591 Elementary School Administration (3:3:0)
Elementary School Administration will provide an overview of the elementary school principalship. A study of the tasks of the elementary school principal, major problems in performing responsibilities, and the processes used in discharging obligations are discussed.
PSED 592 The Middle School (3:3:0)
This course deals with administrative problems and practices related to the organization, operation, and program of the middle school and the junior high school.
PSED 593 Teaching Techniques in the Middle School (3:2:2)
This course is designed to meet the needs of faculties, which are making a transition to the middle school program. Emphasis is placed upon developing programs and materials for a middle school. Topics include open-concept teaching; individualizing and personalizing instruction; team approaches; a review of IPI, PLAN, CPL and CAI models; preparing learning centers and developing learning activity packets and evaluating student progress.
PSED 594 Secondary School Administration (3:3:0)
An overview of the secondary school principalship. The course deals with the philosophical, social, and educational context in which the secondary school operates. The role of the principal, major tasks, responsibilities, changing trends and opportunities are examined. Prerequisite: PSED 585 recommended.
PSED 596 School Finance (3:3:0)
This is an introduction to the principles and structure of financing public education. The theory and practice of educational finance are examined from the point of view of problems of the local budget, the state's responsibility, taxation, and the effect of financial support upon the quality of the educational program. New concepts and emerging trends of public school
finance are studied.
PSED 597 School Plant (3:3:0)
This course involves a study of problems involved in the planning construction, operation, and maintenance of the school plant.
PSED 598 Trends in Secondary Math Education (3:3:0)
This course will examine current and proposed secondary mathematics curricula and models of teaching and learning mathematics. Major foci will be mathematical problem-solving and integrating technology into the mathematics curriculum.
PSED 599 Teaching Mathematics Using Technology (3:3:0)
Designed for in-service secondary mathematics teachers. Participants will learn how to use graphing calculators and computer algebra and geometry systems, how to incorporate them into their classrooms and how the mathematics that they teach will change as a result of the availability of technology.

## Sociology

SOC 531 Foreign Study Tour: South America (Not regularly offered.)
SOC 532 Foreign Study Tour: Africa (Not regularly offered.)
SOC 533 Foreign Study Tour: Western Europe (Not regularly offered.)
SOC 534 Foreign Study Tour: Eastern Europe (Not regularly offered.)
SOC 535 Foreign Study Tour: Asia (Not regularly offered.)
SOC 536 Foreign Study Tour: Australia and New Zealand (Not regularly offered.)
SOC 522 Seminar: Foreign Travel and Study (6:0:12) (Not regularly offered.)
This course is a study in various areas of the world focusing on the culture, history, and government of the countries visited; their economic growth and integration. Emphasis is placed on formal and informal discussion and analysis of contemporary indigenous problems.
SOC 523 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. (Not regularly offered.)
SOC 561 Social Change (3:3:0)
This course examines basic concepts of social change; external factors initiating change; changes in the physical and social environment; factors affecting acceptance of an innovation, chain reaction effects of an intervention; internal affairs affecting change; the growth of cultural complexity; and differential rates of change. (Not regularly offered.)
SOC 562 Population Problems in International Affairs (3:3:0)
This course examines population factors as they influence international relations; typical examples are chosen from various parts of the world; both unique and common elements are investigated and solutions suggested; study of race relations in the contemporary world is included. (Not regularly offered.)
SOC 563 Social Stratification (3:3:0)
This course considers recent research on social stratification and its bearing on behavior in elite and mass society. It includes a study of the relationship of social class to poverty, personality, attitudes, and ideologies; modes of living and alignments, including class influences on life's chances. (Not regularly offered.)
SOC 564 Sociology of Education (3:3:0)
This course is an analysis of education using basic sociological concepts. Emphasis on schools and colleges as social systems, school-community inter-relations, the sociology of professions and education in its societal concept. The course may also be taken as PSED 511. (Not regularly offered.)
SOC 565 The Evolution of Culture (3:3:0)

This course examines the evolution of culture and the nature of social organization. The analysis of the structure and functions of human social systems, their integration, regulation, and control including use of energy and technology. (Not regularly offered.)
SOC 566 Criminology (3:3:0)
This course examines theories of crime causation; demographic characteristics of criminals; the history of theories of punishment; and modern reformative and rehabilitative methods. (Not regularly offered.)
SOC 567 Personality, Culture and Society (3:3:0)
This course is an analysis of the interrelationship between human personality and culture, nature, and society, using the methodological tools of the social sciences. Particular emphasis will be placed on the theoretical conceptions surrounding the nature of human nature and the development of human personality. Age and sex factors, social class, racial prejudice, and religion will be among the numerous cultural and social factors which will be analyzed. (Not regularly offered.)
SOC 568 Racial and Cultural Minorities (3:3:0)
This course is an analysis of dominant minority relations in the United States from the perspective of both the historical and the contemporary with special emphasis upon black-white relations in American society today. The nature and results of prejudice and discrimination, and the realization of social justice will be among the more important areas of dominant-minority relations to be discussed. (Not regularly offered.)
SOCJ 537 Schools, Gangs, Violence, and Society
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. (Not regularly offered.)
SOSW 569 Experimental Seminar in Guided Imagery Techniques for Social Workers (3:3:0)
This is an experimental course dealing with the nature and use of guided imagery for social workers or other mental health practitioners. Various approaches, techniques, and uses of guided imagery will be demonstrated and analyzed. Prerequisites: General background in social work; permission of instructor. (Not regularly offered.)

## Special Education

SPED 535 Classroom Diversity: Creating a Positive Environment (3:3:0)
This course encourages educators to identify their own values, prejudices, and goals; to examine their thoughts and/or misconceptions about culturally diverse communities. Designed to help them create school climates that celebrate diversity and meet the needs of students of different races, ethnicities, gender, and ability levels.

SPED 540 Language Arts for Exceptional Individuals (3:3:0)
This course is designed to develop a knowledge of remedial techniques and special curricular considerations for teachers who work with individuals moderately, severely, or multiply disabled language impaired. (Not regularly offered.)
SPED 550 Nature and Needs of Individuals with Exceptionalities (3:3:0)
This course deals with individuals having educational impairments including: identification and etiological factors; psychoeducational needs of emotionally disturbed, mentally handicapped, learning impaired, or severely physically disabled persons; community and professional services. Required for those students with limited experience in special education.
SPED 551 Inclusionary Practices (3:3:0)
This course is intended for administrators, counselors, psychologists, curriculum supervisors, all teachers (regular, special), and school nurses concerned with proving appropriate educational experiences for students with special education needs in regular educational setting. Required for special education certification. (Offered fall, spring, summer presession, and summer main session.)
SPED 552 Together: Mainstreaming in Schools (3:3:0)

The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction enables 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 to devise, through group interaction, a plan for implementation of mainstreaming in the particular schools. The course is cross listed with ELED 552 and PSED 552.
SPED 553 Creative Materials and Methods for Exceptional Individuals (3:3:0)
At the graduate level this course is designed for in-service regular classroom teachers anticipating students with multiple disabilities included in their classrooms, special educators, and other degree-holding persons planning to work with individuals with exceptionalities in a rehabilitative setting. Emphasis is on a case-by-case analysis of client or student needs, and development of appropriate projects for their training and rehabilitation. Small additional fee.
SPED 554 Curriculum and Instruction for Individuals with Mild Disabilities (3:3:0)
This course is designed to provide a basis for the development of individualized curriculum goals and instruction for students with mild disabilities. (Offered fall term and summer presession.)
SPED 555 Curriculum and Instruction for Individuals with Moderate/Severe/Profound
Disabilities (3:3:0)
This course is designed to provide a basis for the development of individualized curriculum goals and instructions for students with moderate/severe/profound disabilities. (Offered spring term, and summer main session.)
SPED 567 Families in the Educational Process of Individuals with Exceptionalities (3:3:0)
The purpose of this course is to develop skills in working with parents of youths with exceptionalities. Attention will be given to conferencing, reporting, and instructing parents in the process of home training. Further attention will be given to directing parents toward community services and resources, developing school-initiated parent support groups.
SPED 568 Early Intervention in Special Education (3:3:0)
This course is designed to develop skills in the identification and referral of preschool-age children with exceptionalities, determining training targets for this group, implementing alternative programs for individuals with multiple disabilities, developing appropriate preschool training environments, and implementing an adapted curriculum. (Offered fall term and summer main session.)
SPED 570 Collaboration in the Educational Process (3:3:0)
This course is designed to prepare special educators to function as consultants to regular education teachers and other school personnel. The use of consultation is reviewed at the prereferral, referral, and mainstreaming level of service. The goals for this course include student competence in consultation concepts and skills in working with classroom teachers. (Offered summer session.)
SPED 572 Thesis I (3:0:0)
This course consists of the development of a thesis topic and review of the literature, writing and editing of the thesis, and submission of the final paper to peer-reviewed journal. Prerequisites: ELED 570; SPED 566.
SPED 573 Thesis II (3:0:0)
This course consists of the development of a thesis topic and review of the literature, collection of data, writing and editing of the thesis. Prerequisites: ELED 570; SPED 566.
SPED 574 Applied Behavior Analysis Principles I (3:3:0)
This course will cover the basic concepts of behavior analysis as applied to a variety of situations in teaching individuals with exceptionalities. Classroom management utilizing nonaversive behavior management techniques will be presented. Open to all students of graduate standing. (Offered fall, summer main session.)
SPED 575 Applied Behavior Analysis Principles II (3:3:0)
This is an advanced examination of the basic principles of behavior and the development and application of each. This course will examine the principles of behavior in depth and focus on
the use of these principles in applied settings with students and/or individuals with disabilities. The content of this course is determined by the Task List of the Behavior Analyst Certification Board. Prerequisites: SPED 574; permission of instructor. (Offered fall term.)

SPED 576 Seminar: Research Problems in Special Education (3:3:0)
This course will develop student awareness of critical issues in special education which have relevance for research concerns. Additionally, appropriate and feasible research designs and techniques are discussed within the framework of current special education methods and procedures. Required for Master's thesis. Prerequisites: ELED 570; SPED 574.
SPED 577 Application of Behavior Principles with Low Incidence Disabilities (3:3:0)
This course will examine issues relevant to the development and application of interventions with individuals with low incidence disabilities. Specific interventions and strategies will be discussed. Content for this course was determined by the Task List of the Behavior Analyst Certification Board and the Council for Exceptional Children Knowledge and Skill Statements. Prerequisites: SPED 574, SPED 575, SPED 576; permission of instructor. (Offered spring term.)
SPED 578 Systems Issues in Behavioral Support (3:3:0)
This course will examine issues related to service delivery, systems change, and the staff development in the application of applied behavior analysis. The content of this course was developed in accordance with the Task List of the Behavior Analyst Certification Board. Prerequisites: SPED 574, SPED 575, SPED 576, SPED 577; permission of instructor. (Offered summer presession.)
SPED 580 Seminar: Administration and Organization of Special Education (3:3:0)
The course is designed to review traditional and emerging leadership roles and organizational approaches in special education. The student will review, assess, and discuss implications of new mandates for human services. Objectives include evaluation of current delivery systems. (Offered summer main session.)
SPED 581 Measurement and Evaluation in Special Education (3:3:0)
This course utilizes a variety of measures to assess and evaluate the educational, behavioral, and developmental areas of students with exceptionalities using traditional and alternative assessment instruments based upon the results of these measures. Prerequisite: SPED 550. (Offered fall and spring terms.)
SPED 582 Seminar: Current Issues in Special Education (3:3:0)
This seminar is designed for all graduate students in the field of education who are interested in current issues arising out of litigation and legislated mandates within the field of special education. An emphasis will be placed upon issues which are presently affecting (and will continue to shape) services to learners with exceptionalities, regular and special education professionals, and administrators. Attention will also focus upon a class member's individual/ professional concerns in the special education arena. (Offered spring term.)
SPED 583 Seminar: The Emotionally Disturbed (3:3:0)
The course will provide the student with a current overview of the field of education for students with emotional disturbances. Objectives include an awareness of conceptual models and program activities toward ameliorating impact of maladaptive behaviors. Prerequisite: SPED 550. (Offered summer post session.)
SPED 584 Seminar: Vocational and Career Education for Exceptional Individuals (3:3:0)
This course is designed to help the teacher to develop new skills and to find innovative means for career and vocational-technical planning and training with individuals with exceptionalities. Prerequisite: SPED 550. (Offered fall and spring terms.)
SPED 588 Seminar: The Resource Room (3:3:0)
The course is designed to examine the Resource Room as an alternative delivery system in extending services to students with exceptionalities. Course work is designed to enhance students' skills in individualizing programs using diagnostic/prescriptive procedures. Prerequisite: SPED 550.
SPED 589 Curriculum Issues in Special Education (3:3:0)
This course will focus on the development, implementation, and evaluation of special education curriculum. This will include problems of programming for students with exceptionalities; different curriculum approaches and review of research implications. Prerequisite: SPED 550 or
enrolled in the Special Education Supervisory Certificate Program. (Offered summer term.)
SPED 590 Seminar: Teaching Individuals with Learning Disabilities (3:3:0)
The purpose of this course is to broaden the in-service teacher's knowledge of the characteristics of the student with learning disabilities, instructional models and programmatic planning, solving real-life management problems, material problems, and teaching problems, in a sharing and seminar setting. Prerequisite: SPED 550.
SPED 591 Seminar: Assistive Technology (3:3:0)
This course describes the use of assistive technology services and devices as related services in the special education process. Emphasis is placed on consumer-driven technology selection and evaluation processes. Students will learn how to access assistive technology services as well as strategies for collaborating with experts in technology.
SPED 592 Seminar: Teaching Individuals with Physical Disabilities (3:3:0)
The course deals with appropriate educational interventions. Teaching skills are complimented with medical and technical advances. Objectives include amelioration of effects of physical disabilities toward possible mainstreaming. Prerequisite: SPED 550.
SPED 594 Seminar: Teaching Individuals with Mental Retardation (3:3:0)
This course will cover theories of intelligence, retardation, etiological factors of mental retardation, curriculum needs of mental retardation, methods and materials of instruction, an overview of career considerations, and emerging trends for adult services.
SPED 596 Internship in Special Education Supervision (3:1:4)
This supervised field experience is designed to provide the candidate for the Special Education Supervisor certificate with field experiences in personnel supervision, assessment techniques with the exceptional population, budgeting and financing for special class operation, participating in child study team conferences, curriculum development, and due process. Prerequisite: All courses listed for the Supervisory Certificate Program. (Offered summer term.)

## Speech-Language Pathology

SPPA 510 Neural Bases of Communication Disorders (3:3:0)
This course will provide a comprehensive study of the neuro-anatomical and neurophysiologic bases of the speech, language, and hearing mechanisms. Structures and functions of the nervous system involved in these mechanisms will be studied. The relationship between pathologic conditions of the nervous system and communication disorders will be covered. Prerequisite: SPPA 214 or equivalent. (Offered fall term.)

## SPPA 521 Augmentative/Alternative Communication (3:3:0)

This course will address the issues surrounding the selection of augmentative/alternative communication for populations unable to communicate using speech due to motor, mental, or language disabilities. Various augmentative devices will be presented.
SPPA 523 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. Since this course is offered for undergraduate credit also, a differentiation of requirements will be made. (Offered spring term.)
SPPA 533 Professional Issues in Communication Disorders (1:1:0)
This course is designed to make students aware of current professional issues in the fields of speech-language pathology and audiology. Topics will include, but will not be limited to, professional organizations, professional licensure and certification, continuing education requirements, professional ethics, scope of practice issues, and other areas of interest. (Offered fall term.)
SPPA 534 Clinical Audiology (2:2:0)
This course is designed to familiarize graduate-level speech pathology students with pathological processes of the peripheral and central auditory systems and how these affect communication. Students will know how to interpret audiometric test data. Prerequisite: SPPA 231, Introduction to Audiology. (Offered fall term.)

SPPA 535 Aural Rehabilitation (3:3:0)
This course will address methods for educating children and adults with hearing losses and investigate current surgical and assistive intervention strategies. This will include a survey of hearing aids. Prerequisites: SPPA 231, Introduction to Audiology or SPPA 534, Clinical Audiology. (Offered spring term.)
SPPA 541 Phonological Disorders - Assessment and Intervention (3:3:0)
The course will focus on the practical application of phonological theory to techniques and procedures used for the assessment and intervention of speech disorders. It will include an analysis of the application of phonological theory to linguistic diversity. Prerequisites: SPPA 241, 342, 343, 357, and 358. (Offered fall term.)
SPPA 542 Language Disorders in Children (3:3:0)
This course will address the nature, etiology, and clinical management of children with language disorders, with primary emphasis on children from birth through age 12 years. Prerequisite: SPPA 101 or equivalent. (Offered fall term.)
SPPA 543 Language Disorders in Adults (3:3:0)
This course will address the nature, etiology, and clinical management of adults with acquired language disorders in adults, with primary emphasis on aphasia and related cognitive disorders. Prerequisite: SPPA 101 or equivalent. (Offered spring term.)
SPPA 544 Fluency Disorders (3:3:0)
This course is designed to provide a comprehensive analysis of the theories of stuttering, diagnostic procedures, and treatment strategies. Behaviors related to stuttering will be examined. Current research literature for the management of stuttering will be included. Prerequisites: SPPA 357 and 358. (Offered spring term.)
SPPA 546 Voice Disorders (3:3:0)
This course will address the nature, etiology, and clinical management techniques for individuals who have voice disorders resulting from both hyperfunctional and organic etiologies. Prerequisite: SPPA 214. (Offered fall term.)
SPPA 550 Advanced Clinical Practicum (2:0:2-6)
This course is designed to provide supervised, advanced clinical practice in applying diagnostic procedures and intervention strategies to preschoolers through adults who have speech, language, and/or hearing disorders. Specific communication disorders may include phonology, articulation, fluency, voice, language, and hearing. Developing skills to work with diverse linguistic populations will also be emphasized. Clinical experience will be available at the University Speech and Hearing Clinic. Students must take this course at least twice for credit. If a student earns a grade of " $C$ " or lower, this course must be repeated and a " $B$ " or better earned. Anyone earning a second " C " will be dismissed from the program. (Offered fall, spring, and summer terms.)
SPPA 560 Diagnostic Procedures in Speech-Language Pathology (2:2:0)
This course addresses the methods used for assessment procedures in speech and language pathology. The student will gain experience in testing, observation, decision making, and report writing. Co-requisite course: SPPA 561, Diagnostic Practicum. (Offered summer term.)
SPPA 561 Diagnostic Practicum (2:0:4)
This course allows the student to gain experience as a diagnostician. Each student will complete full assessment procedures on speech and language-impaired individuals. Co-requisite course: SPPA 560, Diagnostic Procedures in Speech-Language Pathology. (Offered summer term.)
SPPA 562 Dysphagia (3:3:0)
This course addresses the nature, etiology, and clinical management of dysphagia (swallowing disorders). (Offered fall term.)
SPPA 563 Adolescent Language Learning Disabilities (3:3:0)
This course addresses the nature, etiology, and clinical management of language learning disabilities common in older school-age children and adolescents, with particular emphasis on language use in classroom contexts.
SPPA 568 Alaryngeal Speech Rehabilitation (2:2:0)

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ESU Campus Map Key

1. DeNike Center for Human Resources
2. Reibman Administration Building
3. LaRue Hall
4. Abeloff Convocation Center
5. Zimbar-Liljenstein Hall

Center for Enrollment Services
6. Rosenkrans Hall West Graduate Office
7. Rosenkrans Hall East
8. One College Circle
9. Gessner Science Hall
10. McGarry Communications Center
11. Stroud Hall
12. Computing Center
13. Moore Biology Hall
14. Facilities Management Complex
15. Boiler Plant
16. Institutional Storeroom and Garage
17. University Center
18. Center for Hospitality Management
19. Monroe Residence Hall
20. Minsi Residence Hall
21. Shawnee Residence Hall
22. Laurel Residence Hall
23. 285 Normal Street
24. Dansbury Commons
25. Flagler-Metzger Center
26. Facilities Management Complex
27. Department of General Services
28. Hawthorn Residence Hall
29. Linden Residence Hall
30. Koehler Fieldhouse and Natatorium
31. Hemlock Residence Hall
32. Lenape Residence Hall
33. Former Alumni Center
34. Kemp Library
35. Fine and Performing Arts Center
36. 208 Smith Street
37. 420 Normal Street
38. Ahnert Alumni Center
39. University Apartments
40. 216 Normal Street Office Buildings
a) Office of Admission
b) Academic Department Offices
41. Police Information and Safety Center
42. 100 Normal Street
43. 216 Smith Street
44. United Campus Ministry
45. Beers Lecture Hall
46. 96 Normal Street Offices
47. Child Care Center

P Parking Areas


[^0]:    *For courses other than 3-credit hours, the graduate coordinator and the graduate dean will confer to determine the student's academic status.

[^1]:    *GPA required for initial certification students.
    ** GPA required for advanced certification students (already have Pennsylvania teacher certification).

[^2]:    *Six semester hours in the M.S. program or three semester hours in the M.Ed. program may be earned in courses taken in related areas such as mathematics, chemistry, or physics.

[^3]:    Responsibilities

