

2001-2002
Undergraduate Catalog
103rd Edition

East Stroudsburg University of Pennsylvania
 East Stroudsburg, Pennsylvania 18301-2999



A Member of Pennsylvania's State System of Higher Education

This publication contains the most current information available on the subject at time of printing. The provisions of this Catalog are not to be regarded as an irrevocable contract between the students and the university. East Stroudsburg University reserves the right to change any provisions or requirements at any time within the student's term of attendance. Budgetary restrictions may, from time to time, alter or affect program offerings.

East Stroudsburg University of Pennsylvania

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Calendar

Summer Sessions 2001

Pre Session

Classes begin 8:00 a.m.	Tuesday	May 29
Pre Session ends 10:00 p.m.	Friday	June 15

Main Session

Classes begin 8:00 a.m.	Monday	June 18
July 4 Holiday—No Classes	Wednesday	July 4
Main Session ends 10:00 p.m.	Friday	July 27

Post Session

Classes begin 8:00 a.m.	Monday	July 30
Post Session ends 10:00 p.m.	Friday	August 17

Academic Year 2001-2002

Fall

Semester begins 9:00 a.m.	Tuesday	September 4
Student Registration		
Faculty meetings		
Classes begin 8:00 a.m.	Wednesday	September 5
Last day to drop a class for no (N) grade	Tuesday	September 11
Last day to add a class without Dean's approval	Tuesday	September 18
Second Quarter begins	Wednesday	October 24
Last day to withdraw from a class with a grade of W	Tuesday	November 13
Thanksgiving Recess begins 10:00 p.m.	Tuesday	November 20
Classes resume 8:00 a.m.	Monday	November 26
Fifteenth Week begins	Monday	December 17
Classes end 10:00 p.m.	Friday	December 21
Commencement 10:00 a.m.	Saturday	December 15
Intersession		
Intersession begins 8:00 a.m.	Wednesday	January 2
Intersession ends 10:00 p.m.	Friday	January 18

Spring *

Semester begins 8:00 a.m.	Monday	January 21
Last day to drop a class for no (N) grade	Friday	January 25
Last day to add a class without Dean's approval	Friday	February 1
Fourth Quarter begins	Monday	March 11
Spring recess begins 10:00 p.m.	Friday	March 15
Classes resume 8:00 a.m.	Monday	March 25
Last day to withdraw from a class with a grade of W	Friday	April 5
Fifteenth Week begins	Monday	May 6
Semester ends 10:00 p.m.	Friday	May 10
Commencement 10:00 a.m.	Saturday	May 11

Summer Sessions 2002**Pre Session**

Classes begin 8:00 a.m.	Tuesday	May 28
Pre Session ends 10:00 p.m.	Friday	June 14

Main Session

Classes begin 8:00 a.m.	Monday	June 17
July 4 Holiday—No Classes	Thursday	July 4
Main Session ends 10:00 p.m.	Friday	July 26

Post Session

Classes begin 8:00 a.m.	Monday	July 29
Post Session ends 10:00 p.m.	Friday	August 16

** The Spring Student Teaching calendar may vary from this calendar regarding spring recess.*



Mission and Objectives

Governance

East Stroudsburg University is one of fourteen State-owned institutions in the Pennsylvania State System of Higher Education whose mission is undertaken in 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;

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;

Identify, recruit, and retain students representing a multicultural world who by background, motivation, and commitment can benefit from higher education;

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;

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

The Campus

The 59 campus buildings are located on 165 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 off-campus student recreation area near Marshalls Creek, that includes a lodge and a small lake.

Academic Buildings

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

Other major classroom buildings are: Moore Biology building which contains a large group lecture hall, a greenhouse and wildlife museum; Gessner Science Hall which contains laboratories for physics and chemistry; DeNike Center for Human Services which houses classrooms and has laboratory areas for the departments of health, nursing, and recreation, and leisure services management; LaRue Hall, which houses laboratories for speech pathology and audiology; and Rosenkrans Hall which houses offices and media communication and technology.

The Library

Kemp Library houses more than 437,977 books and periodical volumes, and 1,290,824 pieces of microform material. It currently subscribes to more than 1,900 periodicals including subscriptions to more than 50 periodicals in electronic form. The library is also a depository for both U.S. Government Documents and Pennsylvania State publications, with 77,010 documents in the collection. The library uses an integrated online library system for catalog, circulation, and other functions. The system is accessible in the library, on the campus network, or via modem. Several full-text databases are available for searching, either in the library or on the library's web page. Current students and faculty can receive passwords to search these databases from off-campus sites. User guides are available in the library and

on the library web page.

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

Academic Facilities

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

The Academic Computing network consists of 14 UNIX or Windows NT-based 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 McGarry Communication Center is the campus base for the Instructional Resources Department including the audiovisual, graphics, and television services units. The Communication Center houses two television studios and is the distribution center of campus cable television as well as the community-wide ESU television telecasts. WESS 90.3 FM radio is also located in the Center.

Faculty and Staff

The university faculty totals 265 while another 335 employees make up the management and non-instructional staff. Faculty members are representative of many and varied institutions of higher education in both the United States and abroad. The terminal degree is held by 72 percent of the faculty.

Accreditation

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

In addition, all of the education programs offered by East Stroudsburg University are accredited by the Pennsylvania Department of Education.

Accreditations awarded to other university programs include:

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

Location

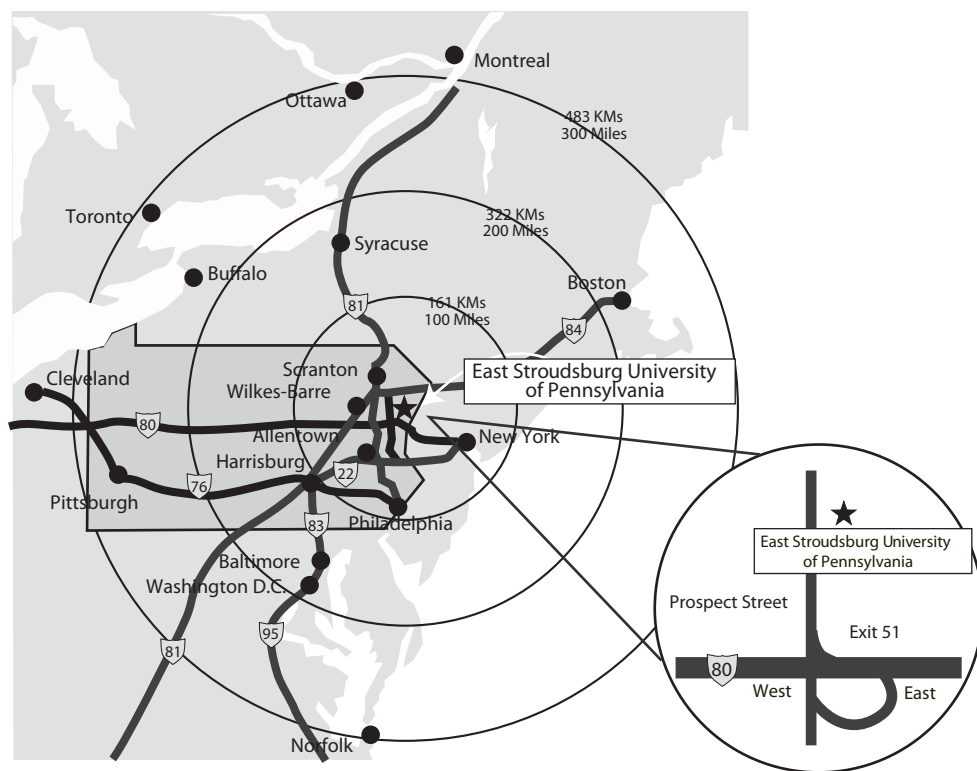
East Stroudsburg University is nestled in the foothills of the Pocono Mountains. The combination of quiet woodlands, mountain streams, and refreshing clean air has made the Poconos famous as a resort area for over 100 years.

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

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

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

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





Admission

Freshmen Applicants

When to Apply

A student should apply in the fall of the senior year in high school. Application requests should be sent to the Director of Admission who will send application materials and instructions.

Deadline for Applying

All applicants are urged to apply between *August and January of their senior year for September admission*. The deadline for receipt of completed applications is March 1. Only limited numbers of freshmen are admitted in January; therefore, students interested in January admission should contact the Office of Admission before applying.

Notification of Admission

Fall freshmen applicants, whose applications are on file February 15, are notified of our decision prior to March 1. Spring freshmen applicants are notified within thirty days of receipt of all application materials. Details are contained in the booklet which accompanies the application for admission.

Admission Conferences

All freshmen applicants and their parents are encouraged to visit the campus for an admission conference during the fall of the year. Tours of the campus are conducted after each group session. Contact the Office of Admission for specific dates. Personal interviews are not required.

Transfer Applicants

When to Apply

Transfer applicants are urged to apply between September 1, 2001, and December 1, 2001, for spring semester (January 2002) admission; the deadline is December 7, 2001. Those applying for the fall semester (September 2002) are encouraged to apply between November 1, 2001, and March 1, 2002; the deadline is June 1, 2002.

Personal Interview

Professors of the various disciplines always welcome students who want to know more about their special field of knowledge. A call for an appointment is appropriate.

Academic Passport

Students holding the Academic Passport from Pennsylvania community colleges or other System universities will transfer credit according to the 1999 Board of Governors Policy entitled *The Academic Passport* and *Student Transfer Policy*. Further information may be obtained from the Office of Admission.

Transfer of Credit without the Academic Passport

Only credits for courses with grades “C” or better will be transferable.

Students may transfer credit from institutions that have been accredited by:

Middle States Association of Colleges and Schools

New England Association of Schools and Colleges

North Central Association of Colleges and Schools

Northwest Association of Schools and Colleges

Southern Association of Colleges and Schools, Inc.

Western Association of Schools and Colleges

Accrediting Commission for Community and Junior Colleges

Accrediting Commission for Senior Colleges and Universities

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

Notification of Admission

Transfer applicants are notified about admission between October and December for January admission, and beginning February 1 for admission in September.

Transfer Student Housing

On-campus housing is limited; a form requesting to be placed on a waiting list is sent with the offer of admission.

The Coordinator of Coordinator of Judicial and Commuter Student Affairs will assist students in finding appropriate off-campus housing.

Applicants Seeking Readmission

Former students must apply for readmission. Students should contact the Director of Admission at least two months prior to their intended return in order to process necessary materials. No application processing fee is required.

Non-Matriculating (Special) Students

A non-degree student is one who is permitted to take courses at the university but is not admitted to the university or to any degree program. Typically, non-degree students are those who wish to take courses for the purpose of personal enrichment or to improve their academic standing prior to gaining admission as a degree student. Others who may be considered for non-matriculating status are: 1) students enrolled in degree programs at other universities who wish to earn credit to transfer to their home institution; 2) applicants who have been denied admission as degree-seeking students and who wish to improve their academic standing; 3) eligible senior citizens (see next page); and 4) high school students who wish to enroll for courses while simultaneously attending high school. Contact the Office of Admission at 570-422-3542 before applying in order to obtain details regarding the process.

Senior Citizens

Pennsylvania residents who are at least 60 years of age and retired may enroll as non-matriculating students (see page 14). Course registration is on “space-available” basis. No tuition or fees are charged. For details, contact the Office of Admission at 570-422-3542.

International Students

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

Residence Requirements

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

Advanced Placement

East Stroudsburg University permits students to earn credit toward the baccalaureate degree by successful completion of such nationally-administered examinations as the Advanced Placement Examinations and College Level Examination Program (CLEP).

Students presently enrolled in high school should contact their guidance counselor about the Advanced Placement Examinations. A grade of ‘3’ or higher on any of these examinations will be counted for three semester hours by East Stroudsburg University.

The General Examinations of the College Level Examination Program (English Composition, Humanities, Mathematics, Natural Sciences and Social Sciences-History) may be taken to apply toward the General Education pattern of courses at East Stroudsburg University. Such examinations must be passed at the 50th percentile. The following limit shall be applied to the number of credits which may be earned in General Examinations:

English Composition	3 credits
Humanities	6 credits
Mathematics	3 credits
Natural Sciences	6 credits
Social Sciences-History	<u>6 credits</u>
Total	24 credits

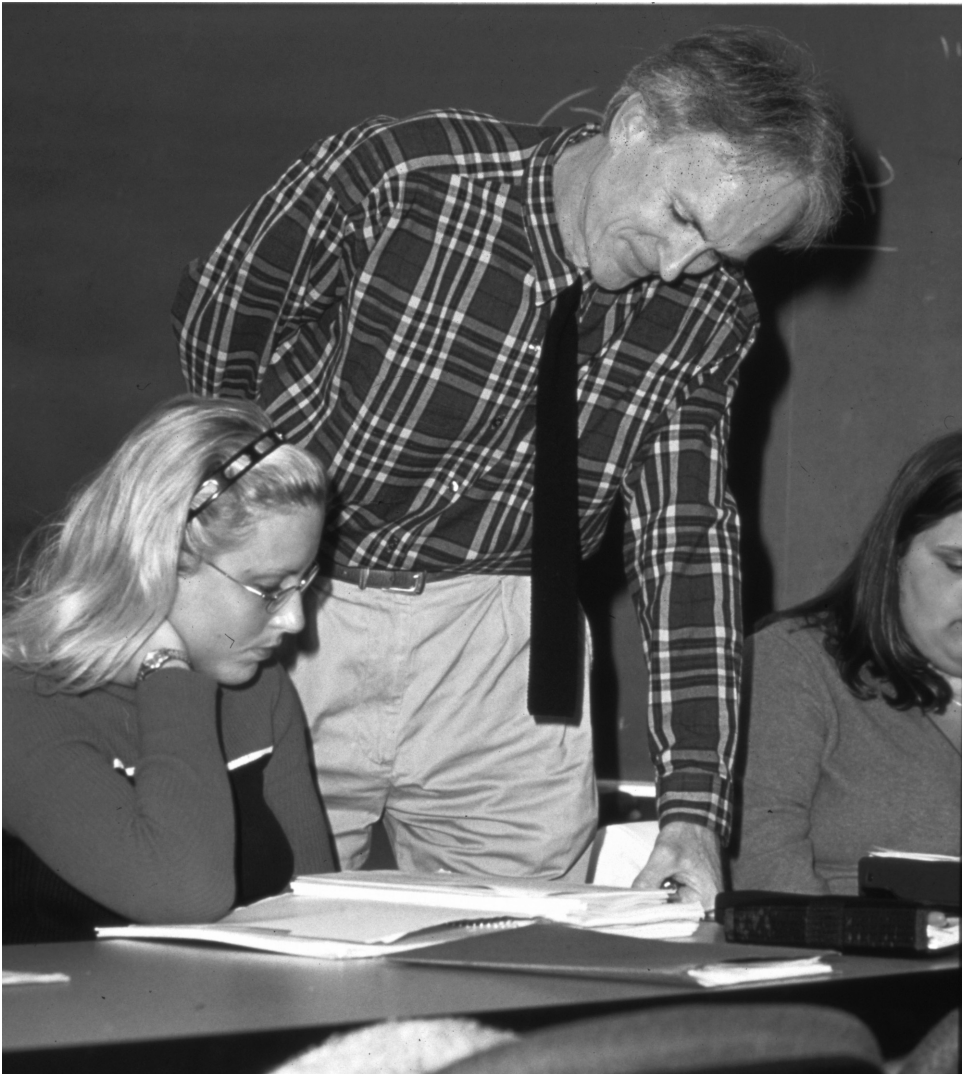
Subject matter examinations may also be taken under the CLEP program. These examinations must also be passed at the 50th percentile. Students shall not be given credit for both General and Subject examinations in the same areas.

Normally, CLEP examinations may not be counted toward the student’s major field of study.

Interested students should contact either the office Counseling and Psychological Services or the College Entrance Examination Board.

Admission of Undergraduate Students to Graduate Courses

An ESU undergraduate student may be allowed to take a graduate course if the following criteria are met: 1) satisfaction of the grade point requirements for admission with full graduate standing, i.e. 3.00 GPA in the major and 2.5 GPA overall; 2) verification of senior class status (completion of 96 credits); 3) approval by the appropriate faculty; 4) and approval of the Dean of the Graduate School. Approval to Enroll cards may be obtained in the Records Office or the Graduate School Office. All appropriate signatures must be secured prior to registering.



Academic Regulations

Attendance

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

Changes of 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.

Course withdrawals, subject to the conditions described below, may be accomplished by completing a drop card, obtaining the instructor's signature, paying the \$10 drop fee at the Business Office, and filing the card at the Records Office. Any student who discontinues attendance in a course without formally withdrawing will be assigned a final grade of E. A student who has not attended a course during the first week (first five class days of the semester or first two days of summer sessions) may be dropped from the course by the instructor.

During the first week of the semester a student may withdraw from a course and have no record of that course appear on the student's permanent record. 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 appropriate Academic Dean's signature on the drop card. A grade of W will be assigned if the student is passing; Z will be assigned if the student is failing.

A student may withdraw (W or Z) from at most 16 credits during the student's stay at the university. Any course dropped during the first week of the semester, for which no grade is assigned, will not be counted toward this limit.

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

<i>Type of</i>	<i>Regular</i>	<i>Quarter</i>	<i>Summer Sessions</i>	
<i>Action</i>	<i>Semester</i>	<i>Sessions</i>	<i>3 Weeks</i>	<i>6 Weeks</i>

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	3rd week	5th and 6th weeks

*Except for extraordinary reasons

First week

2-10 weeks

11-15 weeks

no grade

W

no withdrawal

Grade Reports

Student grade reports are distributed at mid-semester and at the end of the semester. Only the semester grades are entered on permanent records. Semester grade reports are mailed to the student's permanent address of record. The student is required to notify the Registrar's Office immediately of any change in the student's local or permanent address.

Quality Point System

In addition to meeting course and semester hour requirements for graduation, students must maintain a specified academic level throughout a given curriculum as measured by quality points. The minimum number of quality points required for graduation is twice the number of semester hours of credit attempted. Work completed at other colleges and accepted as transfer credit is not considered in computing the quality point average.

The required quality point average for graduation is 2.0 or higher. Each semester hour grade is calculated as follows:

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

Incompletes

The maximum time period for completing course requirements to remove incomplete grades 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.

Auditing Courses

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

Course Repeats

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

Scholarship Standing

Academic Good Standing: A student at East Stroudsburg University must earn a minimum quality point average of 2.00 in order to maintain satisfactory academic standing for graduation. (Individual departments may, however, stipulate higher requirements.) Students who do not meet the above requirement will fall into one of the categories listed below.

Academic Warning: Regular matriculated students who are below the 2.00 QPA, but who are not in academic jeopardy, as listed below, will be placed on academic warning. While on academic warning the student may not register for more than 13 credits in any semester.

Regular matriculated students who have a quality point average lower than the values listed below are in academic jeopardy and will be subject to the following actions by the university.

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

Academic Probation: Regular matriculated students who are in academic jeopardy for the first time will be placed on academic probation and will be granted one semester to raise the QPA to the required level. While on academic probation, the student may not register for more than 13 credits and must show documented evidence of academic counseling by their faculty advisor. Furthermore, students on academic probation are expected to curtail participation in extracurricular activities.

Academic Suspension: Students who are on academic probation and who fail to raise their QPA to the required level and who have a QPA of less than 2.20 for the semester on probation will be suspended from the university for a period of one calendar year. At the end of that year, the student will be eligible for readmission in Academic Probation status. The student will be able to register for no more than six credits per semester through the Continuing Education program during the suspension year.

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

Appeal Process: A student who has been dismissed from the university for academic failure may appeal the dismissal by submitting a letter to the Admissions Appeals Committee. This letter must include why the student was unsuccessful in previous academic experiences and why he/she feels that future academic endeavors will be successful. The committee will review the letter and academic record and either uphold the dismissal, approve a reinstatement, or request an interview with the student in order to gain further information upon which to base a decision.

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

Dean's List

The Dean's List is announced each semester. To qualify for Dean's List, a student must complete at least 12 semester hours during a regular semester and receive a quality point average of 3.50 or higher for all credit coursework for that semester.

Graduation Honors

In order to qualify for graduation honors, a student must have completed at East Stroudsburg University 60 credits in which the letter grades of A, B, C, D, or E are assigned. Students who have the appropriate grade point average at the time the honor's designation is determined, and who will have met the 60 credit minimum once the final semester is completed, will be granted graduation honors as follows:

<i>Summa Cum Laude</i>	cumulative quality point average of 3.800 or above.
<i>Magna Cum Laude</i>	cumulative quality point average of 3.600 to 3.799.
<i>Cum Laude</i>	cumulative quality point average of 3.400 to 3.599.

Graduation honors are based on all work completed at East Stroudsburg University by March 15 of the academic year for May Commencement, and by November 1 for December Commencement.

The official university transcript will carry the appropriate honors designation based on all work completed at the university.

Program Changes

A student may change curriculum or field of specialization only with the approval of the student's adviser and the director of the curriculum or the chair of the department which the student wishes to enter. The student's quality point average and the reasons for change will be assessed by the chair of the department into which the student is transferring.

Changes in program should be requested only after careful counseling and planning. All such changes require the completion of a Change of Major card which is available in the Registrar's Office.

Specific professional programs, such as nursing, medical technology, and special education, are limited in the number of students who can be accommodated. Students planning to enter these fields should contact the appropriate department.

Class Standing

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

<i>Semester Hours Completed</i>	<i>Class</i>
0-29	Freshman
30-61	Sophomore
62-95	Junior
96 and over	Senior

Double Degrees

Students who complete the requirements of two or more majors in combinations of Bachelor of Arts and Bachelor of Science areas will have the choice of designating either B.A. or B.S. for the degree. That designation will be placed on the diploma. The permanent record (transcript) will indicate both degrees.

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

National Honor Societies

Alpha Psi Omega	dramatic fraternity
Eta Sigma Delta	hotel, restaurant, and tourism management honorary
Eta Sigma Gamma	health science and education honor society
Gamma Theta Upsilon	professional geography fraternity
Kappa Delta Pi	honor society in education
Lambda Pi Eta	communication honor society
Omicron Delta Epsilon	honor society of economics
Omicron Delta Kappa	leadership honorary
Phi Alpha Theta	history fraternity
Phi Epsilon Kappa	physical education honorary
Phi Sigma Iota	foreign language honor society
Pi Sigma Alpha	government honor society
Psi Chi	psychology honor society
Rho Phi Lambda	recreation honor fraternity
Sigma Phi Omega	gerontology academic honor and professional society
Sigma Pi Sigma	physics honor society within the Society of Physics Students
Sigma Tau Delta	English honorary fraternity
Sigma Theta Tau	nursing honorary
Sigma Xi	sciences and mathematics honorary of the Scientific Research Society

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



Fees and Deposits

Financial Obligation

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

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

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

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

Student Payment Policy

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

Summary Of University Fees Per Semester (2000-2001 Fees)

(Subject to Change without Notice)

Recurring Fees

Basic Fees

Pennsylvania Residents, Full-Time (12-18 Semester Credit Hours)	\$1,896.00
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Full-time students taking more than 18 semester hours pay an additional \$158 per semester hour for any undergraduate credit hours in excess of 18. Undergraduate students taking a mixed load of undergraduate and graduate credits will be charged for any overload credits at the graduate rate of \$230 per graduate semester credit hour.

Part-time Pennsylvania Resident Students taking fewer than 12 semester hours, pay at the rate of \$158 per undergraduate semester hour

scheduled and \$230 per graduate semester hour scheduled.

Out-of-State Residents, Full-time (12-18 Semester Credit Hours) \$4,740.00

Full-time students taking more than 18 semester hours pay an additional \$395 per semester hour for any undergraduate credit hours in excess of 18. Undergraduate students taking a mixed load of undergraduate and graduate credits will be charged for any overload credits at the graduate rate of \$389 per graduate semester credit hour.

Part-time Out-of-State Resident Students taking fewer than 12 semester hours, pay at the rate of \$395 per undergraduate semester hour scheduled and \$389 per graduate semester hour scheduled.

Room and Board Fee

This charge represents the room and board fee for students who reside in on-campus facilities *other than* University Apartments. \$2039.00

Room and board fee for students residing in University Apartments is \$2,164.00

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 is 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.

ANY 19 meals (Mon.-Fri.; Breakfast, Lunch & Dinner; Sat. & Sun.; Brunch & Dinner)	w/100 Flex dollars	\$763.00
ANY 15 meals	w/100 Flex dollars	\$736.50
ANY 10 meals	w/100 Flex dollars	\$599.00
ANY 5 meals	w/100 Flex dollars	\$458.00

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

Advance Deposits

Registration (non-recurring)	\$100.00
Room	\$150.00

Additional Fees

General Fee (mandatory fee)full-time student	\$463.00
part-time student, per semester hour	\$ 38.60
Summer Sessions, per semester hour	\$ 38.60

Non-Recurring Fees

Late Registration Fees

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.)

<i>Graduation Fee (non-refundable)</i>	\$ 25.00
<i>Application Fee (non-refundable)</i>	\$ 25.00
<i>Record Transcript Fee (after first)</i>	\$ 2.00
<i>Identification Card Fee</i>	\$ 10.00
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.	
<i>Bad Check Fee</i>	\$ 25.00
This is a handling fee assessed for all checks drawn in payment of fees that are not honored due to insufficient funds.	

Guidelines for Determining Resident Status for Students

(Title 22 Pennsylvania Code, Section 153.1)

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

Students who believe that they are qualified for in-state residency and those who would like to be made aware of the necessary factors to make such a transition should contact 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 the Comptroller 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

Recurring Fees

Basic Fees

Pennsylvania Residents

This basic fee covers library and laboratory fees, the cost of registration, and the maintaining of student records.

Students enrolled for continuing education courses and non-matriculated students pay at the applicable rate per semester hour.

Out-of-State Students

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

Food Service Fee

Students in the eight (8) on-campus residence halls *MUST* take *either* the 19 or 15 meal plan described on page 24. There are *NO* exceptions to this rule.

Students living at the University Apartments may choose any of the alternate meal plans or delete meal service entirely. They may elect to purchase individual meals at the dining hall or flex dollars at Student Accounts.

Off-campus students may purchase meal plans for the entire semester, may purchase individual meals at the dining hall, or may purchase **e-dollars** at the **(e-card) office**.

Advance Deposits

Registration

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

Room

Each academic year an advance deposit of \$150 is required, to be credited toward the second semester of that year. This deposit is non-refundable.

Checks or money orders for the advance registration deposit and the advance room deposit should be payable to **East Stroudsburg University** and mailed to Student Accounts, East Stroudsburg University, East Stroudsburg, PA 18301.

General Fee

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

Non-recurring Fees

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 \$25 shall be paid by each candidate to cover the cost of graduation.

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.

Record Transcript Fee

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

Damage Charges

Students are held responsible for damage, breakage, loss, or delayed return of university property. Damages that are determined to be communal will be pro-rated in accordance with university policy and housing contract agreement. Deliberate disregard for university property will also result in disciplinary action.

All keys to university rooms are university property and are loaned to students. Students who do not return keys will be charged a lock replacement fee to be determined by the institution. Loss of a room key should be reported immediately.

Summer Sessions Fees 2001 (subject to change without notice)

Basic Fee

Pennsylvania Resident	per semester hour	\$158.00
Out-of-State Resident (Summer Only)	per semester hour	\$316.00

<i>General Fee</i>	per credit	\$ 38.60
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Students enrolled for a period of instruction differing from the regular schedule pay additional fees on a pro-rated basis of the schedule of fees provided for the regular summer sessions.

Payment Information

It is requested that a cashier's check or money order covering the balance due be written to **East Stroudsburg University**. All post office money orders must be payable to **East Stroudsburg University**.

Do not submit checks in excess of the amount due as the university is legally unable to cash them or refund balances. Postdated checks are **not** accepted.

Delinquent Accounts

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

Refund Policies

Refunds are not automatic. Requests for refunds must be submitted in writing to Student Accounts not later than one month after the date of official withdrawal.

Tuition

The date when students submit a completed drop card to the Registrar's Office to cancel their registration or to withdraw from a course determines their eligibility for a refund.

A student who submits to the Registrar's Office 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 the Records Office an officially approved withdrawal form is entitled to a refund of tuition according to the schedule as follows (Subject to change):

<i>Refund (%)</i>	<i>Period of Attendance</i>
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90	First Week
80	Second Week
70	Third Week
60	Fourth Week
50	Fifth Week
No Refund	After the Fifth Week

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 the Office of Student Financial Aid to discuss the impact of a contemplated mid-term withdrawal on their student financial aid awards and possible resultant personal liability to the university for charges not covered by prorated student financial aid awards.

Housing

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

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

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

If a student is asked to leave university housing, the details concerning a housing refund shall be determined by the Director of Housing.

The comptroller of the university shall always retain the authority to allow exceptions to this policy.

Meals

A student who officially withdraws after the beginning of a semester and who notifies the Student Accounts section of the Business Office will be entitled to a refund of the board paid for the remainder of the semester. A student who withdraws during a week will be charged for the entire week.

Summer Session

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

Financial Aid

Financial aid is designed to help families offset the cost of a post secondary education. Grants and scholarships, which do not have to be repaid, loans, which must be repaid with interest, and student employment which allows students to earn money, are the pieces that make up a student's financial aid package. More than 73% of East Stroudsburg University students receive some type of financial assistance. The \$26.3 million in financial aid distributed to students during the 1999-2000 academic year included \$16.7 million in loans, \$6.3 million in grants, \$1.4 million in student employment, and \$1.3 million in miscellaneous programs, and \$0.6 million in scholarships.

General Eligibility Requirements

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

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

Application Process

East Stroudsburg University aid applicants must complete the Free Application for Federal Student Aid (FAFSA) to be considered for a Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loan, Federal and University Student Employment, and the Federal Family Education Loan Program which includes the Subsidized and Unsubsidized Federal Stafford Loan. ESU does not require or use the College Scholarship Service Profile application for aid consideration. Incoming first year students should submit the FAFSA to the Central Processor by March 1. All other students should submit the FAFSA by May 1. If interested, students can apply on line by visiting the US Department of Education's website <www.fafsa.ed.gov>.

When completing the FAFSA, students interested in applying for Student Employment and/or the Federal Stafford Loans should check "yes" to questions 33 and 34 on the FAFSA. Those interested in receiving a Stafford Loan and that have checked yes to question 33 on the FAFSA will receive a Master Promissory Note (MPN) in the mail. The Financial Aid Office will precertify a loan for students interested in receiving loans, but no funds will be received or credited to the student until the MPN is returned to the guarantor. The Office of Student Financial Aid will determine eligibility for the Federal Perkins Loan.

The FAFSA serves as a student's application for the Federal Pell and Federal Supplemental Opportunity Grants by filing the Free Application for Federal Student Aid. Pennsylvania

residents will automatically be considered for the Pennsylvania State Grant if the FAFSA is completed. In some cases, the Pennsylvania Higher Education Assistance Agency (PHEAA) may request additional information. Non-residents should check on the availability of state aid through their state agency. Please contact the Office of Student Financial Aid if a current address and telephone number of a particular state agency is needed.

Financial Need

Financial aid is awarded on the basis of financial need which is the difference between the total estimated cost of attending East Stroudsburg University and the ability of the family to contribute to educational costs. The Financial Aid Office assigns each student a budget that includes approximate costs for books, personal expenses and transportation to and from home each semester.

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

Verification Requirements

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

Payment of Financial Aid

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

Forms of Financial Assistance

Grants and Scholarships—Sometimes called “gift aid,” grants and scholarships are awards made with no requirement for repayment.

Loans—The loan programs for both students and parents are borrowed monies that generally carry a low interest rate and must be repaid.

University Student Employment—Student employment provides an opportunity for students to earn money for personal expenses. Students usually work ten hours per week and are paid biweekly.

Grants

Federal Pell Grants are available to undergraduates who are pursuing their first baccalaureate degree. Eligibility is determined from the information submitted on the Free

Application for Federal Student Aid.

Pennsylvania State Grants are awarded to undergraduate students who are residents of Pennsylvania. The award value is determined by PHEAA and is based upon the financial need of the applicant.

Federal Supplemental Education Opportunity Grants (FSEOG) are generally available to Pell eligible students who demonstrate exceptional financial need as determined by the analysis of the Free Application for Federal Student Aid.

Loans

Federal Perkins Loans are low interest (5%) loans for undergraduates who exhibit great financial need. Students who graduate, withdraw, or cease at least half time enrollment will have a nine-month grace period before repayment begins.

Family Education Loan Program offered by the Federal Government includes both Subsidized and Unsubsidized Stafford Loans. Eligibility for the Subsidized Federal Stafford Loan is determined on the basis of need as measured by the FAFSA and requires no payment of interest or principal until six months after students cease half-time enrollment, withdraws, or graduates. Unsubsidized Federal Stafford Loans substitute for the EFC, up to the maximum per grade level, and require payment of interest only during periods of enrollment and the six month grace period. The option of deferring these interest payments through capitalization is available. Interest rates are adjusted each year.

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

0-29 credits	\$2625	Year 1
30-61 credits	\$3500	Year 2
62-95 credits	\$5500	Year 3
96- credits	\$5500	Year 4

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

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

Student Employment provides an opportunity for students to earn money for personal expenses. Campus employment consists of the Federal Work-Study and State Student Employment Programs. Students usually work ten hours per week and are paid every other week.

Community Service Learning (CSL) work opportunities are available to students who demonstrate a financial need according to the FAFSA. Under this program, students provide services to off-campus non-profit agencies that include activities in the fields of health care, literary training, education, welfare, social services, and neighborhood and community improvement.

Other Sources

Athletic Grants-In-Aid are awarded in accordance with intercollegiate athletics as a Division II institution and NCAA rules and regulations. Interested students should contact their respective coaches.

Scholarships, based upon a variety of achievements and talents, are available at East Stroudsburg University. Funds for the various scholarship areas are made available through donations by private industry, faculty, staff, community contributions and through private endorsements. For a list of scholarships offered by the University, contact the Office of Student Financial Aid at 570-422-3340 or 1-800-378-6732.

A **Tuition Payment Plan** through Academic Management Services, Inc., is available at East Stroudsburg University. This plan offers a low-cost, flexible system for paying educational expenses from current income through regularly scheduled payments over a period of ten months. The cost of this plan is \$55 (subject to change). There are no other fees or interest charges. Additional information is available from Academic Management Services, Toll-Free 800-635-0120.

Additional sources of financial aid include local clubs or organizations, businesses, summer earnings, and special scholarships, etc. The high school guidance office, local civic leaders or local librarians are helpful resources in researching such financial assistance.

Satisfactory Academic Progress Policy

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

Undergraduate Students

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

Semester Enrollment Status	Total Credits/Year
Full-time (12 cr)	24
Three-quarter time (9-11 cr)	18
Half-time (6-8 cr)	12
Less than half-time (below 6 cr)	Must complete the number of credits for which you enrolled.

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

Students must also meet a qualitative measure of progress. **Federal regulations require that, upon completion of four (4) semesters at East Stroudsburg University, the student must have attained an overall quality point average (QPA) of at least a 2.00 in order to receive financial aid.** For students enrolled less than four (4) semesters, the following chart shows the minimum QPA that must be achieved in order to continue receiving federal financial aid.

Semester Hours Attempted	Minimum QPA
Less than 16 credits	1.000

16 - 30 credits	1.500
31 - 45 credits	1.750
46 - 63 credits	1.900
64 or more	2.000

Special Grades

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

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 students originally failed will be counted toward academic progress.

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

Summer School Enrollment

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

*transient clearance must be obtained prior to taking courses elsewhere to ensure these credits will be accepted at ESU;

**courses taken elsewhere will not affect the QPA. If the student's deficiency is in QPA, taking courses at another institution will not make up that deficiency.

It is the responsibility of the student to notify the Office of Student Financial Aid that he/she has completed the necessary classes and is now maintaining satisfactory academic progress.

Maximum Time Frame for Program Completion

Full-time undergraduate students are expected to complete their program of study within five (5) years or the equivalency of ten (10) semesters of full-time enrollment. Full-time students enrolled in an Associate Degree Program are expected to complete their program within two and one-half (2½) years. The total semesters for completion of a program of study for part-time students will be extended proportionally.

For transfer students, the enrollment at prior institution(s) will be prorated by counting every eighteen (18) credits or part thereof that is transferred in as one semester. That total number of semesters will be subtracted from the ten (10) semester maximum time frame, with that remaining number being the number of semesters a student can receive financial aid at East Stroudsburg University.

No financial aid will be awarded to any student beyond the undergraduate limitations unless extraordinary circumstances, as determined by the Office of Student Financial Aid, exist.

Academic Probation

Matriculated undergraduate students will be placed on academic probation for one (1) semester the first time the quality point average is lower than the required values. A student on probation may retain federal financial aid for the one (1) semester that the probation occurs, **unless the student has been enrolled at ESU for at least four (4) semesters.**

If, at the end of the probation semester, the **semester** quality point average is raised to a level that satisfies the **academic** standing—but the **overall quality point average is still below the required values, the student will be ineligible for federal financial aid.**

Academic Dismissal/Suspension

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

Appeals Process

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

The East Stroudsburg University Office of Student Financial Aid 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.

Student Life

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

Orientation

One of the most important programs that assist new students and their parents in learning about the University is the two-day summer Orientation Program. Academic testing, informal discussions, and various presentations are provided as well as the opportunity to meet other incoming students and parents and interact with members of the University community. Four orientation sessions are scheduled for a two-day Monday-Tuesday sequence during June and July for new students entering the University in the fall semester. Other Orientation programs are scheduled for transfer students and new students entering in other terms.

Housing Information

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

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

Off campus housing information for upperclass students and graduate students is available through the Office of Judicial and Commuter Student Affairs.

Standards of Behavior

The mission and objectives of the University include a serious concern for the overall development of the individual. This philosophy implies that all students maintain high personal standards and conduct themselves in a manner which manifests not only intellectual and emotional growth but also personal and social development.

The basic standards of behavior are outlined in the *Student Handbook* under the Judicial Process and Regulations and the Student Code of Conduct.

Campus Card Center

The Campus Card Center, located on the ground floor of the University Center, provides ESU students and employees with both a campus identification card (e-Card) and a convenient, easy, and safe way to make purchases and use services on campus. The e-Card provides electronic access to a declining balance (debit) account that can be used for the payment of certain items/services in the Bookstore, Convenience store, selected vending machines, residence hall laundry facilities, Library, and campus dining facilities. Students may also use it to gain access to their residence hall. For further information, call 570-422-CARD.

Student and Community Services

Academic Advisement

A faculty member from the student's major department serves as the academic adviser throughout the student's career at the University. The Office of Academic Advising serves all students who are either pre-major or undecided by providing academic advising and guidance in selecting a major. The office will help students choose a career path of interest to them and declare a major that will help them achieve their career goal. The Office of Academic Advising also provides academic advising and course selection assistance during the weeks prior to and during all pre-registration periods. For further information, call 570-422-3383.

Career Resources Center

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

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

Center for Educational Opportunity

The Center for Educational Opportunity (CEO) offers the comprehensive ACT 101 Program, which extends supportive services to educationally and/or economically challenged students. The program provides counseling services (individual, small group, career, and peer) social activities and study skills instruction. For further information, call 570-422-3507.

Child Care Center

The Rose Mekeel Child Care Center is accredited by the National Association for the Education of Young Children and the Department of Public Welfare. The Center is staffed by a Director, two teachers, and work-study students. This facility is open from 7:45 a.m.-5:00 p.m. (Monday to Friday) during the fall, spring, and summer sessions. The facility is also open for a limited enrollment during the January, March and May intersessions.

The program is a hands-on, developmentally appropriate program for children between the ages of 2½ and 5. To reserve a space and obtain information about fees call the Mekeel

Child Care Center at 570-422-3514.

Counseling and Psychological Services (CAPS)

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 community. The services provided are designed to maximize students' personal and educational functioning, to prevent and remediate emotional/social problems, to help students attain their educational goals, and to promote their professional competence. Services offered include personal counseling/psychotherapy, vocational counseling, psychological and vocational testing, developmental and outreach programming, and consultation services in individual and group formats. Some of the issues students often address through counseling include anxiety, career exploration/indecision, depression, difficulties in interpersonal relationships, eating disorders, family concerns, self-doubt, sexual concerns and substance abuse. In addition, the Center maintains a 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), the College Level Examination Program (CLEP), the Miller Analogies Test (MAT), the National Teachers Examination (NTE), and the Certified Health Education Specialist Examination (CHES) are administered at least twice a year by the Counseling Center.

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. Currently enrolled students and all other members of the university community are eligible to receive services that are free of charge except for the fees associated with the national exams.

All information shared by a client is kept confidential, and all client records are classified as confidential records. Without a client's written permission, no information is released to anyone outside of the Center, except as required by law.

The Counseling and Psychological Services office is located on the second floor of the Flagler-Metzgar Center. Normal hours of operation are 8:00 a.m. to 4:30 p. m. Monday through Friday. Services generally are offered by appointment and may be scheduled by stopping at the office in-person or by calling 570-422-3277. Emergency coverage is provided with contact being made through the University police. For additional information, you may call us or visit our web-site: <www.esu.edu/caps>.

Services for Students with Disabilities

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/or accommodations 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. For further information, call 570-422-3825 V/TTY.

University Health Services

The University employs registered nurses, physicians, and a health educator to care for student health needs. The services provided include educational programs, diagnostic services and medical care for minor illnesses and injuries. All major problems are referred to the student's personal physician or to a local physician specialist; all serious accidents are referred to Pocono Medical Center. In cases where referral is necessary to either the student's physician, a physician specialist, to a hospital or other medical facility, the costs incurred

must be borne by the student. Fees for 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.

Only students who are currently enrolled in classes and who have completed their *Report of Medical History Form*, including required, updated immunization dates, will be treated at the University Health Services. Students who leave the University for whatever reason for a period of more than one year are required to complete new health examination forms.

Registered nurses are on duty Monday through Wednesday from 8 a.m. to 8 p.m., Thursday and Friday from 8 a.m. to 6 p.m., and Saturday and Sunday 9 a.m. to 5 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 a.m. to 3:00 p.m. During Summer Sessions a physician is on duty from 1:00 p.m. to 3:00 p.m. and nurses from 8:00 a.m. to 6:00 p.m. During Summer Sessions, the Health Center is closed on Saturday and Sunday. Emergencies should go to the Emergency Room at Pocono Medical Center. Transportation is available through Campus Police.

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 p.m. and Friday from 8 a.m. to 4:30 p.m. for tutoring, studying and computer use. For further information, call 570-422-3507.

Programs for Academic Support

The mission of Programs for Academic Support is to improve the academic success of all students. PAS consists of Academic Advising, the Center for Educational Opportunity, Disability Services, the Learning Center, Student Support Services, Tutoring and Upward Bound. Students wanting academic support are encouraged to call the appropriate PAS office or make an appointment to discuss their academic concerns with the PAS Director, by calling 570-422-3164.

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 Support Services

Student Support Services (SSS) is a federally-funded TRIO program designed to improve eligible students' academic performance, increase their motivation and enhance their potential for graduation. Students who have a physical or learning disability or whose parents did not graduate from a four year college or who meet certain economic guidelines may qualify for participation in SSS. Tutoring and drop-in-labs, study skills workshops, academic and career counseling, peer counseling, cultural and social activities are services that are provided. For further information, call 570- 422-3433.

Tutoring

The University-Wide Tutoring Program offers individual and small-group tutoring in most 100 and 200 level undergraduate courses. Students may request tutors in one or more courses by completing the appropriate forms, which are available in the Learning Center in Rosenkrans East. In addition to individual and small group tutoring, drop-in tutoring labs in a variety of high demand subject areas, such as math, economics, physics, chemistry and writing skills, are offered each semester. These labs require no scheduled lab hours. In addition, Supplemental Instruction is offered in conjunction with specific courses. For further information, call 570-422-3515.

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 coursework. The store also offers the following services: photo processing, newspaper and magazine subscription, Western Union, money orders, class rings, special ordering of clothing, books, pre-recorded music, campus apparel, computer hardware and software, faxing services, greeting cards, glassware, pennants, decals, stationery and many other assorted imprinted items.

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, 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.

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

Fraternities and Sororities

The fraternities and sororities that comprise the Social Greek System provide a wide variety of educational, social, academic, philanthropic and leadership activities, events and programs for ESU students. Greek Life is based on brotherhood, sisterhood and friendship. All ESU Greek organizations strive to excel in all areas of student life including: academics, community service, leadership and personal development. Being 'Greek' provides a unique, diverse experience where students learn teamwork, time management, financial and organizational skills, and the importance of friendship and social responsibility that will help them as they become alumni and enter 'the real world.' Greeks are actively involved in extracurricular activities at ESU including intercollegiate athletics and intramural sports.

The Social Greek organizations are self-governing and work together to benefit and support the University and the surrounding community. The Interfraternity Council (IFC) and Panhellenic Council (PHC) are the governing bodies that represents all Greeks at ESU and provide cultural, social and educational programs and events for the ESU student community. At the beginning of each semester, fraternities and sororities conduct 'Rush' events to recruit new members.

Student Government

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

Residence Hall Association

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

Social and Cultural Activities

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

Educational Trips

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

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, service, social, scholastic, cultural, recreation, and scholastic honoraries.

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, 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.

Campus Activities Board (CAB)

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

CAB is comprised of nine executive board members who meet on a weekly basis during the semester for the purpose of coordinating the various activities. The executive board consists of the four club officers and five committee chairpersons. The five CAB committees are: Concerts, Films, One Night Stand (Comedy), Out and About (Trips), and Special Events. CAB is also involved with planning and promoting activities during Welcome Week, Family Weekend, and Homecoming.

Students who serve on CAB develop strong leadership skills and gain practical hands-on experience while having a great time in the process!

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.

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.

Theatre Program

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

Athletics

Intercollegiate

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

Schedules for 19 sport teams for men and women are arranged on a seasonal basis for fall, winter and spring sports.

The sports are as follows:

Fall Men: cross country, football, soccer

Women: cross country, field hockey, volleyball, soccer

Winter Men: basketball, indoor track and field, volleyball, wrestling

Women: basketball, indoor track and field, swimming

Spring Men: baseball, tennis, outdoor track and field

Women: lacrosse, softball, outdoor track and field, tennis

Outdoor facilities for athletic activities include eight athletic fields, an all-weather track and outdoor tennis courts, four lighted for night play. The main athletic field, Eiler-Martin Stadium, has seating space for approximately 6,000 spectators.

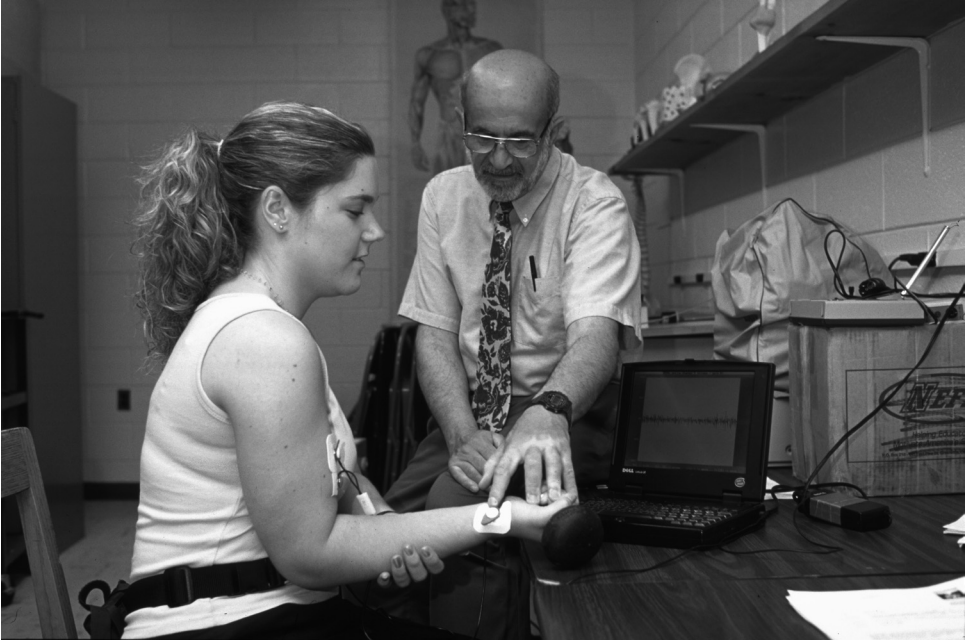
Indoors, the teams practice and compete in the multi-purpose LeRoy J. Koehler Fieldhouse which seats 2,500.

As part of the University's effort to ensure compliance with the Higher Education Act and Equity in Athletics Disclosure Act, the Gender Equity Survey Report is on file in the Offices of Intercollegiate Athletics and Admission. This report contains information on participation and financial support as it pertains to East Stroudsburg University's Intercollegiate Athletics Program.

Intramurals

The Intramural Program provides every student with an opportunity to participate in organized, informal team and individual sports activities. The entire program is voluntary for those who are not regular members of varsity or junior varsity squads and does not require

the intensified training and high degree of skill necessary for intercollegiate athletics. An extensive seasonal program includes flag football, soccer, volleyball, basketball, racquetball, water polo, softball, tennis, badminton, and sand volleyball.





Degrees Offered

Associate of Science Degree

The School of Professional Studies

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

Bachelor of Arts Degree

The School of Arts and Sciences

The Faculty of Arts and Letters

The Faculty of Science

The Faculty of Social Sciences

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

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

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

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

No more than 48 of the 128 credits required for the Bachelor of Arts degree may be from a single discipline. In interpreting this requirement, “English Composition” is not counted with other courses in English. Departments which offer courses in more than one discipline count these areas separately, for example, French, German, and Spanish or Sociology, Social Work, and Criminal Justice.

A typical student in a liberal arts program will choose 50 credits in fulfillment of General Education. Most departments require at least 30 credits for a major. A few departments, notably the sciences, have co-requisite requirements in other disciplines. This still leaves as many as 30 credits of free electives. While free electives are ordinarily taken in the liberal arts, students may also elect courses offered by the Schools of Professional Studies and Health Sciences and Human Performance, providing there are seats remaining after the needs of their own degree candidates have been met. Students are strongly urged to consult with their adviser prior to scheduling courses in these schools. *Courses specifically intended for persons seeking professional certification in education will not be counted toward the Bachelor of Arts degree.* These include: ELED 311, 342, 343, 344, 345, 351, PSED 306, 316, 336, 346, 356, 376, REED 211, 321, SFTY 211, SPPA 357, 358, 477, 478, ELED or PSED 426 and 430, and movement activities courses in excess of six credits.

(This list will occasionally be revised. Current information will be available from the Dean of Arts and Sciences.)

Bachelor of Science Degree

The School of Professional Studies

The School of Health Sciences and Human Performance

The School of Arts and Sciences (The Faculty of Science and the Faculty of Social Sciences)

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

Programs in teacher education at East Stroudsburg University are approved by the State Department of Education. Graduates who receive the degree of Bachelor of Science will have completed the coursework necessary to be eligible for certification to teach the subjects and grade levels in which they are qualified. Certification programs include early childhood, elementary, special education, and several secondary education areas. All applicants must be endorsed by the advisor, the chair of the department, and the Dean of the School of Professional Studies who is the Certifying Officer of the University.

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

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

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

The Bachelor of Science degree is also offered through this School in Allied Health Education, Nursing, Health Education, Speech Pathology and Audiology, and Physical Education. Concentrations are available in community health education, public health

administration, athletic training and sport medicine, exercise physiology, movement, and sport studies and pedagogy.

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

No more than 64 of the 128 credits required for the Bachelor of Science degree may be from a single discipline.

Graduate Degrees

The university offers the Master of Arts, Master of Science, Master of Public Health, and Master of Education degrees in twenty areas of specialization. Post-baccalaureate certificate in Education programs are offered in twenty-four different areas. Joint advanced programs for school administration with Temple University, Pennsylvania State University and Indiana University of Pennsylvania are available. In addition, a unique teacher intern program is available for college graduates who are not certified in teaching secondary school subjects. The program allows graduates to earn teaching credits while they teach, under supervision, and on a full salary.

Detailed information concerning graduate degrees may be obtained in the *Graduate Catalog*.



University Requirements

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

1. A minimum of 128 semester hours. Some degree programs may require more than 128 credits.
2. A minimum of 30 credits in courses with numbers 300 or higher.
3. A minimum cumulative quality point average of 2.00. Some degree programs may require a higher cumulative quality point average.
4. Demonstration of competence in basic mathematical skills. (See page 50.)
5. Completion of the general education requirements. (See page 51.)
6. For students in B.A. programs, no more than 48 credits from any single department may be applied toward the 128 credit minimum. Students in B.S. programs may apply no more than 64 credits from any single department toward the 128 credit minimum. In either case, if a department offers courses under more than one rubric, then this regulation applies separately to each rubric used.
7. Completion of the requirements for one or more majors.
8. A minimum residency as outlined below:
 - a. The minimum residence requirement for the baccalaureate degree is one year (32 credits earned from East Stroudsburg University).
 - b. The last 32 credits must be taken at East Stroudsburg University unless a waiver is granted. This waiver requires the approval of the student's advisor, major department chair, and academic dean. Some programs which require off-campus senior level experiences at other schools have automatic exemptions from this section.
 - c. The minimum number of credits in the major which must be taken at East Stroudsburg University will be determined by the department housing the major.

Home Study Credit Limit

A maximum of nine (9) credits of home study courses may be counted toward the minimum 128 credits required for graduation. A maximum of six (6) of these may be from one department.

Course Numbers

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

Below 100 level remedial courses do not carry credits toward graduation
 100-199 Freshman level courses; typically no prerequisites

200-299 Sophomore level courses; probably has one prerequisite

300-399 Junior level courses; at least one prerequisite

400-499 Senior level courses; at least two prerequisites

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

Course Credit

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

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

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

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

Basic Mathematical Skills Competency

Mathematics and quantitative reasoning skills are fundamental for learning across the curriculum. All entering students must demonstrate a minimal competence in mathematics. This minimal competence may be demonstrated in any of the following ways:

1. Math SAT score of 500 or higher.
2. A passing score on a Basic Mathematical Skills Competency Test. This test will be administered during Summer Orientation for all new students. It will also be administered once during each semester. Each student will be allowed to take the test up to three times.
3. Satisfactory completion of the course MATH 090 Intermediate Algebra. This course will be offered each semester. Credits granted for this course may not be used toward the 128 credits required for graduation.

Students must demonstrate this competence by the time they have completed 60 credits, or 30 credits at ESU, whichever comes later. (*Note: The successful completion of a mathematics course, either at ESU or any other college, other than the ESU course, MATH 090, is not sufficient to satisfy this requirement. Students whose mathematics SAT score is below 500 must either obtain a passing score on the Basic Mathematical Skills Competency Test or successfully complete MATH 090.*)

For further information concerning this requirement, contact the Department of Mathematics at 570-422-3447.

General Education Requirements

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

Undergraduate students complete their academic coursework within the offerings of one of three Undergraduate Schools: The School of Arts and Sciences, the School of Professional Studies, and the School of Health Sciences and Human Performance.

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

A minimum of 128 semester hours is required for graduation. Some programs require more.

The General Education Curriculum at East Stroudsburg University provides a core of interrelated liberal studies for all students. By design it provides students with knowledge and perspectives and enables them to adopt varied modes of thought and develop specific competencies. Students become prepared to make informed judgments as citizens of this state, this nation, and a global society in which the quantity of information continues to grow.

The 50 semester hours in General Education are distributed in the following manner.

Required: 5 credits

English Composition: 3 credits

All students write a placement essay. They are then placed in ENGL 090, Composition Skills, or ENGL 103, English Composition. Those placed in 090 must take and pass it before they can be admitted to ENGL 103.

Students may be exempted from and receive credit for English Composition, ENGL 103, if they take and achieve a high score on the CLEP General Examination in English Composition (with essay).

Students must receive a minimum grade of C to fulfill the English Composition requirement.

Physical Education Activities: 2 credits

To fulfill this requirement, a student must successfully complete two courses selected from the FIT courses offered by the Department of Movement Studies and Exercise Science (*See page 174*). Credit may be earned by successful completion of a proficiency test in any of the courses offered by the department. (Movement Studies and Exercise Science majors are

exempt from this requirement.) Prior military service or law enforcement experience is not accepted for physical education credit.

Distributive Electives: 45 credits

Each student must complete at least 15 credits in each of three areas: Group A—Arts and Letters, Group B—Science, Group C—Social Science. In each group, the student may take *three* credits in each of *three* subjects and *six* credits in a fourth subject *or three* credits in each of *five* subjects. Courses that satisfy General Education requirements are identified as GE in department course listings.

Students should meet with their faculty advisers to plan appropriate choices to meet these requirements. Some GE courses may have specific prerequisites.

Arts and Letters (Group A) 15 credits

1. English Language and Literature
2. Fine Arts - Art, Communication Studies, Music, and Theatre
3. Foreign Languages
4. Performing Arts - Dance, Communication Studies, Music, and Theatre
5. Philosophy

(The distinction between fine and performing arts may be obtained from the faculty adviser.)

Science (Group B) 15 credits

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

Social Science (Group C) 15 credits

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

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

Exceptions

Required Science Courses: Where coursework in biology, chemistry, mathematics, or physics is required (or listed as recommended in the catalog) for the major, a student with a declared major may substitute those courses for courses in the same departments listed under Science Group B.

If a student adopts the above provision and later changes his or her major to a field which does not require coursework in those disciplines, the student may nevertheless receive General Education credit for courses taken in those departments.

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

Teacher Certification Requirements (See Page 64)

Special Academic Programs

Honors Program

The Honors Program at East Stroudsburg University offers the superior student the opportunity to fulfill part of the general education requirements with special honors courses. Unique features of the honors courses include a maximum class size of twenty, specially selected professors, and close teaching-learning relationships in and out of the classroom. Honors courses provide the student with a stimulating introduction to the various aspects of our social, cultural, and scientific heritage. In the junior year, the honors student takes the honors seminar. In the senior year, an honors thesis project must be completed within the department of the student's major.

The student is guided by an honors adviser in addition to the regular academic adviser. Field trips and special speakers are common among honors courses. Other incentives and benefits for the honors student include registration for courses ahead of other students, honors scholarships, international summer study scholarships, special recognition at graduation and on the official University transcript, membership in the Honors Student Association, a special lounge for honors students and faculty, and special attention and assistance in graduate school applications and job applications from the program director and honors adviser.

For requirements on admission into the program and graduation requirements, contact Dr. Marcia Godich at 570-422-3743 or e-mail mgodich@po-box.esu.edu. For more information, see www.esu.edu/honors.

International Programs and Student Exchange

Study Abroad

The Office of International Programs and Student Exchange is housed at 100 Normal Street. In this office, students who wish to experience life in another culture by studying in a foreign country can gather information about study abroad programs sponsored by the Pennsylvania State System of Higher Education universities and by colleges and universities throughout the United States. Information is also available in this office on internship opportunities and scholarships for study abroad. Students will be directed on how to research study abroad programs, how to select a program, and how to guarantee a smooth re-entry into ESU upon their return.

National Student Exchange

Students who wish to experience a different learning environment and to broaden their social and cultural awareness, but who are not ready to leave the continent, should investigate opportunities offered by the National Student Exchange (NSE). Qualified students are given the opportunity to study for a semester or more at another American or Canadian institution at in-state rates. Credits and grades earned during the exchange become part of the student's

ESU transcript. The deadline for application to NSE is always in February, so students who are interested should pick up information from the office prior to leaving for winter break.

For further information on educational opportunities abroad and National Student Exchange, contact the Office of International Student Services and Student Exchange or call 570-422-3470.

Internship Opportunities

Internships are available to students in most majors; academic credit may be awarded for the internship experience. Information regarding specific opportunities may be obtained by contacting department chairs or the deans of the School of Arts and Sciences, Health Sciences and Human Performance, and Professional Studies. A list of organizations with which University students have recently interned, student taught, and volunteered is available in the offices of the School deans.



The Harrisburg Internship Semester (THIS)

During each semester of the academic year, East Stroudsburg University selects two undergraduate students to participate in The Harrisburg Internship Semester (THIS), sponsored by the State System of Higher Education and administered by the Dixon University Center in Harrisburg. Students selected are placed with policy makers in state government offices and agencies. Each THIS intern earns 15 semester hours: 9 semester hours for the internship program, 3 semester hours for a research project, and 3 semester hours for participating in an academic seminar. A stipend is involved, which covers tuition and living expenses.

To be eligible to apply, a student must have maintained a 3.1 GPA in at least 60 semester hours. However, students with 90 or more semester hours are given priority. THIS internships are available to students from all majors who are interested in public policy aspects of their disciplines. For application materials or more information, contact the THIS campus coordinator at ESU, Dr. Marcia Godich at 570-422-3743 or e-mail mgodich@po-box.esu.edu or apply through the internet at www.esu.edu/~godich.

Marine Science Consortium

In keeping with the mission of the University to provide a variety of methods in which students' learning experiences may be enriched and to support the B.S. programs in Marine Science, the University has maintained membership in the Marine Science Consortium, which has a major teaching and research facility at Wallops Island, Virginia. For more information, see the Biological Sciences section in the Degree Programs and Course Descriptions portion of this catalog.

High School Access Program (Early Admission)

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

The part-time (summer or regular academic year) student is a high school junior or senior who wishes to take one or two courses at East Stroudsburg University in order to enrich his/her high school program. Highly motivated students with a minimum average of B or higher in a college preparatory program may be recommended to the University by their guidance counselors. Students with less than a B average but who have demonstrated particular skill or talent in a given area may be recommended by their counselors to pursue coursework in that area. Recommendations should be sent to the Director of Admission.

The full-time student is a student who has completed his/her junior year in high school and wishes to enroll in a full course of study at East Stroudsburg University in lieu of the senior year in high school. Such students must rank in the top 10% of their class and be enrolled in a college preparatory curriculum in order to be considered. Full details are available from the Director of Admission.

Law School Express Admissions Program

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

30% of the Law School's Tuition. For further information contact Professor Kenneth Mash at 570-422-3273.

Evening Degree Program

The Evening Degree Program is for non-traditional students who are not able to attend the University as regular matriculating day students. Classes in this program are offered from 5:30-10:00 p.m., Monday through Thursday. Students are guaranteed that all courses required for degrees offered through the Evening Degree Program will be offered within a five-year time span. For more information on the program, contact the Evening Degree Program Office at 570-422-3468.

Summer Sessions

Summer at ESU is a time to choose from a number of special programs, including innovative and stimulating courses, workshops, and travel programs that are not offered during the regular academic year.

Undergraduate students wishing to accelerate and complete the four-year college program in three calendar years may do so by completing summer sessions over a period of three years. Graduate and non-matriculated students have the opportunity to take varied courses to acquire academic credit and professional competencies.

The official Summer Session bulletin, containing information on courses, expenses, and general regulations, may be obtained in late February by contacting the Summer Sessions Office at 570-422-3540.

Continuing Education

The continuing education program is designed to meet the needs of society by presenting a number of credit and non-credit courses at times convenient for the general public. These courses vary in length from one day to several weeks to the entire semester. For additional information, contact the Office of Continuing Education at 570-422-3468.

Summer Intensive Study Program (SISP)

The Summer Intensive Study Program is the pre-college component of the ACT 101 Program designed to aid students in making a successful transition to academic life. Students spend 8 weeks on campus during the summer prior to enrollment at ESU, acquiring study skills, strengthening academic skills and completing college courses. For more information call 570-422-3504.

Air Force ROTC

East Stroudsburg University students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through a cross-enrollment agreement with Wilkes University. Courses in this program will be taught at Wilkes University.

For additional information, contact the Aerospace Studies Department at Wilkes University (1-800-WILKES-U, extension 4860 or 4861).

Army ROTC

East Stroudsburg University students are eligible to participate in the Army's Reserve Officer Training Corps (ROTC) through a cross-enrollment agreement with Lehigh University. Courses in this program will be taught at Lehigh University.

For additional information, contact Captain Ray Dunning at 610-758-3272.

Upward Bound

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



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Program Offerings

Definitions

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

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

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

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

The School of Arts and Sciences

The School of Arts and Sciences includes the Faculties of Arts and Letters, Science, and Social Sciences. Following the custom of hundreds of years, the faculties and disciplines represented in the School offer a basic core of knowledge to which other dimensions and specializations are added.

The Faculty of Arts and Letters

The Faculty of Arts and Letters offers the following degree programs:

Communication Studies

English

Fine Arts - Art

Fine Arts - Music

Fine Arts - Theatre

French

Philosophy

Spanish

Theatre

Minors:

Art

Communication Studies

English

French

German Studies

Music

Philosophy

Spanish

Secondary Education programs leading to

the Bachelor of Science degree with a major in Communication, English, French, or Spanish are offered jointly with the Faculty of Education.

Studies in the Liberal and Fine Arts enrich the intellectual, emotional, and social lives of all students, and thereby contribute to future success in any specific career.

The student who majors in an Arts and Letters field enjoys flexible scheduling to reflect wide interests. The degree also provides a strong foundation for graduate study.

The Faculty of Science

The Faculty of Science offers the following degree programs:

Biochemistry

Biology

Biotechnology

Chemical Biotechnology

Chemistry

Computer Science

Earth and Space Science

Environmental Studies

General Science

Marine Science

Mathematics

Medical Technology

Physical Science

Physics

Psychology

Cooperative Professional Degree

Programs with other institutions:

Engineering

Medical Technology

Pharmacy

Podiatry

Minors:

Chemistry

Computer Science Applications

Mathematics

Psychology

Biotechnology

Laboratory Medicine

Mental Health Worker

Pre-Medicine

Pre-Physical Therapy

Concentrations:

Actuarial Science

Students participating in the programs in science have great opportunities to enter a wide variety of fields, many of which are

career-oriented and involve professional training and internships. For example, a student whose primary interest includes biology can study biotechnology, laboratory medicine, environmental studies, or marine science. Secondary Education programs leading to the Bachelor of Science degree with a major in Biological Sciences, Chemistry, Earth and Space Science, General Science, Mathematics, or Physics are offered jointly with the Faculty of Education.

Students may concentrate and/or prepare for further studies in the areas of environmental studies, medical technology, physical therapy, mental health, pre-medical school, marine science, and professional engineering. Students desiring to enter one of these programs should indicate such interest on the application for admission.

Some combination of chemistry and biology is valuable in any one of these programs. A major in any one or a combination among biology, chemistry and physics prepares one for medical, dental, optometry or pharmacy school.

The curriculum in Environmental Studies has been designed to meet the needs of students

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

Cooperative engineering programs with Penn State University and the University of Pittsburgh permit a student to complete a Bachelor of Science in engineering at one of these institutions in two years, after completing the first three years at East Stroudsburg University. The student is also awarded the Bachelor of Arts degree from East Stroudsburg University with a major in any one or combination among the fields of Chemistry, Mathematics and Physics. Similar arrangements in Medical Technology, Pharmacy, and Podiatry are also available.

Courses in Computer Science prepare students with valuable experience and training for jobs in industry and in management positions. Internships and training programs in psychology at hospitals and industries are useful in jobs related to human relations.

The Faculty of Social Sciences

The Faculty of Social Sciences offers the following degree programs:

- | | |
|-------------------|-------------------|
| Economics | |
| Geography | |
| History | |
| Management | |
| Political Science | |
| Social Studies | History |
| Sociology | Political Science |

Minors:

- Geography

Concentrations:

- Criminal Justice Administration
- Management
- Social Work

promotes the scholarly tradition in the disciplines of anthropology, economics, geography, history, political science, and sociology. The Faculty is committed to the belief that an education centered

The Faculty of Social Sciences

in the liberal arts is essential in the preparation of potential teachers and in a wide variety of professional careers. A Secondary Education program leading to a Bachelor of Science degree with a major in Social Studies is offered jointly with the Faculty of Education.

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

The Faculty of Social Sciences' curricula permit students to broaden their knowledge through general education requirements and to concentrate in an academic discipline through the departmental requirements of the chosen major.

The Criminal Justice Administration, Management, and Social Work concentrations are professional programs for those students who satisfy general education requirements and complete a departmental major. These concentrations provide academic and practical approaches by critically examining and interrelating subject matter within the Faculty of Social Sciences.

The School of Professional Studies

The Faculty of Hospitality and Leisure Management

The Faculty of Hospitality and Leisure Management offers the following degree programs:

Recreation and Leisure Services Management
Hotel, Restaurant and Tourism Management

The program in Recreation and Leisure Services Management provides a Bachelor of Science degree for students preparing for a career in the recreation profession. A core of required courses represents every segment of the recreation field. Students may choose to emphasize a particular area of study. Emphasis areas in commercial, outdoor, and therapeutic recreation are offered.

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

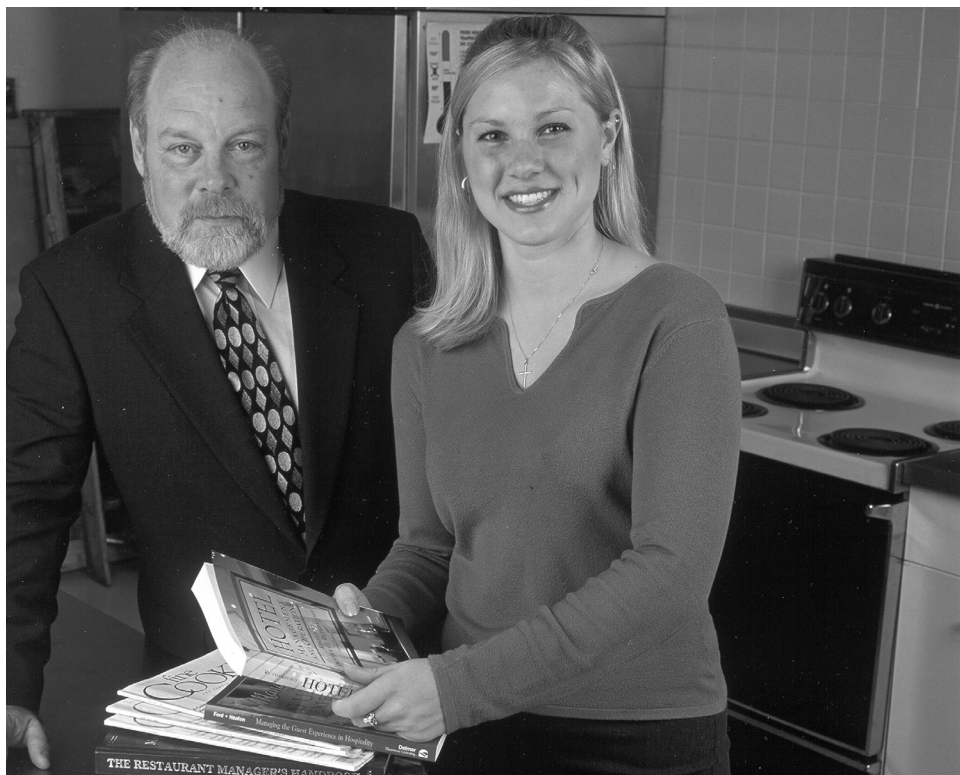
Because both programs of the Faculty of Hospitality and Leisure Management require a maximum amount of contact with the public, an important part of the learning process is actual work experience in the field through a supervised internship.

The Faculty of Education

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

The undergraduate curricula of the Faculty of Education are designed primarily for students preparing for teaching careers in the early childhood and elementary schools, the middle or junior high school, or the senior high school. The Faculty of Education encompasses the departments of Early Childhood and Elementary Education, Media Communication and Technology, Professional and Secondary Education, Reading, and Special Education and Rehabilitation, as well as the Office of Student Teaching. Its major purpose is to prepare teachers for positions in elementary and secondary schools and people-oriented occupations, such as social and restoration agencies, state and federal government, and private industry. The Faculty provides programs that lead to certification in Early Childhood, Elementary Education, Secondary Education, and Special Education (mentally and/or physically handicapped). Graduates receive the degree of Bachelor of Science and are eligible for certification to teach in the schools of Pennsylvania. Students are encouraged to earn certification in several fields to enhance their employment opportunities.

The curricula have been so planned that the graduate may be recommended for certification to teach in many other states without further course requirements and in most of the remaining states with minor additional training. Information and advisement on certification is available in the office of the Dean of the School of Professional Studies.



Graduates are eligible to receive an Instructional I certificate (provisional) which is valid for a period of six years of teaching in Pennsylvania. The Instructional I certificate *must* be made permanent after six years of teaching.

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

Graduate work is offered leading to the Master of Education degree in Elementary Education, Secondary Education, Special Education, and Reading. Advanced graduate studies for the certificate as a Reading Specialist are also available. East Stroudsburg University offers a program in School Administration leading to certification for a Principalship. In addition, a Special Education Supervisor certificate program is offered. Students interested in graduate programs should refer to the *Graduate Catalog*. The programs of the Faculty of Education are recognized by the American Association of Colleges for Teacher Education and approved by the Middle States Association of Colleges and Secondary Schools. All standards for program approval by the Pennsylvania Department of Education have been met.

Requirements for Teacher Certification

Selection for the Teaching Profession

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

Admission into Teacher Education Program

All education majors seeking certification must successfully complete teacher education program admission, monitoring, and exit criteria procedures. Program admission criteria include faculty interviews, satisfactorily passing basic skills screening tests which include the required Praxis Series tests, (contact departments for specific listing of required tests), earning a minimum overall undergraduate QPA as identified by PA law, Chapter 354, (some departments require a higher minimum than as stated in Chapter 354), completing 48 hours by the time candidacy admission is decided, satisfactorily completing early field experiences, completing a speech test, completing Act 34 and/or FBI clearance, Act 151 child abuse clearance, and being recommended by departmental faculty and approved by the Teacher Education Council. Each department may impose additional admission standards. Then students are admitted to candidacy in the teacher education program and are permitted to take majors' only 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 and major average as specified in PA law, Chapter 354, 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. Only qualified teacher education majors are allowed to take teacher education classes. Each department will provide each student a copy of its program requirements, course checklist, and expectations.

Detailed procedures and criteria for admission into teacher education programs are available in each department. All applicants must be endorsed by the faculty advisor, the department, and the Dean of Professional Studies, who serves as the Certifying Officer for the University.

Experienced non-degree teachers, graduates of other colleges or universities, or others who need special assignments in student teaching will have their individual alternative programs planned and approved by the appropriate department and by the Dean of the School of Professional Studies. Transfer students' transcripts will be individually evaluated by the department chair to determine equivalent courses to be accepted.

The PDE 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. The PDE recommends a minimum 3.00 QPA for program admission and completion.

Pre-Student Teaching Field Experiences

The importance of providing opportunities for education students to observe and work directly with children in schools before student teaching is recognized. To make this possible, the Director of the Professional Development School Center and the Director of the Student Teaching Office work with departments to carry out the programs. Incoming early field experiences are also offered in association with various education courses.

Students must submit a negative test for tuberculosis form before beginning their first pre-student teaching field experiences.

Requirements for Approval to Student Teach

All assignments for student teaching are coordinated by the Student Teaching Office. Before assignments are made, students must make application through the Student Teaching Office. Students planning to student teach in the fall semester must satisfy all Teacher Education Program admission criteria at the end of the previous spring semester. Students planning to student teach in the spring semester must satisfy all Teacher Education Program admission criteria at the end of the previous summer session. Students must meet the following requirements in addition to departmental requirements specified under the course listing for student teaching:

1. Possess health, personal characteristics, and professional attitudes considered essential for successful teaching.
2. Have completed at least 96 semester hours of credit.
3. Have successfully completed prerequisite courses in education and have no incomplete grades.
4. Have a minimum quality point average as identified by PA law, Chapter 354, as of fall, 2001 (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.
5. Provide evidence of a negative test for tuberculosis.
6. Have met all requirements for admission to teacher candidacy as required by the major department in education.
7. Have satisfied ACT 34 and/or FBI clearance and have satisfied ACT 151 Pennsylvania History of Child Abuse Clearance.
8. 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.

The Teacher Education Council recommends that student teachers have C or higher grades in all required major classes and no incomplete grades in major classes. Students are encouraged to possess at least a B average.

Student Teaching

Student teaching is the major contract in a series of planned laboratory and field experiences. The prospective teacher spends 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 the supervision of instruction. Student teaching is planned to provide, under expert guidance, an opportunity for continued professional growth in the application of theory, methods, and subject content.

While students may request the selection of geographic areas in which to student teach, it must be noted that students are placed only in school districts with which the University has an executed Affiliation Agreement or Articulation Contract. To date, the University has identified over 90 school districts, within a radius of 50 miles from campus, who have

agreed to participate in East Stroudsburg University's Student Teaching Program. All student teaching arrangements are made through the Office of Student Teaching. It is inappropriate for students to make their own student teaching arrangements.

Students are expected to complete a variety of *Pre-Student Teaching Requirements* prior to the semester of student teaching. Those requirements include but are not limited to:

- Making arrangement for off-campus housing, if necessary.
- Establishing personal transportation to and from the assigned school district.
- Submitting the required state clearances (Act 34, Act 151, and the FBI Check (out of state residents only) to the assigned school district. Students are asked to submit these clearances when they hand deliver their *Student Teaching Autobiography* to the school. All student teachers must have acceptable clearances. An unacceptable clearance will result in the student being removed from student teaching.
- Adhere to school district policies, procedures, ethics codes, schedules, and dress codes.
- Purchase Student P.S.E.A. Liability Insurance

Teacher Education Council

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

Student Professional Program

Designed as an alternative route to teacher certification, this program offers the senior Elementary Education or Early Childhood major (dual major students may participate after consultation with the program coordinator) a full year of guided field experience in elementary and/ or middle schools which are exploring new methods of teaching such as inclusion, individualizing instruction, differentiated grouping and staffing, team teaching, and environmental structuring.

Student Professionals in the program are assigned to schools as full-time interns and in addition participate in group seminars, field trips, school visitations and a program of individualized independent study planned in cooperation with the program coordinator.

Admission to the program is limited and requires the approval of the Early Childhood and Elementary Education Department chair and the program coordinator. Interested students are advised to make inquiry no later than the beginning of their sophomore year.

Areas of Teacher Certification

Instructional I

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

Health and Physical Education
 Mathematics
 Mentally and/or Physically Handicapped
 Physics
 Social Studies
 Spanish
 Speech and Language Impaired

Special Endorsement to Instructional I

Driver Education
 Reading Specialist

Educational Specialist

Dental Hygiene
 School Nurse

School Administration or Supervision

Elementary and Secondary Principal
 Special Education Supervisor

Students must satisfy all teacher education program, departmental requirements, and revised PDE standards before they will be recommended for the degree and teacher certification.

The School of Health Sciences and Human Performance

The mission of the School of Health Sciences and Human Performance is to provide opportunities for undergraduate and graduate students to develop knowledge and skills in the disciplines of health education, movement studies and exercise science, nursing, public health, safety and speech pathology and audiology. The mission is in response to the nation's concern for healthy persons and healthy communities and to students interested in careers in health and human performance areas. Underlying the mission are three basic assumptions:

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

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

The Faculty of Health Sciences

The Faculty of Health Sciences offers the following degree programs:

Majors:

- Allied Health Education
- Health Education
- Nursing
- Speech Pathology and Audiology

Interdisciplinary:

- Gerontology

Concentrations:

- Community Health Education
- Public Health Administration

Teacher Certifications:

- Health Education

Certifications:

- School Dental Hygienist
- School Nurse

The Faculty of Human Performance

The Faculty of Human Performance offers the following degree program:

Majors:

- Athletic Training
- Exercise Science
- Physical Education

Teacher Certification:

- Health and Physical Education

Concentrations:

- Exercise Physiology
- Exercise Professional
- Movement and Sport Studies

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





Academic Programs and Course Descriptions

Art

School of Arts and Sciences—The Faculty of Arts and Letters

Professor: Mitchel, Weigand (chair)

Associate Professors: Luongo

Instructors: Lane, Oye-Benintende

Bachelor of Arts with a Fine Arts major (core emphasis: Art)

54 semester hours

Required Fine Arts courses: MUS 100 and either 211 or 311, and three additional semester hours; THTR 100 and either 302 or 304, and three additional semester hours.

Required core courses: ART 101, 151, 153, 201, 202, 496 and any six additional courses in the 200, 300 and 400 catalog listing, provided prerequisites are fulfilled.

At least 18 semester hours in art must be completed at East Stroudsburg University. For university requirements see page 49.

Art minor-21 semester hours

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

§ART 101 GE: Introduction to Art (3:3:0)

This course is an introduction to art of western culture with emphasis on painting, sculpture, and architecture through the ages.

§ART 151 GE: Basic Drawing (3:0:6)

This course is an introduction to many drawing approaches with a variety of media and subject matter.

§ART 152 GE: Poster Art and Lettering (3:0:6)

This course involves hand lettering with various tools and media appropriate for developing various styles. Emphasis is on composition, design elements, and expressive quality.

§ART 153 GE: Design I: Two-Dimensional (3:2:2)

This course is a study of basic design concepts fundamental in the visual arts.

§ART 154 GE: Design II: Three-Dimensional (3:0:6)

A foundation course in the development of concepts in three-dimensional design. The course involves the use of various materials and organizational concepts to create form.

§ART 201 GE: History of Art I (3:3:0)

This course consists of detailed study of the history of art to the Renaissance. It is designed to express the relationship between the artists and common historical, geographical, and ideological contexts and to note influences of other cultures on our own. It is offered in the Fall semester.

§Fine Arts

§ART 202 GE: History of Art II (3:3:0)

This course consists of detailed study of the history of art from the Renaissance to modern times. It is offered in the Spring semester.

§ART 220 GE: Advertising Graphics (3:0:6)

This course is an introduction to graphic art design used in advertising. The tools, media, techniques, and production processes used in commercial art will be emphasized. Prerequisite: ART 151 or 153.

§ART 251 GE: Sculpture (3:0:6)

This course explores sculpture processes in wood, plaster, metal, and other materials. It is offered biennially or on the basis of student interest or need. Prerequisite: ART 151.

ART 252 Crafts Design (3:0:6)

This course explores the design and creation of craft objects in leather, fiber, glass, and other materials.

§ART 253 GE: Ceramics I (3:0:6)

The course explores hand forming methods in clay and basic glazing techniques. Prerequisite: ART 151 or 153.

§ART 254 GE: Painting I (3:0:6)

This is an introductory course in acrylic and oil painting with a focus on color and painting techniques, as well as the development of visual awareness.

§ART 256 GE: Watercolor Painting (3:0:6)

This is a study of watercolor painting with emphasis on color, composition, pictorial expression, techniques, and materials. Prerequisite: ART 151.

§ART 260 GE: Printmaking I (3:0:6)

This is a basic course in printmaking. Content: Relief, Intaglio, Lithography, and Serigraphy. Prerequisite: ART 151.

§ART 280 GE: Communication Graphics (3:0:6)

This course is concerned with communication techniques that involve services and products. It also involves techniques associated with the visual communication processes. Prerequisite: ART 151 or 153.

ART 290 Special Topics (Semester hours arranged.)

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

§ART 302 GE: American Art (3:3:0)

This course is a study of North American art from the colonial period to the present and will encompass painting, sculpture, and architecture. Offered biennially or on the basis of student interest or need. Prerequisite: ART 101 or 202.

§ART 304 Art Gallery Management (3:3:0)

This course will explore the management of an art gallery from the perspectives of both the artist and of the gallery director. Prerequisites: Any two art courses at the 300 level or above.

§ART 305 GE: The Visual Arts Since 1945 (3:3:0)

This course is a descriptive investigation of the visual arts from the late 1940's to the present. The unique contributions of various artists are investigated, as well as major movements. Prerequisite: ART 101.

§ART 321 GE: Drawing II (3:0:6)

Emphasis is on the human figure, using various media and techniques. Prerequisite: ART 151.

§ART 354 GE: Ceramics II (3:0:6)

The basic focus of this course is wheel throwing, advanced hand building techniques, and glaze formulation. Prerequisite: ART 253.

§ART 355 GE: Ceramic Sculpture (3:0:6)

Various methods of ceramic sculpture are explored ranging from in-the-round to relief. Prerequisite: ART 253.

§ART 356 GE: Painting II (3:0:6)

Students are given the opportunity to work in greater depth in acrylics or oils to develop individual approaches, techniques, and forms of creative expression. Prerequisite: ART 254.

§ART 365 GE: Composition and Painting (3:1:5)

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

§ART 401 Composition and Painting (3:1:5)

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

§ART 405 Illustration (3:0:6)

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

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

This course is a historical survey of works by women artists in Europe and America from the Early Middle Ages to the present. Prerequisites: ART 101, 202.

ART 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis. Prerequisites: Any two courses in ART.

ART 486 Field Experience and Internships (Semester hours arranged.)

Prerequisite: 18 credit hours in ART.

§ART 496 Fine Arts Seminar (3:3:0)

A team-taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music, or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisites: ART 101 and one of 201, 202, or 205. Advanced standing of 90 credits and permission of instructor required. Also offered as MUS 496 and THTR 496.

Biochemistry

See Chemistry Department.

Biological Sciences

School of Arts and Sciences—The Faculty of Science

Professors: Brunkard, Haase, Huffman, Master, Pekala, Rao, Salch, Trainer (chair)

Associate Professor: Milewski, LaDuke

Assistant Professors: Aldras, Smith, Whitford, Wilson

Bachelor of Arts with a Biology major—63 semester hours in sciences, 33 semester hours in biology

Required major courses: BIOL 114, 115, 200, 331, 340 or 422, 495, 496 and a minimum of thirteen additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and two courses in mathematics or one course in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).

Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Bachelor of Science with a Biology major—74 semester hours

Required major courses: BIOL 114, 115, 200, 331, 340 or 422, 495, 496, and a minimum of twenty-one additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three courses in mathematics or two courses in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).

Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Bachelor of Science with a Biology major (Secondary Education) 66 semester hours

Required major courses: BIOL 114, 115, 200, 331, 340 or 422, 495 or 496, 499 and a minimum of fourteen additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three semester hours chosen from MATH 130, 131, 140, and three additional semester hours in mathematics or computer science (MATH 100, 101, or 105 not accepted).

Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321.

Required quality point average: 2.50 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Bachelor of Science with a Biology major—89 semester hours Concentration: Biotechnology

Required major courses: BIOL 114, 115, 200, 281, 330, 331, 340 or 422, 380, 430, 437, 439, 465, 477, 495, 496, and a minimum of eleven additional semester from BIOL 410, 411, 414, 419, 424, 429, 434, 449, 480.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317; three courses in MATH or two courses in MATH and one in CPSC (MATH 100, 101, or 105 not accepted) PHYS 131 and 132 or PHYS 161 and 162.

For university requirements see page 49.

Bachelor of Science with a Biology major—83 semester hours

Concentration: Laboratory Medicine

Required major courses: BIOL 111 and 112, 114, 115, 200 or 210, 280, 330, 331, 410, 416, 424, 434, 437, 495 or 496.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, 371; PHYS 131, 132; and two courses in mathematics or one course in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).

Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Coordinator: Professor Abdalla Aldras.

Bachelor of Science with a Biology major—63 semester hours

Concentration: Pre-Medicine

Required major courses: BIOL 114, 115, 200, 315, 330, 331, 340, 449, 495, 496, and a minimum of nine additional semester hours at or above the 300 level.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236 ; PHYS 131, 132 or PHYS 161, 162; 6 credits in mathematics from the following: MATH 110, 130, 135, 140, 141 (MATH 100, 101, 105, and 131 are not accepted); ENGL 210 or 204.

A minimum grade of C is required in all required and co-requisite courses. Required quality point average: 2.5 or greater in courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

This is a broad spectrum program designed to prepare the student for further training as medical professionals in the fields of Dentistry, Medicine, Optometry, Osteopathy, Podiatry, and Veterinary.

Coordinators: Professors Thomas LaDuke and John Smith.

Bachelor of Science with a Biology major—74 semester hours

Concentration: Pre-Physical Therapy

Required major courses: BIOL 111,112, 114, 115, 200, 331, 340, 410, 495, 496 and a minimum of eleven (11) additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three courses in Mathematics or two courses in Mathematics and one course in Computer Science (MATH 100, 101, or 105 not accepted).

Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Coordinator: Professor Richard Pekala.

Bachelor of Science with a Biotechnology major—89 semester hours

Required major courses: BIOL 114, 115, 200, 281, 330, 331, 340 or 422, 380, 430, 437,

439, 465, 477, 495, 496, and a minimum of eleven additional semester hours from BIOL 410, 411, 414, 419, 424, 429, 434, 449, 480.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317; three courses in MATH or two courses in MATH and one in CPSC (MATH 090, 100, 101, or 105 not accepted) PHYS 131 and 132 or PHYS 161 and 162.

Required quality point average: 2.50

For university requirements see page 49.

Coordinator: Professor Abdalla Aldras

Bachelor of Arts with an Environmental Studies major—37 semester hours

Required major courses: BIOL 104, 210, 484, 497, and six additional courses in a single discipline approved by the adviser (three must be numbered 300 or higher).

Corequisite courses: CHEM 108, CPSC 100 or 101, PHYS 117 or 118.

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

For university requirements see page 49.

Coordinator: Professor Richard Salch.

Bachelor of Science with an Environmental Studies major 57 semester hours

Required major courses: BIOL 104, 114, 115, 210, 484, 497, and six additional courses in a single discipline approved by the adviser (three must be numbered 300 or higher).

Corequisite courses: CHEM 121, 123, 124, 126, 373; CPSC 101; MATH 110 or 140; PHYS 117 or 118.

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

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

For university requirements see page 49.

Coordinator: Professor Richard Salch.

Bachelor of Science with a Marine Science major—63 semester hours

Required major courses: BIOL 114, 115, 288 (two semester hours), 460, 466, 467, 474, 498, and four courses in Marine Science at field station. No more than six credits of internship may be applied toward Biology requirements for this degree.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 235; GEOG 121; MATH 110; PHYS 131, 132. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

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

Coordinator: Professor Bruce Haase.

Bachelor of Science with a Medical Technology major—62 semester hours

Required major courses: BIOL 111 and 112; 114, 280, 330, 410, 416, 424, 434, 437.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317; (one of the

following courses, BIOL 312, 414, 419, 429, 435, 436, or 492 may be substituted for CHEM 315 and 317); PHYS 131, 132; and one course selected from CPSC 101, 111 or MATH 110, 130, 131, 140, 141. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Coordinator: Professor Abdulla Aldras.

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

Podiatric Medicine Transfer Program

Bachelor of Science with a Biology major—74 semester hours

Required major courses: BIOL 114, 115, 200, 315, 330, 331, 340, 449, 495, 496. An additional 9 credits to be transferred to ESU after the first year at the Temple University School of Podiatric Medicine (TUSPM) At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131,132 or PHYS 161,162; six credits in mathematics from the following: MATH 110, 130, 135, 140, 141 (MATH 100, 101, 105, and 131 are not accepted); ENGL 210 or 204.

A minimum grade of C is required in all required and co-requisite courses. Required quality point average: 2.5 or greater in courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.

For university requirements see page 49.

Coordinators: Professors Thomas LaDuke and John Smith.

This is a seven-year cooperative degree program with the Temple University School of Podiatric Medicine (TUSPM). Students accepted into the program will spend three academic years at East Stroudsburg University enrolled in the program leading to a bachelor's degree in Biology. Students will take the Medical College Admission Test (MCAT) during their junior year to determine eligibility for acceptance into medical school. Students accepted by TUSPM must complete all general education and biology degree requirements (except 9 SH biology electives) prior to transfer. At the end of the first year at TUSPM, the student will receive the Bachelor of Science degree from East Stroudsburg University. After successful completion of four years at Temple University School of Podiatric Medicine, the student will receive the Doctor of Podiatric Medicine degree.

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

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

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

This course is an introduction to a broad spectrum of biological topics and to the scientific

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

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

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

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

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

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

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

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

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

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

Introductory Biology II is a continuation of Introductory Biology I. Topics to be discussed include classification schemes, plant and animal anatomy, and systemic physiology. The course has been designed to provide the student with a sound foundation in Biology for advanced studies in this field. Prerequisite: BIOL 114.

BIOL 200 General Ecology (3:2:3)

This course is a study of interrelationships of plants and animals and their environments; the influences of heat, light, air, soil, water, and biotic factors; associations and successions; habitat types; populations, equilibrium, and predator-prey relationships. Prerequisites: BIOL 114, 115.

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

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

BIOL 220 Field Botany (3:2:3)

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

BIOL 221 Field Zoology (3:2:3)

This course is a general study of animal groups found in the region; field technique, trapping, tagging, and population studies; amphibia, reptiles, birds of prey, and mammals.

Class discussion of wildlife conservation and man's role in nature are included. Prerequisites: BIOL 114, 115.

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

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

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

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

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

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

BIOL 290 Special Topics (Semester hours arranged.)

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

BIOL 310 Histotechnology (3:2:3)

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

BIOL 311 Embryology (3:2:3)

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

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

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

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

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

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

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

natural variation and fossil species.

BIOL 320 Plant Morphology (3:2:3)

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

BIOL 321 Plant Pathology (3:2:3)

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

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

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

BIOL 325 Ornithology (4:3:3)

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

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

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

BIOL 330 Microbiology (4:3:3)

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

BIOL 331 Genetics (3:3:0)

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

BIOL 333 Invertebrate Zoology (3:2:3)

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

BIOL 340 Animal Physiology (4:3:3)

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

BIOL 350 Animal Behavior (3:3:0)

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

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

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

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

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

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

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

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

Students will be provided the opportunity to review, apply and coordinate skills learned in a variety of classes including experimental design, and data collection, organization, interpretation, analysis and presentation, to conducting a formal research project. Prerequisites: BIOL 114, 115; CPSC 101; MATH 110.

BIOL 401 Human Genetics (3:3:0)

This course relates principles of both transmission and molecular genetics to the human organism. Particular stress will be placed on inborn errors such as Down's Syndrome, Klinefelter's Syndrome, and Tay-Sach's Disease. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 331.

BIOL 407 Organic Evolution (3:3:0)

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

BIOL 409 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 data base searches, computer simulation and modeling, teaching of biology, reviewing available software and hardware, and interfacing of computers for data collecting in the laboratory. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: 16 undergraduate credits in biological sciences.

BIOL 410 Histology (4:3:3)

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

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

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

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

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

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

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

BIOL 414 Pathogenic Microbiology (3:3:0)

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

BIOL 415 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. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Offered on demand. Prerequisite: BIOL 111 or 112.

BIOL 416 Parasitology (3:2:3)

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

BIOL 417 Helminthology (3:2:3)

This is a laboratory and lecture course designed to acquaint the student with the parasitic helminths 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. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Offered on demand. Prerequisites: BIOL 114, 115.

BIOL 418 Cytology (3:3:0)

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

BIOL 419 Virology (3:3:0)

This course includes a study of the aspects of systematics, serology, immunology,

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

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

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

BIOL 421 Introductory Mycology (3:2:3)

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

BIOL 422 Plant Physiology (4:3:3)

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

BIOL 423 Plant Ecology (3:2:3)

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

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

This course will discuss the mechanisms contributing to disease and representative diseases affecting the various body systems. Readings, Kodachrome slides, and selected, preserved organs/tissues will be used to graphically illustrate the diseases. Prerequisites: BIOL 111, 112.

BIOL 425 Herpetology (3:2:3)

This course will review the biology of the vertebrate classes Amphibia and Reptilia from an organismic perspective. The topics of focus will include evolution, systematics, ecology, and behavior. Field research techniques will also be emphasized. Prerequisites: BIOL 114, 115.

BIOL 426 Wildlife Biology (3:2:3)

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

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

This program provides a graduate and undergraduate course 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. Since this course also is offered for graduate credit, a differentiation of requirements will be made. (Offered during Main Summer Session) Prerequisites: BIOL 114, 115.

BIOL 428 Zoogeography (3:3:0)

This course deals with the geographical distribution of animals. It explains the pattern of animal distribution and how and why that pattern was formed. The question of what present animal distributions indicate about past climates and environments is considered. A secondary area of examination is ecology of invasions which include present day migrations of animals from former to new habitats. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, one semester of geography.

BIOL 429 Human Physiology (3:3:0)

This course is an in-depth study of human physiology. Emphasis is placed on the function and interrelationship of the nervous, circulatory, respiratory, and excretory systems. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 111, 112; CHEM 312 is recommended.

BIOL 430 Applied Microbiology (4:3:3)

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

BIOL 431 Ecological Physiology (3:2:3)

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

BIOL 432 Virology Laboratory (1:0:3)

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

BIOL 434 Cell Physiology (4:3:3)

This course is a study of the cellular control and mechanism of DNA, RNA, and protein synthesis, active transport, cell growth and division, and cell metabolism. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: CHEM 315 or BIOL 538.

BIOL 435 Endocrinology (3:3:0)

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

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

Comparative anatomy and physiology of the vertebrate reproductive systems and the chemistry and action of hormones concerned with reproduction will be studied. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: BIOL 435.

BIOL 437 Immunology (3:3:0)

A course designed to develop a basic understanding of the immune system and its relationship to disease. Everyday immunologic problems, penicillin and ragweed allergy, myeloma and lymphomas, serologic tests involving antigen antibody reactions, immunization, etc. will be considered. Graduate students will be expected to write a paper and complete a project. Prerequisites: BIOL 111, 112.

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

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

BIOL 439 Molecular Biology (3:3:0)

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

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

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

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

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

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

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

BIOL 443 Stream Ecology (3:2:3)

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

BIOL 444 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. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

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

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

BIOL 446 Limnology (3:2:3)

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

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

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

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

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

BIOL 449 Cell Biology (3:3:0)

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

BIOL 450 Field Entomology (3:2:3)

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

BIOL 451 General Entomology (3:2:3)

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

BIOL 452 Insect Morphology (3:2:3)

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

BIOL 453 Insect Physiology (3:2:3)

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

BIOL 454 Medical Entomology (3:2:3)

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

BIOL 114 and 115 or 451.

BIOL 455 Economic Entomology (3:2:3)

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

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

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

BIOL 457 Behavioral Ecology (3:3:0)

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

BIOL 458 Wildlife Diseases (3:3:0)

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

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

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

BIOL 460 Marine Ecology (3:2:3)

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

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

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

BIOL 462 Mammalogy (4:3:3)

An overview of the vertebrate Class Mammalia, this course is designed to help the student develop a basic understanding of the anatomy, diversity, ecology, fossil record,

and geographical distributions of mammals. Students will be exposed to the modern and fossil mammals of the world—with a focus on the regional fauna—through a combination of classroom discussion, lecture, laboratory work with preserved specimens, field trips, and field work. Prerequisites: BIOL 114, 115, 200.

BIOL 463 Conservation Biology (4:3:2)

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

BIOL 464 Population Genetics (4:3:3)

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

BIOL 465 Immunology Laboratory (1:0:3)

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

BIOL 466 Marine Ichthyology (3:2:3)

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

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

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

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

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

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

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

BIOL 480 Research in Biotechnology (3:1:TBA)

This course introduces research methods in biotechnology including the scientific

method, literature search strategies, collection and analysis of data and scientific writing and presentation skills. With assistance from instructors, students choose an independent research project in the area of biotechnology. Prerequisites: Junior standing and permission of instructor.

BIOL 484 Environmental Studies Field Experience and Internship (Semester hours arranged.)

Environmental field experience is gained by on-the-job experience under direct professional supervision. Interns have served with state, local, federal, and overseas agencies. Opportunities continue to expand as present interns open new positions for future internships. Must be at least a second semester junior.

BIOL 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student.

BIOL 486 Field Experience and Internship (Semester hours arranged.)

BIOL 491 Behavioral Ecology Laboratory (1:0:3)

Laboratory topics will introduce students to experimental design, data acquisition, and behavioral observation techniques under laboratory and field conditions using a variety of invertebrate and vertebrate organisms and plants. Some Saturday laboratories will be required. Prerequisites: BIOL 114, 115, 457 or concurrent.

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

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

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

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

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

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

BIOL 495 Seminar I (1:1:0)

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

majors who are student teaching in the spring semester.

BIOL 496 Seminar II (1:1:0)

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

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

Selected environmental topics are analyzed by seminar participants. Both individual and group efforts are encouraged. Prerequisites: Environmental Studies Majors Only; permission of instructor.

BIOL 498 Research in Marine Science (3:0:0)

This course is an individualized investigation of a research area in Marine Science. The specific research problem is formulated by the student and carried out under the direction of the professor. Prerequisites: 12 credits in Marine and Aquatic Science and senior standing.

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

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

Biology—Marine Science Courses

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

BIOM 401 Biological Oceanography (3:2:3)

The interactions between biological communities and the oceanic environment are studied with emphasis on the distributions of coastal plankton, fishes, and benthic invertebrates. This course is periodically offered at the Marine Science Consortium field station at Wallops Island, Virginia, only during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisite: Two courses in Biology. Recommended: Introduction to Oceanography.

BIOM 402 Marine Evolutionary Ecology (3:2:3)

This course will study the ecological mechanisms underlying evolutionary processes. It is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. This course is periodically offered at the Marine Science Consortium field station in Wallops Island, Virginia, only during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Courses in genetics and ecology.

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

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

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

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

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

This course examines the interaction of biological, chemical, physical, geological, and ecological ocean processes as applied to coastal environments. Emphasis is placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal up welling and coastal fronts. Specific cases in coastal pollution will be examined from coastal environments around the U.S. Prerequisites: Two semesters of introductory biology, college algebra (or equivalent) and an ecology course. Recommended: statistics.

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

This course covers the wide array of methods of data collection, study designs, and analyses used in ecology. Emphasis is placed on understanding the strengths and weaknesses of different ecological methods and analyses in the study of coastal environments. Lecture, field work, and laboratory are integrated, and students gain practical computer experience by analyzing ecology data from the field using software that performs analyses introduced in lecture. Prerequisites: Two semesters of introductory biology, college algebra (or equivalent) and an ecology course. Recommended: statistics.

BIOM 460 Marine Ecology (3:2:3)

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

BIOM 461 Marine Botany (3:2:3)

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

BIOM 462 Marine Invertebrates (3:2:3)

The course is a study of the life history, habits, origin, development, physiology, anatomy, and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 463 Marine Biology Cruise (3:2:3)

This course consists of a three-week session involving detailed planning and preparations

for an oceanographic research cruise of approximately eight days, actual execution of the cruise plan aboard an ocean research vessel, and data-processing and reporting of the cruise results. Shipboard sampling techniques and instrumentation used by biological oceanographers are introduced. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 464 Developmental Biology of Marine Organisms (3:2:3)

This course deals with the principles of development and differentiation in marine organisms at the molecular and supramolecular levels of organization. The laboratory will include both descriptive and experimental embryology. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 465 Management of Wetland Wildlife (3:2:3)

This course deals with the ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 466 Marine Ichthyology (3:2:3)

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

BIOM 467 Marine Pollution Research Cruise (3:2:3)

Investigations are conducted before, during, and after a pollution episode; the fate and behavior (dispersion and degradation) of the pollutants are followed. Bioassays and other toxicity studies will also be conducted. Procedures, techniques, and equipment will be prepared and standardized prior to the cruise and a final project report prepared and submitted for the course grade. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 468 Marine Ornithology (3:2:3)

Ornithology at the Wallops Island station introduces the student to the avian fauna of the seacoast and at the same time enables comparison with inland species to be found near the laboratory. In addition to the field work providing visual and vocal identification, lecture material will include information on distribution behavior physiology and anatomy. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 469 Field Methods in Oceanography (3:2:3)

This course provides students with a general background for a working knowledge of investigative techniques that are used to study the physical, biological, geological, and chemical parameters of the marine environment. Students learn to appreciate the scope of field studies through active participation in group projects and individual research efforts; those projects

include planning and execution, analysis and interpretation of data, and presentation (written and verbal) of the results. This course is periodically offered at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 470 Marine Biology (3:2:3)

This course is a study of plant and animal life in the marine environment. Emphasis will be placed upon physical and chemical factors that affect the marine environment and the ways in which various organisms have become adapted for exploiting marine resources. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 471 Biology of 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. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Prerequisite: One year of biology (with laboratories).

BIOM 472 Coral Reef Ecology (3:2:3)

This course investigates coral reef structure, formation, types and the relationship of reef organisms to their environment. Emphasis will be given to species diversity/identification, symbiosis, and effects of temperature, salinity, light, nutrient concentration, current predation, and competition on the abundance and distribution on coral reef organisms. This course will be offered at the Marine Science Consortium at Wallops Island, Virginia, with a portion taught in Honduras. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisite: One year of biology (with laboratories).

BIOM 473 Marine Mammals of the Atlantic (3:2:3)

The distribution, population size, physiology, evolution, adaptation, and ecological relationships of marine mammals will be studied. Laboratory and field work will include an off-campus field trip to facilities studying marine mammals (Baltimore Aquarium and Woods Hole). This course will be offered at the Marine Science Consortium at Wallops Island, Virginia, during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: One year of biology (with laboratories).

BIOM 474 Introduction to Oceanography (3:2:3)

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

BIOM 475 Behavior of Marine Organisms (3:2:3)

Discussion and observations are conducted on the influences of external and internal factors on the regulation and coastal behavior of organisms living in the marine coastal environment. This course is periodically offered during the summer sessions at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 476 Marine Microbiology (3:2:3)

A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration and identification, with emphasis on marine bacteria. This course is periodically offered during summer sessions at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 478 Anatomy of Marine Chordates (3:2:3)

The basic structures of marine chordates will be studied by dissection in order to trace the important trends (and their functional significance) in the evolution of these structures within the various groups of marine chordates. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 479 Ecology of Marine Plankton (3:2:3)

A study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic population of various types of habitats in relation to primary and secondary productivity. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 480 Oceanography (3:2:3)

This course is an introduction to the physical, chemical, biological, and geological processes and interactions in the oceans. Topics include history of oceanography, charts and navigation, the physical and chemical properties of 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 seas, and marine ecology. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 481 Marine Micropaleontology (3:2:3)

This course is designed for students majoring in either biological or geological sciences. The course will deal with modern, living representatives of microorganisms important in the fossil record. Particular emphasis will be placed on the taxonomy, morphology, evolution, and ecologic affinities of the foraminifer (Sarcodina), but other groups, including the Radiolaria, Diatoms, and Ostracoda, will also be considered. Laboratory and field aspects of the course will include sample collection preparation and analysis. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 482 Field Studies in Oceanography (3:2:3)

This is a three week session involving detailed planning and preparation for an oceanographic research cruise of approximately one week duration, the actual research cruise on board the R. V. "Annandale," and the data-processing and final reporting of results. Demonstration of various shipboard sampling techniques and instrumentation will be given. Each cruise will deal with different aspects of marine science, i.e., 1) general oceanography, 2) marine biology, 3) marine geology, and 4) marine pollution and waste disposal. This course

is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 483 Wetland Ecology (3:2:3)

This structure and function of coastal wetland ecosystems are emphasized. The ecological impact of humans on these wetlands is interrelated with management strategies. Field exercises are stressed. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 487 Tropical Invertebrates (3:2:3)

Tropical Invertebrates emphasizes the systematics and ecology of tropical communities. A variety of collection and observation methods is used to sample tropical inshore and reef areas. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 488 Coastal Vegetation (3:2:3)

The vegetation under the marine influence is identified, and the factors limiting and controlling the distribution of this vegetation is determined. This course is periodically offered during the summer at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements is made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 489 Physiology of Marine Invertebrates (3:2:3)

Mechanisms and regulation of organ function in invertebrates with emphasis on homeostasis will be studied using live specimens from the marine environment. The unique adaptations of the marine invertebrates will be compared with general physiological principles. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements is made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

BIOM 490 Marine Aquaculture (3:2:3)

This course will include the theory and the practice of raising organisms for food and for the aquarium trade. Techniques of raising economically important organisms from the egg stage to marketable size and their food supplies will be studied. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during summer sessions. Prerequisites: Three courses in biology (minimum of nine total credits) with exception of laboratory courses only.

In addition to the courses listed previously, there are a number of courses offered by the Marine Science Consortium at Wallops Island, Virginia, which a student may take and apply toward the requirements in biology. Interested students should contact Dr. Bruce L. Haase for further information.

Chemistry

School of Arts and Sciences—The Faculty of Science

The Department of Chemistry is accredited by the **American Chemical Society**.

Professors: Bergo, Doherty, Erb (chair), Husic, Schramm

Associate Professors: Cady, Gold, Loffredo

Assistant Professor: Jones-Wilson, Kelly, Schaffer

Bachelor of Arts with a Chemistry major—30 semester hours

Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 353, 354, 371, 385, 495.

Corequisite courses: CPSC 101; MATH 140, 141; PHYS 161, 162 (or equivalent courses).

For university requirements see page 49.

Note: A 2.00 minimum quality point average in major courses is required for graduation.

All 300 and 400 level courses required for the major must be completed at ESU, with the exception of courses taken as part of the Pharmacy Transfer Program.

Bachelor of Science with a Chemistry major—51 semester hours

Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 353, 354, 371, 372, 385, 433, 441, 442, 460, 495, and six additional semester hours in 300 to 499 numbered courses.

Corequisite courses: CPSC 101; FLFR 116, or FLGR 116, or FLSP 116; MATH 140, 141; PHYS 161, 162.

For university requirements see page 49.

Note: A minimum quality point average of 2.00 in major courses is required for graduation. This degree program is approved by the Committee on Professional Training of the American Chemical Society. Graduates of this program with a minimum quality point average of 2.50 in major courses are eligible for certification by the society.

All 300 and 400 level courses required for the major must be completed at ESU.

Bachelor of Science with a Chemistry major (Secondary Education) 31 semester hours

Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 353, 354, 371, 385, 495, 499.

Corequisites: BIOL 114 and BIOL 115; CPSC 101; MATH 140, 141; PHYS 161, 162 (or equivalent courses).

Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321.

For university requirements see page 49.

The following are recommended courses: CHEM 315, 373, 405, 493; GEOG 120 or 121. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

All 300 and 400 level courses required for the major must be completed at ESU.

Bachelor of Science in Chemical Biotechnology major

Required major courses: BIOL 114, 281, 411 or 439/477; CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, 350, 352, 371, 385, 415, 417, 420, 495.

An addition three electives (minimum 8 credits) from CHEM 372, 418, 436, 461, 493, BIOL 330, 331, 380, 437, 465, including a laboratory component.

Corequisite courses: PHYS 131, 132 or PHYS 161, 162; a minimum of 2 of MATH 110, 140, 141; CPSC101

For university requirements see page 49.

Note: A minimum quality point average of 2.5 in chemistry courses is required for graduation. Students enrolling in this degree program are strongly encouraged to participate in undergraduate research or an internship opportunity.

All 300 and 400 level courses required for the major must be completed at ESU.

Chemistry Minor—23 semester hours

Required courses: CHEM 121, 123, 124, 126, (233, 234, 235, 236) or (353, 354), and seven semester hours from chemistry major courses.

Note: A minimum quality point average of 2.0 in chemistry courses is required. A student majoring in a program offered by the Department of Chemistry cannot qualify for this minor. The following are recommended courses: CHEM 315, 373, 405, 493 and GEOG 120 or 121.

All 300 and 400 level courses required for the minor must be completed at ESU.

Bachelor of Arts with a Biochemistry major—45 (46) semester hours

Required major courses: BIOL 114; a minimum of six semester hours from the following courses (at least one of which MUST have an accompanying laboratory) - 330, 331, 422, 434, 449; and an additional three semester hours in a course numbered 200-499; CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, (350, 352 or 352, 353), 371, 385, 412, 495.

Corequisite courses: MATH 140, and 110 or 141; PHYS 161, 162.

For university requirements see page 49.

Coordinator: Professor Diane Husic, Chemistry Department.

Note: A minimum quality point average of 2.00 in major is required for graduation.

All 300 and 400 level courses required for the major must be completed at ESU, with the exception of courses taken as part of the Pharmacy Transfer Program.

Pharmacy Transfer Program

Coordinator: Professor William M. Loffredo, Chemistry Department.

This is a rigorous 6 year program between ESU and a pharmacy school of choice. The pre-pharmacy student spends their first 2-3 years at ESU taking introductory courses primarily in math and science, to prepare them for their degree in pharmacy. The student applies to a pharmacy school as a transfer student. To complete the degree at the pharmacy school the student must satisfy the requirements stipulated by the pharmacy school to which they transferred. The specific courses taken at ESU depend on the student's choice of pharmacy school. The pre-pharmacy student receives a certificate from ESU.

CHEM 100 Chemical Problem Solving: (1:1:0)

This course is a review of the methods of obtaining and analyzing quantitative measurements with emphasis on the mass, energy, and chemical changes which occur during chemical reactions. It is intended primarily for students who require or desire additional work in solving chemical problems.

CHEM 101 GE: Modern Chemical Science (3:3:0)

This course develops concepts of modern chemistry as a natural consequence of scientific thought and advancement. The atom is followed from its creation to its chemical reactivities. Inorganic chemistry is the main emphasis. It is primarily intended for students who wish to

satisfy a general education requirement in science but is also an excellent preparatory course for General Chemistry I and General Chemistry II.

CHEM 104 GE: Chemistry for the Consumer (3:3:0)

This course is an introduction to the basic chemical principles which underlie the composition, applications, and safety of common consumer products and everyday materials. Among topics to be discussed are plastics, laundry products, personal-care products, fertilizers, pesticides, food additives, and electrochemical processes, and batteries.

CHEM 106 GE: Fingerprinting the Elements (3:3:0)

The periodic table will be used to introduce the descriptive chemistry of the elements. Periodic trends in chemical reactivity and physical properties provide the basis for predicting the inorganic behavior of an element. Computer software assignments are used to clarify periodic trends.

CHEM 108 GE: Environmental Chemistry (3:3:0)

This course is an introduction to basic chemical principles which are used as the basis for discussion of environmental issues. Among the topics included are air and water pollution, waste disposal, food additives, and pesticides.

CHEM 111 GE: Chemical Basis of Matter (3:3:0)

The fundamental concepts relating to matter, its properties, composition, structure, and reactions are presented. The student is introduced to the chemical elements, the periodic table, inorganic nomenclature, atomic theory and structure, chemical reactions and equilibria, solution chemistry, and nuclear chemistry. Applications to the health sciences of the principles presented will be emphasized. This course may be useful in preparation for CHEM 121. Some algebraic experience is desirable.

CHEM 115 GE: Chemistry, Molecules and Life (3:3:0)

This course introduces the student to the principles and concepts of general, organic and biological chemistry and their applications to health-related issues. Intermolecular forces, acid-base theory, chemical reaction and equilibrium, and structural properties are used to explain metabolism, function, and causes of physiological changes at the molecular level.

CHEM 117 GE: Chemical Basis of Life Laboratory (1:0:3)

This course is a compilation of laboratory experiences designed to introduce the student to basic experimental techniques and investigations in general, organic, and biological chemistry. Emphasis is given to the physical methods used to synthesize, purify, and identify various chemical compounds. Prerequisite: CHEM 212 or concurrent registration in CHEM 115.

CHEM 121 GE: General Chemistry I (3:3:0)

This course presents language, principles, and applications of chemistry at a level designed for students majoring in the sciences. Topics include measurement, periodicity, stoichiometry, thermochemistry, atomic and electronic structure, bonding, and states of matter. Prerequisite: Intermediate algebra. Concurrent registration in CHEM 123 is required.

CHEM 123 GE: General Chemistry I Laboratory (1:0:3)

This course offers students an opportunity to safely observe and measure chemical changes. Written work emphasizes data treatment and local interpretation. Principles include density, stoichiometry, atomic structure, and gas laws. Techniques include volumetric, gravimetric, and spectroscopic measurements. Concurrent registration in CHEM 121 is required.

CHEM 124 GE: General Chemistry II (3:3:0)

This course is a study of the concepts of equilibrium, thermodynamics, acid-base chemistry, kinetics, electrochemistry, and nuclear chemistry. Prerequisites: CHEM 121, 123. Concurrent registration in CHEM 126 required.

CHEM 126 GE: General Chemistry II Laboratory (1:0:3)

This course introduces students to more sophisticated measurement tools such as spectrophotometers, pH meters, precision thermometers, voltmeters, ammeters, and computers. Experiments focus on principles studies in CHEM 124. Prerequisites: CHEM

121, 123. Concurrent registration in CHEM 124 required.

CHEM 127 General Chemistry I Problem Solving (1:1:0)

This course will provide systematic, step-by-step approaches to problem solving in general chemistry, with emphasis on the factor label method as it is applied to stoichiometry, solution concentration terms, and thermochemistry. It is intended primarily for students who require or desire additional work in solving general chemistry problems. Concurrent registration in CHEM 121, General Chemistry I, is required.

CHEM 128 General Chemistry II Problem Solving (1:1:0)

This course is a continuation of CHEM 127, General Chemistry I Problem Solving. Concurrent registration in CHEM 124, General Chemistry II, is required. Prerequisites: CHEM 121, 123.

CHEM 212 GE: Chemical Basis of Life (3:3:0)

The fundamental concepts developed in CHEM 111 are applied to the study of organic molecules and functional groups and their importance to biochemical structures. The structure, properties, nomenclature, and reactions of the different classes of organic and biochemical compounds are discussed as well as isomerism and metabolism and their biochemical applications to the health sciences. Prerequisite: CHEM 111.

CHEM 233 Organic Chemistry I (3:3:0)

The structure, nomenclature, preparation, and reactions of organic compounds will be studied using modern theories and reaction mechanisms as unifying bases. Prerequisites: CHEM 124, 126, and 235 concurrent or completed or with permission of department.

CHEM 234 Organic Chemistry II (3:3:0)

This course is a continuation of CHEM 233, Organic Chemistry I. Prerequisites: CHEM 233, 236 concurrent or completed or with permission of department.

CHEM 235 Organic Chemistry I Lab (1:0:3)

A series of experiments designed to introduce the student to the techniques and equipment used in the preparation and characterization of organic compounds will be undertaken. Prerequisite: CHEM 233 concurrent or completed.

CHEM 236 Organic Chemistry II Lab (1:0:3)

This course is a continuation of CHEM 235, Organic Chemistry Lab. Prerequisites: CHEM 234 concurrent or completed and CHEM 235.

CHEM 237 Organic Chemistry I Problem Solving (1:1:0)

This course will present approaches to and the methods of problem solving in organic chemistry while utilizing the unifying theories of mechanism which are based upon classical and contemporary bond theories. It is intended primarily for students who require or desire additional work in solving organic chemistry problems. Concurrent registration in CHEM 233, Organic Chemistry I, is required.

CHEM 238 Organic Chemistry II Problem Solving (1:1:0)

This course is a continuation of CHEM 237, Organic Chemistry I Problem Solving. Concurrent registration in CHEM 234, Organic Chemistry II is required. Prerequisites: CHEM 233, 235.

CHEM 275 GE: Chemical Aspects of Drug and Alcohol Abuse (3:3:0)

This course is an introduction to the chemical aspects of alcohol and other drugs of abuse with emphasis on the pharmacological and physiological effects on the human organism. Prerequisite: CHEM 111 or 115 or 121.

CHEM 290 Special Topics (Semester hours arranged.)

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

CHEM 315 Biochemistry (3:3:0)

This course is an introduction to the chemistry of living systems. Topics discussed include the chemistry of aqueous solutions; pH and buffer systems; the structure, functions and interactions of biomolecules; theories of ligand binding catalysis; the chemical reactions and regulation of major metabolic pathways; and introductory bioenergetics. Prerequisites: CHEM 234, 236.

CHEM 317 Biochemistry Laboratory (1:0:3)

A series of experiments designed to introduce the techniques and instrumentation of biochemistry will be utilized in investigating biomolecules and biochemical processes. Statistical methods for data analysis and interpretation of data published in biochemical journals will be integral components of this course. Prerequisite: CHEM 315 concurrent or completed.

CHEM 350 Physical Biochemistry (3:3:0)

This course introduces physical theory and methodology as applied to studies of biomolecules and biochemical processes. Topics covered include the importance of electrostatic interactions in determining structure and function of biomolecules; processes of denaturation; thermodynamics and bioenergetics; kinetics; solution properties of macromolecules; membrane dynamics; and the theories of a variety of physical methods of analysis. Prerequisites: CHEM 315, 317; MATH 140; PHYS 162.

CHEM 352 Physical Biochemistry Laboratory (1:0:3)

Experiments to be performed will provide experience with advanced analytical and physical techniques used in the analysis of biomolecules and biochemical processes. Examples of techniques to be used include absorption spectroscopic analysis of structure and kinetics; centrifugation; electrophoresis; blotting; equilibrium dialysis; purification methods and affinity ligand chromatography; and computer assisted data analysis. Independent design of some experiments, critical evaluation, and statistical analysis of data are stressed. Prerequisite: CHEM 350 concurrent or completed or CHEM 353.

CHEM 353 Physical Chemistry I (4:3:3)

This course is an introduction to theoretical physical chemistry including classical thermodynamics, statistical thermodynamics, and equilibrium. The use of computer techniques in the solving of problems and the treatment of laboratory data is an integral part of the course. Prerequisites: CHEM 124, 126; PHYS 162; MATH 141; CPSC 101.

CHEM 354 Physical Chemistry II (4:3:3)

This course is a continuation of CHEM 353 with emphasis on the theory and applications of quantum mechanics to simple chemical systems, introduction to spectroscopy and statistical mechanics. Prerequisite: CHEM 353.

CHEM 371 Analytical Chemistry I: Quantitative (4:2:4)

This course is a study of the theories and methods of 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. Prerequisites: CHEM 124, 126.

CHEM 372 Analytical Chemistry II: Instrumental (4:2:4)

This course is a study of principles and applications of modern analytical methods with emphasis on physiochemical measurements. Topics include electrochemical, spectrochemical, chromatographic, and radiochemical methods. Prerequisites: CHEM 353, 371.

CHEM 373 Environmental Quality: The Chemical Approach (4:3:3)

This course deals with the chemical aspects of environmental quality. Emphasis is placed on the identification, chemical characterization, and controls of pollutants. Topics include air, water, pesticides, food additives, heavy metals, and solid waste. Prerequisites: CHEM 124, 126.

CHEM 385 Chemical Literature and Documentation (1:1:0)

This course is a study of the various classes of chemical literature, techniques of searching the literature, and the proper documentation of experimental observations and literature references. Prerequisites: CHEM 234, 236.

CHEM 402 Contemporary Topics in Sciences (3:3:0)

This course deals with the nature and theoretical bases of recent noteworthy advances in science. Interdisciplinary in design, the course draws its content from the various disciplines of natural science. Emphasis is placed upon topics being reported upon in professional journals. This course is also listed as PHYS 402. Prerequisites: CHEM 353 and 354 and permission of instructor.

CHEM 405 The Development of Modern Physical Science (3:3:0)

This course examines past works and philosophical thought of noted physical scientists. Emphasis is placed on the nature of scientific discovery and the processes of science. This course is also listed as PHYS 405. Prerequisites: PHYS 161 and 162 and permission of instructor.

CHEM 412 Contemporary Topics in Biochemistry (3:3:0)

Topics presented in this course will cover a variety of advanced areas of biochemistry. Typically in one semester, the course will focus either on enzymes and regulation and integration of metabolism, or nucleic acids and recombinant DNA technology. Current journal articles will be used to supplement the textbook and provide the basis for discussions. The choice of focus and inclusion of other special topics will be determined by the needs of the students enrolled. Prerequisites: CHEM 315, 317, and 350 or 353.

CHEM 415 Protein Chemistry(3:3:0)

Building upon principles in the introductory biochemistry course, this course will elaborate on protein structure and function, and cover theoretical and practical aspects related to the purification, quantification, characterization, and modification of proteins. Students will be introduced to the use of protein data banks, computer modeling and prediction of protein structure, and protein design. Prerequisites: CHEM 315; 317; and 350 or 353.

CHEM 417 Protein Chemistry Laboratory (1:0:3)

Designed to accompany CHEM 415, this course focuses on laboratory protocols for the purification, quantification, and analysis of protein structure function used in industry and research. Computer-assisted structure prediction and analysis will also be used. Prerequisites: CHEM 315; 317; 350 and 352 or 353. Concurrent registration in CHEM 415 is required.

CHEM 418 Molecular Toxicity (3:3:0)

This course introduces students to the fields of toxicity and risk assessment. Emphasis will be on the molecular basis of toxicity and the biochemical impact of exposure to toxic agents. Prerequisites: CHEM 234, 236, 315.

CHEM 420 Bioseparations (2:0:6)

This laboratory-intensive course focuses on methods used to isolate biological molecules and cellular structures. Theory, instrumentation and protocols of chromatography, dialysis, filtration, centrifugation, electrophoresis and cell sorting will be covered. Prerequisites: CHEM 315, 317.

CHEM 433 Organic Chemistry III (3:3:0)

A study of the theoretical and practical aspects of the reactions, mechanisms and stereochemistry of organic compounds. Prerequisites: CHEM 234, 236, 354.

CHEM 436 Medicinal Chemistry (3:3:0)

This course is a survey of the various classes of pharmacological agents being utilized in the treatment of various disorders. Included are considerations of mode of action, design and synthesis, and current efforts in the field of development of new drugs. Prerequisites: CHEM 234, 236, 353.

CHEM 441 Inorganic Chemistry I (3:3:0)

This course is a study of the periodic properties and descriptive chemistry of the chemical elements and their inorganic compounds, ionic solids, equilibria in aqueous and nonaqueous systems, and acid-base concepts. Prerequisites: CHEM 123, 124, and 353 (concurrent registration in CHEM 353 permitted).

CHEM 442 Inorganic Chemistry II (3:3:0)

This course is a continuation of CHEM 441 with emphasis on a study of the theories of bonding, structure, and reactivities of inorganic, coordination, and organometallic compounds. The magnetic and spectroscopic properties of coordination compounds and the descriptive chemistry of selected group elements will also be discussed. Prerequisites: CHEM 353, 441.

CHEM 452 Physical Chemistry III (3:3:0)

This course is a study of selected topics in theoretical chemistry including quantum mechanics, group theory and symmetry, and molecular orbital theory. The use of computer programs in the illustrations of chemical principles will be emphasized. Prerequisites: CHEM 353, 354.

CHEM 460 Advanced Chemistry Laboratory (2:0:6)

This course is designed to expose students to various experimental techniques needed to conduct chemical research. The course integrates synthesis, separation, purification, analysis, and characterization techniques. Instrumental techniques used include UV-VIS, FT-IR, FT-NMR, spectroscopy, HPLC, GC-MS & various optical methods used for characterizing organic and inorganic compounds. Prerequisites: CHEM 372, 433, 442 (or concurrent).

CHEM 461 Polymer Chemistry (3:3:0)

The basic concepts of polymer chemistry are introduced in this course. Topics included will be the mechanisms and kinetics of polymerization, the synthesis of polymers, and the relationships between molecular structure, conformation, and morphology of polymers and their chemical and physical properties. Prerequisites: CHEM 234, 236, 353.

CHEM 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student.

CHEM 486 Field Experience and Internships (Semester hours arranged.)

Prerequisites: CHEM 123, 124.

CHEM 493 Research in Chemistry (3:0:0)

This course is an experimental investigation selected by the student in consultation with a member of the faculty and carried out under the faculty member's guidance. Prerequisites: Senior standing and permission of the department.

CHEM 495 Chemistry Seminar (1:1:0)

This course is a series of lectures and discussions on chemical topics by faculty, visitors, and students; each registered student is required to give a seminar during the semester. Prerequisites: Permission of the department; CHEM 236, 385.

CHEM 499 Student Teaching Internships (1:0:TBA)

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

relationship between disciplinary subject matter and pedagogy.

Communication

School of Arts and Sciences—The Faculty of Arts and Letters

Bachelor of Science with a Communication major (Secondary Education)

36 semester hours

Required major courses: ENGL 231, 260, 261, 264, 265. One additional ENGL course at the 300 or 400 level and any advanced writing course.

Additional courses: CMST 163, 253, 499, MCOM 210, THTR 101. One of the following: CMST 126, 232, 333.

Corequisites: ENGL 162, 210, CMST 111.

Required Professional Education courses: MCOM 262, PSED 161, 242, 376, 420, 421, 430, 431, REED 321.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Coordinating Departments: Communication Studies, English and Secondary Education.

Communication Studies

School of Arts and Sciences—The Faculty of Arts and Letters

Professors: Ashcroft, Leland, Lippert, McKenzie, Warner (chair)

Associate Professors: Geiser-Getz, Godich, Yan

The Department of Communication Studies offers coursework and degree programs which focus on the history, theory, and critical evaluation of mediated communication, as well as the areas of broadcasting, applied speech performance, and rhetoric. The Department also offers a Communication major in Secondary Education, and a minor in Communication Studies is available to students majoring in other disciplines.

Bachelor of Arts with a Communication Studies major—36-39 semester hours

Students must complete the Core Curriculum and the specified courses within one of three different tracks.

Core Curriculum (18 semester hours): CMST 111, 126, 222, 310, 365, 495.

Track I. Speech Communication (18 semester hours): CMST 210 or 220, 232 or 253, 329; and nine semester hours chosen from the following: CMST 331, 333, 354, 363, 367, 415, 429, 465-H.

Track II. Media Studies (18 semester hours): CMST 136, 163, 367; and nine semester hours chosen from the following: CMST 267, 342, 348, 364, 370, 410.

Track III. Broadcasting (21 semester hours): CMST 219 (taken twice for a total of three semester hours), 229, 315, 410 or 440, 486; and six semester hours chosen from the following: CMST 337, 342, 348, 364, 410 or 440.

Residency Requirement: The student's final 18 credit hours in the major must be completed in residence.

For university requirements see page 49.

Communication Studies minor—21 semester hours.

Required courses: CMST 111, 126, 136 or 163, 210 or 220, 232 or 253; and six semester hours of 300-400 level CMST coursework.

‡CMST 111 GE: Speech Communication (3:3:0)

This course includes an introduction to the study and application of some principles of dyadic communication, small group interaction, and public speaking, in addition to listening skills. Attendance requirement will be enforced.

CMST 112 Voice and Diction (3:3:0)

This course emphasizes training students in maximally effective production and use of voice, articulation, and enunciation.

§CMST 126 GE: Introduction to Mass Media (3:3:0)

This course is a survey of the defining characteristics and histories of each of the media in mass communication. The focal point in each media is the relationship of the mass media to society.

§CMST 136 GE: Popular Culture and Communication (3:3:0)

This introductory course affords the student an opportunity to systematically examine popular culture: the cultural environment in which virtually all Americans have lived during the twentieth century. Emphasis is placed upon the study of popular artifacts, arts, and rituals as communicators of cultural belief.

CMST 150 WS: Introduction to Women's Studies (3:3:0)

This course will provide an overview of the history, theories, and methodological approaches of Women's Studies; examine the implications of our cultural understandings of women, gender, race, and class; raise questions about the goals and direction of social

§Fine Arts

‡Performing Arts

change; and review the impact of Women's Studies on traditional disciplines and knowledge. Prerequisite: ENGL 103 (may be taken concurrently).

§CMST 163 GE: Introduction to Film Study (3:3:0)

This course is designed to provide the students with an understanding of the elements necessary for film analysis toward a development of an appreciation for film as art. Representative films are screened in order to study the impact of the art form on modern society and on the individual.

***CMST 210 GE: Interpersonal and Small Group Communication (3:3:0)**

This course introduces the processes and functions of communication in two-person, and small group contexts. Emphasis is placed on helping the student increase competence as a communicator in these settings. Various concepts of communication behavior skills are applied in practice. Task force group work is emphasized. Attendance requirement will be enforced. Prerequisite: CMST 111.

CMST 219 Radio Practicum (1.5:0:3)

This course introduces students to basic operations of a radio station. Students will learn practical skills in policies, strategies, and broadcasting techniques of radio stations. The course may be repeated for a maximum of 3 credits. Pass/Fail course.

***CMST 220 GE: WS: Gender Differences and Human Communication (3:3:0)**

This course is designed to examine the ways in which women and men communicate differently in interpersonal, work, and family settings and to discuss ways in which both men and women can improve communication and reduce conflict. Attendance requirement will be enforced. Prerequisite: CMST 111.

CMST 222 The Dynamics of Human Interpretation (3:3:0)

This course is an introduction to the process of interpretation as it relates to an overall understanding of the various forms of communication. Emphasis is placed upon the nature of meaning and language, the concept of text, and the assessment of the communicative act through various methods of criticism.

CMST 229 Broadcast Journalism (3:3:0)

Radio and television are studied as media for news and information. Included are basic principles of newscasting, on-the-spot coverage, editing, writing, and delivery of news; use of wire copy; news policy and censorship codes; and theory and practice in station news operations. Prerequisite: CMST 126.

***CMST 232 GE: Oral Interpretation (3:3:0)**

This course increases understanding and appreciation of literature through development of skills in reading aloud. The course emphasizes selection, adaptation, and preparation of literature for personal enjoyment and public presentation. The basic course in oral interpretation differs from the advanced course in the difficulty of the literature undertaken for public presentation. Attendance requirement will be enforced.

***CMST 253 GE: Public Speaking (3:3:0)**

This course deals with instruction and practice in selecting, analyzing, arranging, and delivering material for different types of public speeches; consideration of various methods of appeal, rhetorical devices, selected speeches, audience analysis and principles of criticism. Attendance requirement will be enforced.

§CMST 267 GE: Art and History of the Film (3:3:0)

This course studies the historical and aesthetic developments of the cinema, emphasizing the aesthetic aspects of film in an attempt to develop critical standards through surveying the methods and problems of film. Narrative, nonnarrative, fictional, and documentary films are screened and discussed. Prerequisite: CMST 163.

CMST 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students, or are offered

on a trial basis in order to determine the demand for and value of introducing them as a part of the University curriculum.

CMST 310 Intercultural Communication (3:3:0)

Intercultural Communication is communication between persons who share different patterns of thoughts (attitudes, beliefs, values, and opinions) and behaviors. This course will deal with communication between men and women, black and white, young and old, straights and gays, students and teachers, and other subcultures in conflict. Prerequisite: CMST 111 or 126.

CMST 315 Voice for Broadcasting (3:3:0)

This course reviews the variables of the voice and their development as they pertain to the medium of radio and television. Students are given the opportunity to study and practice projecting their personalities through the medium of their respective voices as well as an opportunity to develop their vocal skills for broadcasting news, sports, interviewing, and educational programming. Prerequisites: CMST 111, 229.

***CMST 329 GE: Rhetorical Perspectives (3:3:0)**

This course is designed to provide the student with a general background in the area of persuasion and rhetorical theory. The course views rhetorical theory from a historical perspective and focuses on the uses of rhetoric in different oratorical situations. Attendance requirement will be enforced. Prerequisite: CMST 111.

***CMST 331 GE: Advanced Public Speaking (3:3:0)**

Advanced Public Speaking builds upon a student's general knowledge of communication gained in Public Speaking. The course enables a student to gain more experience in composing, delivering, and criticizing public speeches. Students will refine techniques in their delivery in various modes of public speaking. Attendance requirement will be enforced. Prerequisite: CMST 253.

***CMST 333 GE: Argumentation and Persuasion (3:3:0)**

This course studies the ways beliefs are changed or instilled in an audience as a result of a message's argumentative or persuasive qualities. The principal mode of message studied is that of the public speech, but other messages will be examined critically to determine how those messages function argumentatively and persuasively. Attendance requirement will be enforced. Prerequisite: CMST 253.

CMST 337 Broadcast Management (3:3:0)

This course deals with the organization and management of radio and television stations: personnel, programming formats, sales, audience analysis, social and governmental responsibility. Prerequisite: CMST 126.

CMST 342 Popular Music as Cultural Text (3:3:0)

This course will examine the importance of contemporary American popular music as a communicative medium and signifying practice which can affect cultural and subcultural identity. Prerequisite: CMST 136.

§CMST 348 GE: Media Criticism (3:3:0)

This course develops a variety of methods for analyzing both the functions and the products of mass media. After examining the cultural contexts in which the media operate, the course will establish important critical methods and offer opportunities to apply these methods in critical practice. Prerequisite: CMST 126.

***CMST 354 GE: Advanced Oral Interpretation (3:3:0)**

This course builds upon the experiences gained in Oral Interpretation but explores literature of greater complexity and difficulty. Opportunity is provided for the student to work in concert with other students in reading literature aloud and projecting its essence to an audience through controlled gesture and voice. Attendance requirement will be enforced. Prerequisite: CMST 232.

CMST 363 Psychology of Speech (3:3:0)

§Fine Arts

*Performing Arts

This course is a study of the secondary variables that influence communicational interaction. Emphasis is placed upon developing a concept of communicational context, situation, and circumstance, as well as developing skills of interpreting the unspoken messages which underlie communicational transactions. Prerequisite: CMST 210.

§CMST 364 GE: Studies in Television Genre (3:3:0)

This course examines a variety of television genres, allowing the student to develop an understanding of the nature of American formulaic television through critical analysis of programming. Prerequisite: CMST 136.

CMST 365 Communication Research (3:3:0)

This course will familiarize the student with the vast array of methods employed in the field of mass communication research and to provide him/her with a basic fluency in each of these methods. Prerequisite: CMST 111 or CMST 126.

CMST 367 Advertising and Propaganda (3:3:0)

This course will provide an introduction to the special type of persuasive communication that characterizes both advertising and other forms of propaganda. Advertising, other forms of sociological propaganda, and political propaganda will be studied in terms of their relation to society, their techniques, and the ethical issues that they raise. Prerequisite: CMST 126.

§CMST 370 GE: Film Genres (3:3:0)

These courses will analyze significant films of either one or two genres in an attempt to define the characteristics of each genre and understand their cultural meaning. Readings will focus on the genres' historical development with emphasis on their relation to the social currents of the times. Representative films will be screened. Selected genres will vary with each offering of the course. Genres studies will include: the comedy film, the science fiction film, the musical film, the documentary film, the film noir, and the horror film. Prerequisite: CMST 163.

CMST 410 Comparative Media (3:3:0)

This course will expose students to media from around the world. Students will learn how to compare media content, formats, systems, and ownership structures in an effort to better understand underlying assumptions that help shape our perceptions of the world. Prerequisites: CMST 126, 310.

CMST 415 Genres of Rhetoric (3:3:0)

This course will examine one or two rhetorical genres to define the characteristics of each and understand its nature, meaning, and influence within a particular cultural movement. Students will apply classical and contemporary rhetorical theories to genres such as presidential, war, feminist, and environmental rhetoric. Representative examples of speeches, letters, essays, advertisements, and demonstrations will be analyzed. Prerequisites: CMST 111, 329.

CMST 429 Criticism of Rhetoric and Public Address (3:3:0)

This course is designed to develop and enhance the student's critical response to rhetorical discourse in the area of public address. The course includes a survey of rhetorical theory and opportunity to evaluate critically examples of rhetorical discourse from these various theoretical points of view. Prerequisites: CMST 111, 329.

CMST 440 Ethical and Legal Issues in Broadcasting (3:3:0)

This course will cover ethical and legal issues that confront broadcasters in their daily routine. Topics include programming decisions, FCC regulation, community standards, personnel management and precedent-setting court cases. Prerequisites: CMST 126 or 229; PHIL 110 or 231.

CMST 465-H Scapegoats and Witchhunts (3:3:0)

This course is an interdisciplinary seminar which explores the phenomena of cultural scapegoating and witchhunting. The primary perspectives will be rhetorical, historical, and psychological. By focusing on various targeted individuals and groups, past and present, the

seminar will culminate in a synthesized view based on the instructors' various disciplines. Prerequisite: Junior standing in Honors Program or permission of instructor and Honors Program Director.

CMST 466-H Engendering Communication: Shaping Our Society and Selves (3:3:0)

Gendered identification shapes our sense of self, the way we communicate, the way we are perceived by others, and the manner in which we act in the world. Through a variety of readings, this seminar will explore the nature and implications of gender and the way it shapes our interactive lives. This course is designed as an interdisciplinary Honors Junior-level seminar. Prerequisite: Junior standing in Honors Program or permission of instructor and Honors Program Director.

CMST 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis. Open to a limited number of students who are juniors and seniors or who have completed 12 credit hours in Communication Studies and who receive departmental approval. A student engaging in Independent Study will complete a minimum of five (5) hours per credit of exclusive conference time with the faculty member in charge of the Independent Study relative to the design, consultation, and evaluation of the study. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of a willingness to meet the commitments of the discipline.

CMST 486 Field Experience and Internship (Semester hours arranged.)

Field experience gained through placement in a practical on-the-job situation under professional supervision. Credits from an internship cannot be applied to the elective requirements of the department's degree programs. Prerequisite: completion of all basic courses required in the major. (Pass/Fail course).

CMST 495 Seminar in Communication Studies (3:3:0)

The course consists of discussion and research of selected topics in communication theory, criticism, and application. It is designed to further those research methods characteristic of professional competence in the field of Communication Studies. Prerequisite: Senior class standing.

CMST 498 WS: Seminar in Women's Studies (3:3:0)

This course is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.

CMST 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy. Prerequisite: Qualification to student teach. Concurrent registration in PSED 430 or 431 required.

Computer Science

School of Arts and Sciences—The Faculty of Science

Professors: Amori (chair), Friedman, R. Prince

Associate Professors: Cole, Kimm, McDonald, Williams

Assistant Professor: Emert

Bachelor of Science with a Computer Science major—46 semester hours

Required major courses: CPSC 111, 141, 151, 232, 240, 251, 321, 330, 486; fifteen semester hours of Computer Science electives numbered over 200 with at most six hours numbered 200-299.

Mathematics corequisite courses: MATH 140, 141, 220, 311, 320.

Distributive corequisite courses: ENGL 204; CMST 111; and one year of science courses that include laboratories: BIOL 114, 115, or CHEM 121, 123, 124, 126, or PHYS 161, 162.

Suggested four-year schedule of required courses

Year 1: Fall CPSC 111, MATH 140; Spring CPSC 141, 151, MATH 141

Year 2: Fall CPSC 232, 251, MATH 220, CMST 111, Science Sequence; Spring CPSC 240, MATH 320 or 311, ENGL 204, Science Sequence

Year 3: Fall CPSC 321 or 330, elective, MATH 320 or 311; Spring CPSC 321 or 330, elective(s)

Year 4: Fall CPSC elective(s); Spring CPSC 486, elective(s)

For university requirements see page 49.

Notes:

1. All CPSC and MATH courses used to meet the requirements in the major must be completed with a grade of A, B, or C.
2. Students who have an interest in one of the following areas are strongly advised to include the listed courses in their program of studies:
 - Scientific Computing - CHEM 121, 123, 124, 126; PHYS 161, 162.
 - Business and Economics - ECON 111, 112, and Accounting courses.
 - Graduate Studies - MATH 421, 440.
3. Students transferring into Computer Science, whether from off campus or on campus, must meet departmental admissions criteria. The criteria may be obtained from the department chair. Also, there is a maximum transfer of twelve (12) semester hours of CPSC courses into the major (at most [3] three semester hours of courses numbered from 300 to 499).

This degree program closely follows the professional preparation recommendations of the ACM (Association for Computing Machinery). Some recent career placements have been as software developers for major computer manufacturers (e.g., IBM, UNISYS, AT&T), computer science organizations, the defense industry, and software houses, among others. Admission standards are high, and extensive class work, laboratory and project involvement, motivation and commitment are required for successful development as Computer Science problem solvers. In recent years, the department has received more than \$4.3 million in research grants from outside sources. This has provided a very rich laboratory environment as well as research opportunities for select undergraduates.

Computer Science Applications Minor—20 semester hours

Required concentration courses: CPSC 111, 141, 151, and three additional courses from among the following: either CPSC 100 or 101, but not both; CPSC 120; either CPSC 200 or 201, but not both; any CPSC courses numbered 210 or higher; ECON 332, 415; EMGT 451; HRTM 351; MATH 311, 312, 325, 383, 384, 470; MCOM 470, 475; PHYS 111; MSES 346.

CPSC 100 GE: Personal Computers and Their Uses (3:3:0)

This course is an introduction to personal computers (PCs) for non-science majors. It conveys a general understanding of how PCs function, and of how businesses and individuals use PCs to manage information. The course also teaches the use of standard PC software, including an operating system, a word processing program, a drawing package, a spreadsheet, and a data manager. Students may receive credit for either CPSC 100 or CPSC 101, but not both.

CPSC 101 GE: Personal Computers and Their Uses in the Sciences (3:3:0)

This course, which is similar in content to CPSC 100, emphasizes the use of personal computers to solve real world engineering and scientific problems. Topics particular to CPSC 101 include statistical analysis packages, computer-controlled scientific instrumentation, and very high performance computing. Students may receive credit for either CPSC 100 or CPSC 101, but not both.

CPSC 110 GE: Excursions in Computer Programming (3:3:0)

This course is intended to give the student with no programming experience an introduction to algorithmic methods and can be used as preparatory to CPSC 111. The principles of algorithm and computer program design are presented using simple programming languages, such as Basic, Pseudocode or Logo. Topics discussed include blocks, conditional statements, loops, subprograms, libraries of subprograms and modular design. This course is not open to students with credit for CPSC 111 or above.

CPSC 111 GE: Introduction to Computer Programming and Problem Solving (4:4:0)

This course, a first course in computer science, is intended mainly for students who are either majoring or minoring in computer science. It teaches algorithmic problem solving, emphasizing the use of top-down program development to design and implement programs in the C++ programming language. No prior familiarity with C++ or computer programming is assumed.

CPSC 141 GE: Introduction to Computer Organization (3:3:0)

This course presents the organization and operation of the classic, single-processor digital computer. Topics include the central processing unit, primary and secondary memory, common peripheral devices, and computer-usable communications hardware. Also featured is an overview of parallel architectures. Prerequisite: CPSC 111.

CPSC 151 GE: Linear Data Structures and Elementary**Algorithm Analysis (4:4:0)**

This course discusses the implementation and use of common one-dimensional data structures, including typed files, sets, strings, lists, queues, and stacks. Array-based and pointer-based implementations for these structures are developed, together with iterative and recursive algorithms for structure access and manipulation. Other topics covered include the concept of an abstract data type, searching and sorting, and an introduction to algorithm analysis. Prerequisite: CPSC 111.

CPSC 200 GE: Advanced Personal Computers and Their Uses (3:3:0)

This course builds on CPSC 100. Advanced topics in word processing and spreadsheets will be covered. Integration of databases and spreadsheets as well as programming in an appropriate language will be studied. Students will learn how to use operating system commands and will write batch files. Prerequisite: CPSC 100 or 101.

CPSC 201 GE: Advanced Personal Computers and Their Uses in the Sciences (3:3:0)

This course builds on the content of CPSC 101. Specific topics of interest are advanced uses of word processors, statistics in spreadsheets, integration of databases and spreadsheets,

database reports and macros, an overview of programming, drawing packages, file handling, and additional topics in scientific instrumentation. Prerequisite: CPSC 101.

CPSC 211 Scientific Computing with Fortran (3:3:0)

Scientific computing uses FORTRAN as a vehicle for numerical solutions to applied mathematical problems. Some techniques include polynomial curve fitting, roots of transcendental equations, numerical integration and differentiation, simulations, initial value and boundary value problems in differential equations, and simultaneous algebraic and differential equations. Corequisite: MATH 141. This course cannot be counted toward the elective requirements for computer science majors. This course is usually offered in alternate years.

CPSC 232 Introduction to Assembler Programming (3:3:0)

This course is an introduction to machine language and assembly language programming. Concepts discussed include techniques for encoding data as numbers, instruction set design, and the IEEE floating point standard. Assignments, which reinforce ideas covered in CPSC 141, teach assembly language programming techniques and allow students to practice assembler programming. This course is usually offered in the Fall. Prerequisites: CPSC 141, 151.

CPSC 234 Object Oriented Programming with C++ (3:3:0)

This course is designed to teach the students how to effectively write programs using the techniques of Object Oriented Programming (OOP) rather than the standard functional programming techniques. It also teaches the student how to program using one of the most widely used and effective OOP programming languages, C++. Students will learn how to build and use objects in the design of effective and efficient programs. Prerequisite: CPSC 111.

CPSC 236 Programming Using Visual Basic (3:3:0)

This course teaches students how to design and rapidly build applications using the very popular and widely used programming language, Visual Basic. It will stress how to effectively use Visual Basic to take advantage of existing and tested objects and programs such as Microsoft Access and Excel, so as to reduce program development time and provide the user familiar graphical interfaces and functionality. Prerequisites: CPSC 111, CPSC 151.

CPSC 240 Operating Systems and Computer Architecture (3:3:0)

This course is an introduction to operating systems principles and operation. Topics will include the function and operation of the major areas of the operating system such as user interfaces, process control, primary and secondary memory management, I/O controls, concurrent processes and security issues. This course is usually offering in the Spring. Prerequisite: CPSC 232.

CPSC 251 Non-Linear Data Structures (4:4:0)

This course discusses the implementation and use of common non-linear data structures, including random access files, sparse arrays, trees, and graphs. Algorithms for accessing and updating structures are presented and analyzed. Topics covered include hashing, sorting and searching, and a selection of standard graph algorithms. Prerequisites: CPSC 111, 151.

CPSC 290 Special Topics (Semester hours arranged.)

This course is designed to meet specific needs of groups of students or courses to be offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

CPSC 320 Topics in Computer Science (3:3:0)

This course focuses on special topics in computing selected from such areas as compiler construction, formal languages, information retrieval, graphics, artificial intelligence. This may be taken more than once, with permission in advance. Prerequisites: CPSC 141, 251.

CPSC 321 Issues in the Practice of Computer Science (3:3:0)

This course examines concerns relating to the practice of computer science. Topics

considered include uses of computers in professional environments, an introduction to software development practices, ethical and legal issues in computer science, and opportunities for continued professional development. Prerequisites: CPSC 111, 141, 151, 232, 251.

CPSC 325 Fundamentals of Security Engineering I (3:3:0)

This course provides a comprehensive introduction to security engineering concepts and technologies. The core technologies of access control, cryptography, trusted computing bases, digital signatures, authentication, network firewalls, and secure network architecture are explained in detail. Legal issues, security policy, risk management, certification and accreditation are covered in their supporting roles. Case studies reinforce the lessons learned. Pre-requisites: CPSC 240, 251, Math 220.

CPSC 330 Programming Languages (4:4:0)

This course discusses the characteristics of programming languages, and surveys the features, strengths, and limitations of specific languages. Programming practice is provided in languages that emphasize diverse approaches to problem solving: e.g., Scheme, Prolog and a block-structured language. Prerequisites: CPSC 111, 141, 151, 251.

CPSC 335 Building Graphical User Interfaces (GUIs) (3:3:0)

This course teaches students to use Object-Oriented Design techniques to efficiently build effective Graphical User Interfaces (GUIs) for applications software. It teaches the student how to use two of the most popular tools, Visual C++ and Visual Basic, and existing class libraries to rapidly build and maintain GUIs. Students will be required to demonstrate that they have learned how to build a GUI by completing a final class project. Prerequisite: CPSC 234 and 251.

CPSC 421 Computer Graphics (3:3:0)

This course is an introduction to computer graphics. Basic principles for design, use, understanding of graphic systems will be studied. Algorithms for creating and manipulating graphic displays and a standard programming language for their implementation will be presented. There will be programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251, MATH 320.

CPSC 425 Expert Systems (3:3:0)

This course is an introduction to knowledge based systems. Basic concepts, characteristics, architectures, and tools will be studied. Major paradigms for synthesis and analysis class systems, and exact and inexact reasoning systems will be discussed. Computational and knowledge engineering issues will be treated by case studies, and there will be programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251, 330.

CPSC 428 Artificial Intelligence and Heuristic Programming (3:3:0)

A study of symbolic processing and intelligent applications; major models, state-space, problem-subproblem, automated deduction will be applied to solve problems in heuristic programming and artificial intelligence. This course is usually offered in alternate years. Prerequisites: CPSC 111 and 251.

CPSC 429 Machine Learning (3:3:0)

This course is an introduction to techniques which enable software to improve its performance over time. History and classic experiments will be presented. Programs will be studied which perform rote learning, learn by being told, learn by analogy, learn from examples (induction), and learn by observation and discovery. There will be some programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251; CPSC 428 is recommended.

CPSC 430 Software Engineering (3:3:0)

This course is a study of the principles of software engineering and various programming methodologies as applied to the development of large, complex software systems. Top-down, structured design and programming will be emphasized. There will be practice in the

construction of a large software system. This course is usually offered in the Fall. Prerequisites: MATH 311; CPSC 111, 251, 330.

CPSC 432 Natural Language Processing (3:3:0)

This course is an introduction to natural language processing in Computer Science. There will be a review of elementary text, tree, and graph processing and an introduction to syntactic and semantic processing. Syntax: Backus-Naur grammars, sentence generation, recognition, augmented transition networks, parsing strategies. Semantics: case grammar theory, frame theory. There will be case studies of current systems as well as programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 141, 251, 330.

CPSC 433 Compiler Construction (3:3:0)

This course introduces the student to the methods and techniques involved in translating high level languages such as Ada and C into executable machine code. Topics include study of lexical scanning, parsing, symbol table construction, object code generation, and optimization. The bulk of the student activity is spent writing a compiler for a substantial subset of the Ada or C language. This course is usually offered in alternate years. Prerequisites: CPSC 111, 232, 240, 251.

CPSC 444 Realtime Systems (3:3:0)

This course is an introduction to the problems, concepts and techniques involved in computer systems which must monitor and control external devices or events. This includes techniques and hardware for data collection and control functions. Applications discussed will include microprocessor controlled intelligent devices and process control. This course is usually offered in alternate years. Prerequisites: MATH 141; CPSC 111, 141, 232, 240.

CPSC 445 Networking and Data Communication (3:3:0)

This course gives students a foundation in the study of data communications and computer networking. Topics covered will include basic data communications, Open Systems Interconnect (OSI) Model, Local Area Networks (LAN), and common communications standards. This course is usually offered in alternate years. Prerequisites: CPSC 111, 141, 232, 240.

CPSC 450 Algorithmic Graph Theory (3:3:0)

This course is an algorithmic approach to the mathematical theory of graphs and their applications. Path problems, covers, network flows and other problems will be formulated in graph theoretical terms and solutions will be programmed. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251.

CPSC 453 Database Systems (3:3:0)

This course is an introduction to the management of large volumes of interrelated data through integrated database management software. Topics discussed will include relationships between data items, effect of redundancy, and database design. Representative examples of the relational and network approaches to database management will be examined. Prerequisites: CPSC 111, 251. Corequisites: CPSC 232, 240.

CPSC 460 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 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The

proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five hours of time per credit hour upon request of the student.

CPSC 486 Computer Science Internship (Semester hours arranged.)

This course consists of in-depth involvement in ongoing programming projects under direct professional supervision. Prerequisites: CPSC 111, 141, 151, 232, 240, 251, 321, 330.

Criminal Justice Administration

School of Arts and Sciences—The Faculty of Social Sciences

Criminal Justice Administration concentration—24 semester hours

Required concentration courses: SOC 341, 342, 486;

SOCJ 150, 250 or 352, 350.

Electives: Additional semester hours selected from CHEM 275; FLSP 234; PHYS 251, 252, 253; SOC 441; SOCJ 151, 251, 252, 253, 351; PSY 271.

Transfer Policy:

1. No upper level (300 and 400 level) courses will be accepted from community or junior colleges for the CJA Concentration.
2. For CJA concentration—a minimum of 15 credits must be taken at East Stroudsburg University, and 300 and 400 level courses from four-year colleges are accepted only with permission of the department.

Early Childhood and Elementary Education

School of Professional Studies—The Faculty of Education

Professors: Kelberman, Pinciotti (chair), Stish

Associate Professors: Bray, Kellow, Kramer, LePage, Puskar, Walker, Wilson

Assistant Professors: Benson, Brown, Harlan, Rogers, Vagliardo

Bachelor of Science with an Early Childhood Education major—62 semester hours

Required major courses: ECED 162, 163, 430, 464, 465, 466, 489, 495; ELED 132, 426; MSES 242; REED 211, 212.

Corequisite courses: 15 semester hours selecting one of the following concentrations: Early Intervention Concentration: SPPA 101; SPED 214 HLTH 240; ELED 356; Elective by advisement. Administration Concentration: EMGT 224; PSY 320; SOCW 326; SOC 336; ELED 356. Curriculum Concentration: 15 semester hours may be taken from any curriculum area identified in the ECED/ELED Area of Concentration Booklet or 15 semester hours of a combination of ELED methods courses with approval of academic advisor.

Required professional education courses: PSED 161, 242; SPED 105; MCOM 262, 265.

All students are required to maintain a cumulative and major average of 2.75 or as specified in PA law, Chapter 354, whichever is higher, to remain in the program and/or to take teacher education classes.

Note: Transfer credits will be evaluated by the department chair for equivalent University courses.

Graduates of this degree program will be certified to teach in pre-school to grade three in the Commonwealth of Pennsylvania.

Majors in Early Childhood should meet regularly with their academic advisers so that they are oriented to their major program.

The Commonwealth of PA has established new requirements for all candidates in teacher preparation programs. Refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Department Entrance Competency Examination

1. All incoming Early Childhood students (freshmen, transfer, certification, etc.) must satisfactorily pass PRAXIS I Professional Skills Test and Elementary School Content Knowledge during their first semester on campus. All students must be proficient in reading, writing, and computing as evaluated by the departmental competency exams before they are eligible for departmental screening.
2. Upon successful completion of the exams and additional department requirements, the student will be considered for departmental screening. Students must be screened into the department before their second Professional Field Experience.

Bachelor of Science with an Elementary Education major 62 semester hours

See Elementary Education

Dual or Multiple Certification

Opportunities for dual or multiple certification are available in early childhood, elementary, secondary, or special education. Careful advisement should be obtained from the department chair or academic adviser.

Student Professional Program (ELED 497, 498)

Designed as another route to teacher certification, the program offers a full year of field experience in Early Childhood settings. Student professionals in the program are assigned to schools as full-time interns and, in addition, participate in group seminars, field trips, and a program of various assignments planned in cooperation with the program coordinator. Prerequisites: Completion of General Education requirements, completion of all methods courses required of Early Childhood majors, approval of the Early Childhood and Elementary Education Department. This course satisfies the area of concentration requirement. It is also possible for students who have satisfied the coursework requirements in another certification to obtain dual certification with the Student Professional year. Students are required to have a 3.00 quality point average.

Teacher Education Program Requirements

Students must satisfy the teacher education program requirements located under the School of Professional Studies section in the Program Offerings section of this catalog.

ECED 162 Introduction to Early Childhood Education (3:3:0)

This course includes the study of infants, toddlers, nursery school, kindergarten and primary school-aged children; a historical perspective of early intervention models, materials, equipment, and developmentally appropriate practices for use in a pre-school center, primary school, and the home; an evaluation of current trends and issues related to guiding and educating young children including the exceptional child. This course is directed toward prospective teachers and parents.

ECED 163 Creativity in Childhood Education (3:3:0)

This course is designed to facilitate the exploration of the creative process on two levels. Students are encouraged to develop their own creative process while studying methods and theories that encourage creative behaviors in the classroom for children. Emphasis is placed on the development of procedures that will ensure a climate conducive to creativity in pre-school and primary classrooms.

ECED 430 Student Teaching in Early Childhood Education (12:0:30)

This course is a semester of guided teaching in two settings: a pre-school or kindergarten and a primary grade in an elementary school. This field experience is designed to provide the student teacher with the opportunity to demonstrate the competencies and understanding of the teacher-learning process necessary to work effectively with children from pre-school to 3rd grade. Prerequisites: students must have Department approval which is obtained when all requirements described under the Student Teaching section on page 46 and 47 of this catalog have been completed. In addition to these requirements, early childhood majors must satisfy the following prerequisites: (1) Completion of all early childhood education major courses including ELED 132, ECED 162, 163, 464, 465, 466, 489, 495; REED 211, 212; and MSEs 242; (2) Minimum overall grade point average of 2.75 and a minimum grade point average of 2.75 in the major with no grade lower than a C; (3) Completion of two weeks of Professional Field Experience; (4) Completion of departmental screening procedure; and, (5) Act 34 and/or FBI clearance, and Act 151.

ECED 464 Early Childhood Curriculum I—Birth to Age 3 (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of infants and toddlers. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 162; ELED 132.

ECED 465 Early Childhood Curriculum II—3 to 6 Years (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of preschoolers. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 162; ELED 132.

ECED 466 Early Childhood Curriculum III —6 to 8 Years (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of primary grade children. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 162; ELED 132

ECED 489 Organization and Administration of Early Childhood Programs (3:3:0)

This course emphasis is on organization and administration of high quality pre-school programs, including supervising, staffing, housing, equipment, programs, records, financing and budgeting, and parent involvement. The course is directed toward prospective early childhood teachers and day care center personnel. Prerequisites: ECED 162; ELED 132.

ECED 495 Seminar in Early Childhood Education (3:3:0)

This course emphasizes current trends, issues, and problems related to educating young children. It includes a survey of the many resources available as well as opportunities to meet with and benefit from the experiences of several practicing professionals. Prerequisites: ECED 162; ELED 132.

Earth and Space Science

School of Arts and Sciences—The Faculty of Science

Bachelor of Science with an Earth and Space Science major**53 semester hours**

Required major courses: BIOL 114, 474; CHEM 121, 123; GEOG 120, 121, 220, PHYS 121, 122, 124, 161, 162; 2 courses from (PHYS 304, 305, 404; BIOM 469, 480; GEOG 321); 12 additional credits related to the major, approved by the adviser.

Corequisite courses: MATH 110 (or 311), 140, 141; 1 course in CPSC.

Additional requirements: At least 9 credits of required courses (not corequisites), 300-level or above, must be completed at ESU. A minimum of a C must be obtained in each of the required courses.

For university requirements see page 49.

Bachelor of Science with an Earth and Space Science major (Secondary Education) —48 semester hours

Required major courses: BIOL 114, 474; CHEM 121, 123; GEOG 120, 121, 220; PHYS 121, 122, 124, 131 (or 161), 132 (or 162), 495; 2 courses from (PHYS 304, 305, 404; BIOM 469, 480; GEOG 321); 1 course from (BIOL 200, 210; CHEM 108, 373); 3 additional credits related to the major, approved by the adviser.

Corequisite course: MATH 140; 1 course in CPSC.

Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321, PHYS 499.

Recommended course: CMST 111.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

Additional requirements: At least 9 credits of required courses (not corequisites), 300-level or above, must be completed at ESU. A minimum of a C must be obtained in each of the required courses.

For university requirements see page 49.

Economics

School of Arts and Sciences—The Faculty of Social Sciences

Professors: Bunjun, Christofides, Hartman (chair), Kercsmar, Kidman

Associate Professors: DeCosmo, Kane, Neelakantan, Nyamwange

Assistant Professor: Behr

Bachelor of Arts with an Economics major—39 semester hours

Required theory courses (15 credits): ECON 111, 112, 311, 312, 495.

Required foundation courses (12 credits): EMGT 250 or MATH 110, EMGT 201 or MATH 130 or MATH 131 or MATH 135, EMGT 233, ECON 321.

Professional Electives (12 credits): Students are required to select one course from Group A. The remaining nine (9) credits may be selected from any combination of Groups A, B or C. Students must select at least one 300 and one 400 level course.

Group A Analytical and Research: ECON 332, 415, EMGT 350, 451.

Group B Global Economics: ECON 234, 235, 313, 432.

Group C Financial and Monetary: ECON 122, 236, 411, 412, EMGT 342.

For university requirements see page 49.

Note: Admission to the Economics program is limited. A student may apply for admission to the program and be designated as an economics major after completing at least 30 credit hours of instruction with a quality point average in economics of 2.25 or better. A QPA of 2.25 or better is required for all coursework taken at East Stroudsburg University with an ECON rubric. Economics majors must complete at least 8 courses with an ECON rubric at ESU. Economics majors are required to pass at least six (6) upper division ECON courses (i.e., ECON 300 level and ECON 400 level). The department does not accept transfer credit in upper division coursework (i.e., 300 or 400 level courses) for ECON courses completed at community colleges, junior colleges, trade schools, etc. Economics majors whose QPA in economics falls below 2.25 for more than one semester will be removed from the program.

The quantitative requirements should be completed as early as possible.

ECON 111 GE: Principles of Macroeconomics (3:3:0)

This course is an introduction to the theory of income determination. It covers the topics of national income accounting, inflation, unemployment, fiscal policy, and monetary policy. A survey of consumption, investment, and multiplier theory is also provided.

ECON 112 GE: Principles of Microeconomics (3:3:0)

This course is an introduction to price theory, including theory of consumer behavior, production theory, and cost analysis; the study of commodity pricing under conditions of perfect competition, monopoly and imperfect competition; a survey of distribution theory, factor pricing, and international trade and finance.

ECON 121 GE: Consumer Education (3:3:0)

This course consists of an analysis of human wants in the process of maximizing satisfactions; consumption and patterns of family life cycle are explored. Emphasis is on the individual and the principles and techniques which govern successful consumer behavior in the areas of budget planning, consumption expenditures, and credit transactions. Recent changes in consumerism are explored.

ECON 122 GE: Personal Finance (3:3:0)

This course applies the theoretical tools of microeconomics and business management techniques to the problems of consumer choice. Emphasis is placed on formulating and managing an investment portfolio. This course includes a review of elementary accounting principles and an introduction to federal income tax preparation techniques as well as retirement and estate planning.

ECON 221 GE: Contemporary Economic Problems (3:3:0)

This course is a survey of selected problems in the production, exchange, and distribution of wealth; i.e. attempts to quantify the empirical dimensions, assumptions and value judgments associated with each problem. Economic theory and analytical techniques are applied to current problems.

ECON 234 GE: International Commerce (3:3:0)

This course examines the role, the organization, and the operation of the business firms involved in international transactions. While international trade theory focuses on the macro-aspects of international economic relations, international commerce emphasizes the microaspects. The course is a brief survey of organizations, agencies, and facilities operating in the field of international economics. This includes administration, marketing, promotion, and such collateral activities as price quotations, transportation, insurance, banking, credit, and legal matters. Prerequisite: ECON 112.

ECON 235 GE: International Finance (3:3:0)

This course examines the financial aspects of international transactions. Emphasis is placed on the built-in mechanisms of international financial adjustments. The development of the world monetary system is traced from the Gold Standard through the Floating Exchange Rate System. The evolution of the Euro-dollar market and the petro-dollar market is analyzed in terms of the role played by the U.S. dollar as a world reserve currency. Prerequisite: ECON 111.

ECON 236 Money and Capital Markets (3:3:0)

A comprehensive analysis of capital markets is presented via the flow of funds from saver-lender to borrower-spender. The development of financial markets, their present structure and operations techniques, and the merits of the innovative investments they have created are examined in detail. Topics covered include money and credit instruments; risk analysis; determination of interest rates; structure and operations of money, debt, capital and Euro markets; government regulations of financial markets; behavior of depository, contractual and investment intermediaries; and an evaluation of the changing roles of

financial institutions.

ECON 290 Special Topics (Semester hours arranged.)

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

ECON 311 GE: Intermediate Macroeconomics (3:3:0)

Reviews and extends the theory of income determination, surveys consumption theories, and analyzes problems of inflation and unemployment. It includes critical evaluations of fiscal, monetary, and income policies, as well as a brief introduction to modern theories of growth. Prerequisite: ECON 111.

ECON 312 GE: Intermediate Microeconomics (3:3:0)

This course reviews and extends the analysis of value and distribution: it covers traditional price theory techniques in production, exchange, and distribution for firms in markets of perfect and imperfect competition. It includes an introduction to general equilibrium analysis, linear programming, and welfare economics. Prerequisite: ECON 112.

ECON 313 GE: International Trade (3:3:0)

This course examines the development of international trade and finance; it includes a survey of classical, neoclassical, and modern theories and analyzes balance-of-payments techniques and principles. It includes critical evaluation of the arguments for protection, the economic effects of tariffs and quotas, U.S. trade policy, international financial institutions, and international liquidity. Prerequisites: ECON 111, 112.

ECON 321 GE: History of Economic Thought (3:3:0)

This course is brief survey of the life and times of the major economic thinkers. It includes a critical evaluation of the contributions of each school of thought. Emphasis is on the evolution of economic analysis and its methodology. Prerequisites: ECON 111, 112.

ECON 322 GE: Labor Economics and Industrial Relations (3:3:0)

This course examines the roles of labor and management in industrial relations with special references to labor history, wage-rate determination, collective bargaining and government intervention into labor relations. The implications of the changing structure of the American economy are analyzed. The rise of multi-national corporations and the unique labor-relations systems in other countries are studied to ascertain the obstacles that exists to trans-national collective bargaining. Prerequisites: ECON 111, 112.

ECON 332 Forecasting Methods (3:3:0)

Time series, multiple regression, qualitative, Box-Jenkins, and other techniques are explained and applied in the forecasting of industrial production, sales, and financial variables. Emphasis is placed on the construction, utilization, and evaluation of computer generated forecasting models. Prerequisites: ECON 112; MATH 110.

ECON 411 Public Finance (3:3:0)

This is one of the two major macro-policy oriented courses for economics majors designed to familiarize students with government budgets; i.e. the course examines the structure of expenditures and revenue, fiscal incidence, project analysis, and the problems encountered in the performance of fiscal stabilization techniques to attain given policy targets. Prerequisites: ECON 111, 112, 311.

ECON 412 Money and Banking (3:3:0)

This course deals with the development of money types and banking systems; examination of techniques and operations of the banking system of the U.S.; survey of monetary theory and policy. Prerequisites: ECON 111, 311.

ECON 413 Managerial Economics (3:3:0)

This course is a survey of mathematical techniques useful in constructing economic and

managerial models which help the student identify and systematically formulate managerial problems. The course concentrates on pricing decisions, demand theory, production and cost analysis, and the empirical problems involved in managerial decision making. Prerequisites: ECON 112; MATH 110.

ECON 415 Econometrics (3:3:0)

This course is an introduction to the theory of econometrics and its applications. The course will concentrate on determining and measuring the relationship between economic variables. Simple regression, correlation, multiple regression, and the nature of econometric models will be discussed. A series of applications will conclude the course. Prerequisites: ECON 112; MATH 110.

ECON 432 Economic Growth and Development (3:3:0)

Critical evaluation of the historical and theoretical development of laissez-faire, centralized planning, and mixed economies; emphasis is placed on capital accumulation, industrialization, and economic expansion in the developed and underdeveloped nations, current problems, and alternative policies. Prerequisites: ECON 111, 112.

ECON 442 Comparative Economic Systems (3:3:0)

The purpose of this course is the study of the different economic systems from the "free enterprise system" to the "command economies," with the Third World economic system in between. An attempt is made to analyze the institutional structure of each economic system and the factors underlying it. The universality of economic principles is brought out. Prerequisites: ECON 111, 112.

ECON 485 Independent Study (Semester hours arranged.)

A student wishing to take independent study either on the undergraduate or graduate levels (other than under 571) should discuss the plan with a member of the department. If the faculty member agrees to sponsor the project, the proposal should be submitted to the department chair. The chair, after approving the independent study project, shall bring it to a departmental meeting for confirmation. The dean of the school gives final approval after receiving the minutes of the departmental meeting which identifies the students who were approved by the department to do independent study.

ECON 486 Field Experiences and Internships (Semester hours arranged.)

ECON 495 Senior Seminar (3:3:0)

The course consists of a series of lectures and discussions on economic topics designed to lead senior students into current scientific literature and research methodology. Prerequisite: Permission of the department.

Elementary Education

School of Professional Studies—The Faculty of Education

Bachelor of Science with an Elementary Education major 62 semester hours

Required major courses: ELED 132, 264, 311, 342, 343, 344, 345, 346, 351; REED 313.

Required concentration courses: Minimum of fifteen semester hours from single subject area courses: ART, BIOL, CHEM, CMST, ECON, ENGL, FLFR, FLGR, FLSP, GEOG, HLTH, HIST, MATH, MUS, PHYS, PSY, REED, SOC; broad field area courses: Earth Sciences, Fine Arts, History, and Political Science, Language and Literature, Performing Arts, Physical Education, Social Studies; interdisciplinary field area courses: Early Childhood Education, Outdoor Education, Student Professional Program.

Required professional education courses: MATH 105; MCOM 262; MCOM 265; ELED 426, 430; PSED 161, 242; SPED 105.

For university requirements see page 49.

All students are required to maintain a cumulative and major average of 2.75 or as specified in PA law, Chapter 354, which ever is higher, to remain in the program and/or to take teacher education classes.

Coordinating Department: Early Childhood and Elementary Education.

Graduates of this degree program will be certified to teach in kindergarten to grade six or in a middle school within the schools of the Commonwealth of Pennsylvania.

Students in the elementary education curriculum are required to take fifteen semester hours of courses, which will complete an area of concentration selected by the student. Electives are to be so arranged that each student pursues in depth an academic field of study or an approved interdisciplinary field. Each student will, after consultation with his or her academic adviser within this department, determine the pattern which his or her area of concentration will follow. A pamphlet outlining the various areas of concentration is available in the Early Childhood and Elementary Education Office.

An integrated certification program for Elementary Education-Special Education is available. Candidates for the integrated program are selected during their freshman or sophomore year. A 3.0 quality point average is required for admission and retention in this program.

Majors in Elementary Education should meet regularly with their academic advisers so they are oriented to their major program.

Department Entrance Competency Examination

1. All incoming Elementary Education students (freshmen, transfer, certification, etc.) must satisfactorily pass Praxis I Professional Skills Test and Elementary School Content Knowledge during their first semester on campus.
 - a. All students must be proficient in reading, writing, and computing as evaluated by the departmental competency exams before they are eligible for departmental screening.
 - b. Those who do not successfully complete the departmental exams will be advised regarding courses needed to upgrade skills. The departmental competency exams must be retaken to demonstrate necessary proficiency.
2. Upon successful completion of the exams and additional department requirements, the student will be considered for departmental screening. Students must be screened into the department before their second professional field experience.

Field Experiences

There are multiple opportunities to gain experience in elementary classrooms including urban and inclusive settings. These various field experiences are connected to courses and are an integral, required part of the program.

Professional Development Schools (PDS)

Taken the semester prior to student teaching, the PDS integrates five courses (ELED 311, 344, 345, REED 313, SPED 315) along with weekly field work in an elementary classroom. For more information see your academic adviser or contact the PDS office at 570-422-3951.

Student Professional Program

The program offers a full year of field experience in elementary and middle schools. (Refer to ELED 497 and ELED 498 Student Professional Programs at the end of the course descriptions.)

Teacher Education Program Requirements

The Commonwealth of PA has established new requirements for all candidates in teacher preparation programs. Refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs. Students must satisfy the teacher education program requirements located under the School of Professional Studies section in the Program Offerings chapter of this catalog.

ELED 100 Success Oriented Education (1:1:0)

This course is designed to prepare students majoring in Education to meet successfully the challenges of academic life.

ELED 132 Child Growth and Development (3:3:0)

This course presents the development of the child from conception through pre-adolescence, interaction between heredity and environment, parent-child relations, development and stabilization of the personality, attitudes toward self and others—physical, social, emotional, and cognitive development. Completion of ENGL 103 is recommended. This course is a prerequisite to all methods courses.

ELED 264 Principles and Practices of Teaching (3:3:0)

This course develops the ESU Educators: Reflective and Deliberate Decision-Makers conceptual framework. This course explores current research and practice related to the learner and the learning environment, the teaching and learning process, content, and professionalism including planning, organization, management, instructional strategies, evaluation, and assessment. Pre-requisites: ELED 132 Child Growth and Development. Co-requisites: PSED 161, 242 and the Early Field Experience Packet.

ELED 290 Special Topics (Semester hours arranged.)

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

ELED 311 Art in Childhood Education (3:3:0)

This course examines the unique role of the visual arts in education, learning, and development. Through hands-on experiences, various artistic behaviors are developed along with teaching competencies to integrate the arts into the curriculum. Prerequisites: ELED 132, 264 and declared major.

ELED 342 Language Arts in Childhood Education (3:3:0)

This course prepares students to implement sound methodologies when teaching

language arts in the elementary school. Emphasis is placed on philosophical objectives, curriculum materials, and correlation/integration with other curricular areas. Prerequisites: ELED 132, 264 and declared major.

ELED 343 Mathematics in Childhood Education (3:3:0)

This course places emphasis on how theory and research shape practice in mathematics education. Additional emphasis will be placed on a variety of teaching techniques and assessment methods and how they can be integrated in a mathematics program. Course participants will also become familiar with the use of technology and how to integrate it appropriately in an elementary mathematics program. Prerequisites: ELED 132, 264; MATH 105; and declared major.

ELED 344 Science in Childhood Education (3:3:0)

This course is designed to familiarize students with the methods and materials for teaching science in the elementary school. The primary focus is on the use of activity-based methods. Prerequisites: ELED 132, 264 and declared major.

ELED 345 Social Studies in Childhood Education (3:3:0)

Through individual, small group, and class projects, curricula, methods and materials for the teaching of social studies or social learnings in the elementary school are discovered, analyzed, and developed. Prerequisites: ELED 132, 264 and declared major.

ELED 346 Children's Literature (3:3:0)

This course studies the great variety of literature available for children and the literary materials of more recent times which have been written expressly for children. The course offers varied ways to get children interested in books for their appropriate reading levels and interests. Implementation of Children's Literature into the elementary curriculum will be stressed. Prerequisites: ELED 132, 264 and declared major.

ELED 351 Music in Childhood Education (3:3:0)

This course introduces the student to the importance of music in the elementary school curriculum. It focuses on establishing a role for the classroom teacher in fostering children's growth through music and providing the prospective teacher with musical understanding and skills for developing student-centered learning environments through music. Emphasis is on the encouragement of creative teaching of all content through the integration of music into the total elementary curriculum. Strategies for facilitation of music experiences to meet the needs of mainstreamed students as well as culturally diverse students are included. Prerequisites: ELED 132, 264 and declared major.

ELED 356 Urban Education and Classroom Diversity (3:3:0)

This course will give students the opportunity to learn about teaching in an urban setting. Students will be provided with a strong theoretical knowledge base and practical field experience in order to prepare them to teach in a variety of settings. Students will explore their own beliefs and attitudes as it relates to diversity in the classroom. Prerequisites: ELED 132 and ELED 264 or PSED 161 or PSED 242.

ELED 415 Individualizing Instruction in Elementary Education (3:3:0)

This course examines the process of individualizing instruction and strategies which lend to its development. Students will work on individualized projects which will help them meet their goals. Although emphasis is placed on elementary education, some topics will apply on a K-12 basis. Prerequisites: ELED 132; PSED 242.

ELED 426 Professional Practicum (2:2:0)

This course is designed to develop insight during laboratory experiences of student teachers. It includes the study of experiences and typical problems encountered in student teaching and the first year of teaching: analysis of materials and methods used in promoting learning, attention to classroom management and to the practical application of techniques in specialized areas, consideration of current practices in today's schools, orientation in professional responsibilities and legal aspects of the work of the teacher. Prerequisites:

Completion of all elementary education courses including ELED 132, 264, 311, 342, 343, 344, 345, 346, 351; REED 313.

ELED 430 Student Teaching in Elementary Education (12:0:30)

This course includes a semester of guided teaching in elementary schools. This field experience is designed to provide the student teacher with the opportunity to develop further competencies and an understanding of the teaching-learning process necessary for effective teaching in the elementary schools. Prerequisites: Students must have Departmental approval which is obtained when all requirements described under the Student Teaching section of this catalog have been completed. In addition to these requirements, elementary education majors must satisfy the following prerequisites: Completion of all elementary education major courses including ELED 132, 264, 311, 342, 343, 344, 345, 346, 351; REED 313; attainment of a minimum overall grade point average of 2.75 and a minimum grade point average of 2.75 in the major elementary education requirements with no grade lower than C in the major; completion of two weeks of Professional Field Experience; completion of departmental screening procedure; Act 34 and/or FBI clearance and Act 151.

ELED 444 International Collaborative Learning Project (1-3: 1-3: variable)

This course enables students to participate in unique learning events in a foreign country. Students will have the opportunity to experience different styles in teaching and learning, how reflective teaching practice can become an integral part of the teaching process, and how teacher education reform occurs in different contexts through seminars and observations. The class will deal with exploring differences and similarities between cultures and philosophies. Pre-requisites: Permission of Instructor.

ELED 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis.

ELED 497 & 498 Student Professional Program (16:5:30) (16:5:30)

Designed as another route to teacher certification, the program offers a full year of field experience in elementary and middle schools. Student professionals in the program are assigned to schools as full-time interns and in addition participate in group seminars, field trips, and a program of various assignments planned in cooperation with the program coordinator. Prerequisites: A 3.0 QPA; completion of General Education requirements; completion of all methods courses required of Elementary Education majors with no grade lower than a C, approval of the Elementary Education Department; Act 34 and/or FBI clearance and Act 151. This course satisfies the area of concentration requirement. It is also possible for students who have satisfied the coursework requirements in another certification to obtain dual certification with the Student Professional year.

Engineering Transfer Program

School of Arts and Sciences—The Faculty of Science

Bachelor of Arts with a Physics major—22 semester hours in physics 60 with corequisites

Concentration: Engineering Transfer program

*Required major courses: PHYS 111, 161, 162, 201, 202, 261, 262.

*Corequisite courses: CHEM 121, 123, 124, 126; MATH 140, 141, 240, 320, 341; CMST 111; ENGL 204; ECON 111 or 112; CPSC 111 or 211.

Other requirements: Completion of a bachelor's degree in engineering at Penn State University or any other institution approved by the coordinator of the program.

For university requirements see page 49.

Coordinator: Professor Robert Reed, Department of Physics.

This degree program which also is called the “3-2 engineering program” encompasses three years of study at East Stroudsburg University and two years of study in an approved engineering program at the Penn State University or the University of Pittsburgh. The student receives the Bachelor of Arts degree from East Stroudsburg University upon completion of the engineering program at the cooperative university.

*Please see cooperative agreement or coordinator for specific requirements of specific engineering disciplines.

English

School of Arts and Sciences—The Faculty of Arts and Letters

Professors: Benn, Condit, Hawkes, Liberman, Meyers, Misurella, VanArsdale (chair)

Associate Professors: Kercsmar, Madigan, McKay, McLaughlin, Walker

Assistant Professors: Antonette, Duguay, Moriarty, Strete

Bachelor of Arts with an English major (Concentration: Writing)—39 semester hours

Required major courses: ENGL 163, 203, 260, 264, 490; one of the following: 261, 265, 272, 273; two 300-400 literature courses; five of the following (three of which must 300-400 level): 204, 205, 215, 218, 220, 225, 231, 302, 303, 305, 306, 316, 317, 319, 332, 334, 415, 486.

Other requirements: Six semester hours in a foreign language or its equivalent; extra-curricular participation on *Stroud Courier* or the literary magazine.

For university requirements see page 49.

Bachelor of Arts with an English major (Concentration: Literature)—39 semester hours

Required major courses: ENGL 163, 260, 261, 264, 265, 374, 390, 495; one course in major writers (391, 392, or 393); two courses in literary movements (356-358, 378-387), one course in linguistics (332, 334).

Other requirements: Six semester hours in a foreign language or its equivalent.

Note: Semester hours should be distributed equally among British and American literature courses.

For university requirements see page 49.

Bachelor of Science with a Communication major (Secondary Education)

See Communication.

Bachelor of Science with an English major (Secondary Education)

37 semester hours

Required courses: ENGL 163, 231, 260, 264, 334, 390, 499; 261 or 265; one of 203, 215, 220, 225, 302, or 303; one of 275, 276, 277, 278, 279, 280, 281, 282, 284, or 374; two of 356, 357, 358, 378, 379, 380, 381, 382, 383, 384, 385, 386, or 387; one of 391, 392, or 393, 499.

Required professional education courses: MCOM 262; PSED 161, 242, 306, 420, 421, 430, 431; REED 321.

Other requirements: One of CMST 111, 232, 253; one of CMST 126, THTR 101, or 102.

For university requirements see page 49.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

English minor—18 semester hours

Required courses: ENGL 162 or 163, one (1) 200 level Writing course, one (1) 200 level Literature course, 3 (three) courses at the 300 level or above.

Nine (9) of the 18 credits for the minor must be taken at East Stroudsburg University.

Prerequisites for Literature Courses

The last two digits of the course number indicate the classification of 100-300 level English courses, i.e.: writing 00-29, linguistics 30-49, literature 50-99.

Lower Division: Enrollment in literature courses numbered 100 to 299 requires concurrent enrollment in or completion of ENGL 103 English Composition.

Upper Division: Literature courses numbered 300 to 499 require the completion of ENGL 162 or 163 and two additional 100 to 299 numbered courses. All 300 courses require 60 credit hours and/or one specified English course. All 400 courses require 90 credit hours and/or two specified English courses.

ENGL 090 Composition Skills (3:3:0)

This course is designed for students with writing problems. Entrance is based on a score achieved on an essay written during orientation. Grading is Satisfactory/Unsatisfactory. Students required to take ENGL 090 may not enter ENGL 103 until they have passed this course. This course is offered each semester. Credits granted for the course are not included within the minimum 128 semester hours required for graduation.

ENGL 091 Composition Skills for Foreign Students (3:3:0)

This course, a special section of ENGL 090, offers international students the opportunity to improve their writing, reading, listening, and speaking skills (in that order).

ENGL 103 English Composition (3:3:0)

This course entails the study and practice of expository writing. The course or its equivalent is required of all students, but the results on the essay written during orientation may require some students to pass ENGL 090 before entering ENGL 103. Other students may demonstrate competency by attaining a high grade on an examination or an essay. The course is offered each semester. Students must receive a minimum grade of C to fulfill the English Composition requirement.

ENGL 150 WS: Introduction to Women's Studies (3:3:0)

The course will provide an overview of the history, theories, and methodological approaches of Women's Studies; examine the implications of our cultural understandings of

woman, gender, race, and class; raise questions about the goals and direction of social change; and review the impact of Women's Studies on traditional disciplines and knowledge.

ENGL 162 GE: Introduction to Literary Analysis & Interpretation (3:3:0)

Designed to acquaint the student with the basic skills of literary interpretation, this course includes readings in selected works of literature and examines such topics as explication and analysis of the genres of literature, plot, character, foreshadowing, atmosphere, symbolism, and imagery. The course is offered each semester. Enrollment in ENGL 162 requires the completion of or concurrent enrollment in ENGL 103.

ENGL 163 The Study of Literature (3:3:0)

Students will study fiction, poetry and drama from around the world and write a number of critical papers. Students will also learn to conduct critical research and will demonstrate familiarity with a wide variety of critical approaches. *This course is for majors only.* Enrollment in ENGL 163 requires the completion of or concurrent enrollment in ENGL 103.

ENGL 173-188 GE: Selected Readings (3:3:0)

These courses are designed to introduce the student to literary interpretation through readings in various interest areas. The following courses are offered as interest permits:

ENGL 173 GE: Literature of War

ENGL 174 GE: Literature and Religion

ENGL 175 GE: Biblical Literature

ENGL 177 GE: Environmental Literature

ENGL 178 GE: Horror and Fantasy

ENGL 180 GE: Literature and Science

ENGL 182 GE: Literature of Sport and Games

ENGL 183 GE: WS: Women in Literature

ENGL 188 GE: Mystery Fiction

Students may contact the department for further details on these courses.

ENGL 203 GE: Advanced Composition (3:3:0)

This course is designed to give students further practice in expository writing to improve their skills. Students will explore a topic through short and long reading and writing assignments in a workshop environment. At least one course project will be a substantial academic research paper. Prerequisites: ENGL 103 with a minimum grade of C.

ENGL 204 Technical Writing (3:3:0)

This course acquaints students with the skills necessary for professional writing in such fields as engineering and the sciences. Students will learn to write effective proposals, operations manuals and a variety of technical reports. Prerequisite: ENGL 103.

ENGL 205 Business English (3:3:0)

This course focuses on practice in writing correct and effective business letters, reports and memoranda, with analysis of examples. The course includes exercises in form-and-content problems. Prerequisite: ENGL 103.

ENGL 215 Print Journalism I: Newspapers (3:3:0)

This course is an introduction to print journalism, including practice in all activities relevant to daily newspaper work. Assignments will emphasize the techniques of reporting, interviewing, copy editing, fact checking, proofreading, and editorial and feature writing. There will be some discussion of layout and typography as well. Prerequisite: ENGL 103.

ENGL 218 Sports Writing (3:3:0)

The course will deal with the techniques of daily reporting and feature writing about sports events, personalities, and issues. Emphasis will be given to newspaper and magazine writing, with some photojournalism required. Editorial skills will also be taught so that students can take their manuscript copy through the editing process to the printed page. Prerequisite: ENGL 215.

ENGL 220 Script Writing (3:3:0)

Students will learn the craft of script writing and have an opportunity to apply the techniques to film, television, and theatre. Students will prepare short scripts and a major work, ranging from a scenario, to a television play, to a one-act play.

ENGL 225 GE: Introduction to Creative Writing (3:3:0)

This course is a workshop in writing poetry, fiction, and drama. It is designed to introduce students to the mechanics of each genre and to the workshop format. Prerequisites: ENGL 103, 162 or 163.

ENGL 231 English Grammar (3:3:0)

This course is required for those seeking secondary certification in English. It consists of a review of the basic precepts of traditional grammar and an introduction to new grammars.

ENGL 260 GE: English Literature I (3:3:0)

This course is an introductory survey of English literature to 1800 designed to acquaint the student with major literary figures, works and trends. Offered in the fall. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

ENGL 261 GE: English Literature II (3:3:0)

This course is an introductory survey of English literature from 1800 to the present, designed to acquaint the student with major literary figures, works, and trends. Offered in the spring. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

ENGL 264 GE: American Literature I (3:3:0)

This course is an introductory survey of American literature to the Civil War, designed to acquaint the student with major literary figures, works and trends. Offered in the fall. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

ENGL 265 GE: American Literature II (3:3:0)

This course is an introductory survey of American literature from the Civil War to the present, designed to acquaint the student with major literary figures, works, and trends. Offered in the spring. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

ENGL 272 GE: World Literature I (3:3:0)

This survey course introduces students to literature and literary traditions of selected countries and cultures from ancient and classical periods through the Renaissance.

ENGL 273 GE: World Literature II (3:3:0)

The readings in this survey course cover literature and literary traditions of selected countries and cultures from the Renaissance through to the present. Students can select this course without taking World Literatures I.

ENGL 275-284 GE: Studies in Literary Genre (3:3:0)

These courses emphasize the characteristics and techniques differentiating the literary genres. Attention is also given to the historical development of the genre. Prerequisites: ENGL 103, 162 or 163. The following courses are offered as interest permits:

275 GE: Comedy

276 GE: The Epic

277 GE: The Lyric

278 GE: Myth and Ritual

279 GE: The Romance

280 GE: Satire and Irony

281 GE: Tragedy

282 GE: Drama

284 GE: Short Story

Students may contact the department for further details on these courses.

ENGL 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered

on a trial basis in order to determine the demand for and the value of introducing them as part of the university curriculum.

ENGL 292 GE: Multicultural American Literature (3:3:0)

This course will address the multiplicity of ethnic experiences that make up American cultural experiences. This work can address a variety of cultural groups and experiences not limited to African-American, Chicano, European-American, or Asian-American. Prerequisite: Completion or concurrent enrollment in ENGL 162 or 163.

ENGL 293 Afro/American Black Drama (3:3:0)

Afro/American Black Drama concerns contemporary African Drama and American Black Drama since 1958. The course consists of a close reading of the plays. In addition, students will submit critical papers on selected plays.

ENGL 296 GE: Native American Literature (3:3:0)

This course will examine works produced by native North American authors. The course may cover the historical period that begins with the U.S. Republic and continues to the present. It will include both original works and works in translation.

ENGL 302 Creative Writing-Fiction (3:3:0)

This course is a workshop in the writing of prose fiction, with emphasis on the techniques of the short story. Supplementary readings may be assigned by the instructor. Prerequisites: ENGL 162 or 163; two English courses other than ENGL 090 or ENGL 103.

ENGL 303 Creative Writing-Poetry (3:3:0)

This course is a workshop in the writing of poetry. Students are expected to achieve competence in a variety of forms. Supplementary readings may be assigned by the instructor. Prerequisites: ENGL 162 or 163; two English courses other than ENGL 090 or ENGL 103.

ENGL 305 Professional Writing: Public Relations (3:3:0)

This course is a workshop in the writing forms and styles, from basic press releases to multi-media public relations campaigns, used by communications professionals; students will also explore topics in media relations, business ethics, and non-profit/corporate public relations case studies. Prerequisite: ENGL 205 or 215.

ENGL 306 Professional Writing: Advertising (3:3:0)

The course is a workshop in advertising copywriting. Students will examine current advertisements and learn to write print ad copy and broadcast scripts. They will explore the relationship between copy and images and will consider some of the ethical challenges which can face a copywriter. Prerequisite: ENGL 205 or 215.

ENGL 316 Print Journalism II: Magazines (3:3:0)

This advanced course focuses on all aspects of magazine journalism. Students will analyze a variety of current consumer and trade magazines. They will research and write articles suitable for broad-based and special-interest publications and discuss layout and editing techniques. Prerequisite: ENGL 215.

ENGL 317 Reviewing the Arts for Newspapers and Magazines (3:3:0)

The course stresses journalistic coverage of all the major art forms: literature, drama, film, plastic arts, music, dance, television. Students will learn to write intelligent, informative reviews for the popular media; they will also do one or two feature articles or interviews about individual artists or current artistic trends. Prerequisite: ENGL 215.

ENGL 319 Writing Creative Non-Fiction (3:3:0)

This course explores the techniques and history of the New Journalism as practiced by Tom Wolfe, Annie Dillard, and others. Students will read and write nonfiction that makes use of on-site reporting, in-depth interviews, and literary feature writing style. Prerequisites: ENGL 215; 316 or 317.

ENGL 332 Descriptive Linguistics (3:3:0)

This course is an inductive introduction to the theory of language. Confronted with language data, students will determine what factors require accounting for in order to

formulate explicit generalizations which will give them insight into linguistic theory and into the scientific method of language study. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.

ENGL 334 History of the English Language (3:3:0)

This course is required for those seeking secondary certification in English. It is an introductory study of selected topics in semantics, phonology, morphology, and syntax from Old English to the present. The course is offered once a year. Prerequisites: ENGL 162 or 163; two courses other than 090 or 103.

ENGL 350 Cognitive Science (3:3:0)

This interdisciplinary course is a study of a topic of common interest in computer science, linguistics, physical science, neuroscience, philosophy, and psychology; viz. the acquisition, organization, and expression of knowledge. Prerequisite: Honors Program.

ENGL 356 American Poetry (3:3:0)

This course is a study of important individual poets and poetic movements in the history of American poetry. Selections range from Puritan to contemporary poetry. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.

ENGL 357 The American Novel (3:3:0)

This course is a study of representative examples of the American novel and its themes and forms from the early nineteenth century to the present. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.

ENGL 358 The British Novel (3:3:0)

The British Novel is a survey of the development of the novel in Britain. It focuses on the "great tradition" of British novelists and also includes novels by other masters of the form. Prerequisites: ENGL 162; two courses other than ENGL 090 and 103.

ENGL 374 Literary Criticism (3:3:0)

This course is a survey of the various approaches to the discussion of literature from Classical times to the present. Prerequisites: ENGL 162; two courses other than ENGL 090 and 103.

ENGL 378-387 Studies in Literary Movements (3:3:0)

These courses are intensive studies of the dominant literary spirit as reflected in both major and minor writers of particular eras in the American and British tradition. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103. The following courses are offered as interest permits:

378 Old and Middle English Literature

379 British Literature of the Renaissance

380 Seventeenth-Century British Literature

381 Age of Pope and Johnson

382 British Romanticism

383 Victorian Literature

384 Modern British Literature

385 American Romanticism

386 American Naturalism

387 Modern American Literature

ENGL 390 Shakespeare (3:3:0)

This course offers intensive study of Shakespeare's plays and the social and political milieu of the Elizabethan period. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.

ENGL 391 Geoffrey Chaucer (3:3:0)

This course offers intensive study of the poetry of Geoffrey Chaucer and the social and political milieu of Chaucer's England. Prerequisites: ENGL 162; two courses other than

ENGL 090 or 103.

ENGL 392 John Milton (3:3:0)

This course will consider Milton's major works within the literary, religious, political and social cross-currents of the Seventeenth Century. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.

ENGL 393 Major Writers (3:3:0)

This course will offer intensive study of a writer about whom a significant body of critical texts exists. A study of at least one writer chosen by the department will be offered each year. Students may take this course for credit more than once if they wish to study more than one major writer. Students may not improve a grade by retaking the course when a different major writer is studied. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.

ENGL 412 Teaching of Writing in the Secondary Schools (3:3:0)

This course will briefly survey the history of the teaching of writing in American secondary schools, intensively review writing process theory and research of the past two decades, and critically consider the implications of writing process theory and research for classroom practice. Also listed as PSED 412. Prerequisites: Completion of 90 credits; consent of instructor.

ENGL 415 Computers and Writing (3:3:0)

Computers and Writing will examine the impact that the new forms of electronic writing have had and will have on conventional print-based writing. We will analyze various forms of electronic writing such as the World Wide Web, e-mail, listservs, newsgroups, MOOs. Prerequisites: ENGL 103; two 300- or 400- level English courses.

ENGL 466 Teaching Multicultural Literature (3:3:0)

The English/Education major will utilize a seminar setting to focus on a detailed consideration of current multicultural subject matter, theory, and strategy that may be effective in the multicultural classroom. Prerequisites: ENGL 162 or ENGL 163 or completion of undergraduate degree, and completion of, or concurrent enrollment in ENGL 292.

ENGL 470 Literature and Censorship (3:3:0)

A study of selected works of literature and court opinions concerning some of them, in an effort to aid the individual to formulate a meaningful definition of "redeeming social value." The ramifications of censorship for other than pornographic reasons will also be considered. Prerequisites: Completion of 90 credits; consent of instructor.

ENGL 485 Independent Study (Semester hours arranged.)

Directed research and study on an individual basis. Open to advanced students (90 credits) on a limited basis upon approval of the department or the instructor and after the completion of twelve semester hours in the subject. Independent studies cannot be given in areas in which courses are being taught.

A student entering upon independent study must complete a minimum of five (5) hours of individual conference time with the sponsoring professor for each credit undertaken. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of willingness to meet the commitments of the discipline.

ENGL 486 Internship in Written Expression (Semester hours arranged.)

This is an opportunity for a limited number of advanced students to develop their skills by applying them in a professional situation and thus receive both an apprenticeship experience and college credit. Prerequisites: Department approval; completion of 90 credits.

ENGL 490 Senior Seminar in Writing (3:3:0)

The course is the culminating experience for Writing Track Majors. They will collectively focus on creative, journalistic, non-fiction, and corporate writing being published in the

current marketplace. Individually, they will conceive, write, and revise a major project of their own in the writing field of their choosing. Prerequisites: ENGL 203; at least three 200-300 level required courses in the writing track.

ENGL 495 Senior Seminar (3:3:0)

This is a culminating course in which students, making use of the ability and knowledge they have acquired, examine intensively a figure, movement, or era. Required of liberal arts English majors. Prerequisites: Completion of 90 credits; consent of instructor.

ENGL 498 WS: Seminar in Women's Studies (3:3:0)

This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.

ENGL 499 Student Teaching Internship (1:1:0)

This course is designed to provide the student with an opportunity to work with a faculty member in English during the student teaching experience. Prerequisites: Qualification to Student Teach, concurrent registration in PSED 430 or 431.

Environmental Studies

School of Arts and Sciences—The Faculty of Science

**Bachelor of Arts or Bachelor of Science
Interdisciplinary Program**

Environmental Studies major—37 semester hours or 57 semester hours

See Biological Sciences.

An integrated interdisciplinary program which offers students the unique opportunity to select individualized programs from a wide variety of electives in several disciplines. Field experience and internship are required.

Foreign Languages

School of Arts and Sciences—The Faculty of Arts and Letters

Professor: Ball

Associate Professors: Ahumada (chair), González, Vitello

Bachelor of Arts with a French major—30 semester hours

Required major courses: FLFR 235, 315, 336; 21 additional semester hours, three of which must be met with a 400 level literature course. (Language courses 116 and 117 are not counted toward the major.)

For university requirements see page 49.

Bachelor of Arts with a German major—(In Moratorium)

Bachelor of Arts with a Spanish major—30 semester hours

Required major courses: FLSP 235, 310, 315, 336; 18 additional semester hours, three of which must be met with a 400 level literature course. (Language courses 116 and 117 are not counted toward the major.)

For university requirements see page 49.

Note: All students pursuing a Bachelor of Arts degree in French, or Spanish must complete a minimum of twelve credits at ESU in their target language at a level higher than Language 215 (Language IV). Of these twelve credits, a minimum of three (3) credits must be at the 400 level. Students must maintain a minimum quality point average of 2.50 in the major. No grade less than C will be accepted in any course within the major. Additional information is in the Foreign Language Department and available upon request. The department encourages students majoring in a language to participate in foreign study. Appropriate credit will be awarded for courses taken through programs approved by the department.

Bachelor of Science with a French major (Education)—31 semester hours

Required major courses: FLFR 235, 315, 336; FLNG 361, 499; 18 additional semester hours, three of which must be met with a 400 level literature course. (Language courses 116 and 117 are not counted toward the major.)

Required professional education courses: MCOM 262; PSED 161, 242, 316, 420, 421, 430, 431; REED 321.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Note: Certification encompasses kindergarten through grade twelve.

Bachelor of Science with a German major (Education)—(In Moratorium)

Bachelor of Science with a Spanish major (Education)—31 semester hours

Required major courses: FLSP 235, 310, 315, 336; FLNG 361, 499; 15 additional semester hours, three of which must be met with a 400 level literature course. (Language courses 116 and 117 are not counted toward the major.)

Required professional education courses: MCOM 262; PSED 161, 242, 316, 420, 421, 430, 431; REED 321.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies

in this catalog for specific requirements for admission into teacher education programs. For university requirements see page 49.

Note: Certification encompasses kindergarten through grade twelve.

Note: B.S. students are advised that PSED 316 (Teaching of Foreign Languages) is offered in alternate years. All students pursuing a Bachelor of Science degree in French or Spanish must complete a minimum of twelve credits at ESU in their target language at a level higher than Language 215 (Language IV). Of these twelve credits, a minimum of three (3) credits must be at the 400 level. Students seeking a Bachelor of Science degree or certification in French or Spanish must take the ACTFL Telephonic Oral Proficiency Interview Test before entering student teaching. It is expected that students will pass the test at the Intermediate Level. Candidates for the Bachelor of Science degree in Foreign Language will also be required to demonstrate appropriate language proficiency through an interview conducted by faculty members within the appropriate language component. Students must maintain a minimum quality point average of 2.50 in the major. No grade less than C will be accepted in any course within the major. Additional information is in the Foreign Language Department, and available upon request. The department encourages students majoring in a language to participate in foreign study. Appropriate credit will be awarded for courses taken through programs approved by the department.

Bachelor of Arts or Bachelor of Science with a double major—Foreign Language + Foreign Language

Language levels 116 and 117 are counted for one of the languages. For all other requirements, refer to the Foreign Language B.A. or B.S. program.

German Studies Interdisciplinary Minor

This minor provides an integrated program of studies which combines the study of German (9 credits) with relevant courses from other departments (9 credits). The nine German credits may be chosen from the following courses; FLGR 116, FLGR 117, FLGR 120, FLGR 214 or any upper-level German course approved by the Department. Co-requisites may be chosen from Art 202, English 273, Geography 234, History 281, History 473, Philosophy 318, Philosophy 457, Political Science 222, and Political Science 426. Two of the co-requisites should be at the 300-level or above. A minimum of 12 credits must be taken in residence. A minimum QPA of 2.5 must be maintained in program courses.

French or Spanish Minor

Students will be required to complete a minimum of 18 credits in the target language. Any target language courses may be counted for the minor, except the following: FLFR 120; FLFR 141; FLSP 120; FLSP 141; FLSP 143. Twelve semester hours, in the minor, must be completed at East Stroudsburg University. This residency requirement applies to all students, including transfer students who arrive with credits completed elsewhere. Students are required to maintain a QPA of 2.50. No grade less than C will be accepted in any course within the minor. Native speakers choosing a minor in their native language will be required to complete twelve credits at the 300-400 level.

Elementary Education Concentration

This is a single subject area of concentration in French or Spanish. Students will be required to complete a minimum of 15 credits in the target language. Courses must include one of the following: FLFR/FLSP 235; FLFR/FLSP 315; FLFR/FLSP 336. Language levels 116 and 117 are counted toward the concentration. Students must maintain a 2.50 quality point average in their area of concentration. No grade less than C will be accepted in any

course within the concentration.

Foreign Language General

The following courses may not be counted toward the major: FLFR 120; FLSP 120; FLFR 141; FLSP 141; FLSP 143; FLSP 233; FLSP 234. These courses do count toward General Education.

Departmental Authorization for Native/Near-native Speakers:

This option is available only to native speakers of French or Spanish. Such a student will apply for authorization only after having spent at least two semesters at East Stroudsburg University and only after having completed two language courses at ESU at the 300 level or above, and having earned a grade of B or better. The student will be required to write a detailed statement, in the target language, concerning the extent of language experience and the relation of that language experience to a legitimate course of study. Each application will receive the consideration of the total Department membership, and the decision concerning the number of credits to be granted will, ultimately, rest with the Department Chair and the language group in question.

Regarding the policy on departmental authorization, the maximum number of credits which may be granted by the department is six (6). The Foreign Language Department may authorize credit only for those languages in which it offers a major, namely French or Spanish. This policy also applies to any credits granted through examination. (See Department of Foreign Languages for specific information.)

Native speakers choosing a major in their native language will be required to complete twelve (12) credits at the 300-400 level, in addition to required courses. Please note: Native speakers choosing courses in their native language (but not majoring in the language) will be placed in appropriate courses by Foreign Language Faculty.

General Education Offerings: Students with advanced language skills who start a language sequence at a level above the GE courses listed may substitute that course(s) as valid GE offerings.

FLNG 361 Introduction to Linguistics (3:3:0)

This course examines the nature of language. Characteristics of phonological and grammatical systems and techniques of linguistic analysis are considered. The field of linguistics is discussed. Prerequisite: Advanced standing.

FLNG 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy. Prerequisite: Qualification to student teach. Concurrent registration in PSSED 430 or 431.

Asian Languages

FLAL 116 GE: Introduction to Asian Languages I: Chinese/Japanese (3:3:0)

This is a foundation course in Asian languages (Chinese or Japanese). It will provide the students with the basic skills of speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. This course may be taken more than once for credit, if a different language is the focus each time.

FLAL 117 GE: Introduction to Asian Languages II: Chinese/Japanese (3:3:0)

This course will further develop language skills acquired in FLAL 116. It will provide the students with extended practice in speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. This course may be taken more than once for credit, if a different language is the focus each time. Prerequisite: FLAL 116.

French

FLFR 116 GE: French I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLFR 117 GE: French II (3:3:0)

This is a continuation of French I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLFR 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

FLFR 120 GE: French Masterpieces in Translation (3:3:0)

This is a general education course open to all students except French majors. It includes reading and analysis of representative French works, done in English translation, of the 19th and 20th centuries.

FLFR 141 GE: French Influence on European Culture (3:3:0)

This course, in English translation, concentrates on original esthetic texts which reveal the movement of ideas at two high points in French civilization. It shows the reasoning behind French baroque, classicism, romanticism, symbolism, Dadaism, and Surrealism. This course is open to all students except French majors.

FLFR 214 GE: French III (3:3:0)

This is an intermediate level course designed to improve the communicative skills of students who have studied French for one-year in college or 4 years in high school. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLFR 117, or 4 years of high school French.

FLFR 215 GE: French IV (3:3:0)

This is a continuation of the French III course, and is designed to further develop those skills already learned. New grammatical concepts will be learned as well. Prerequisite: FLFR 214 or equivalent high school preparation.

FLFR 221 Reading French (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in learning to read French. Students will develop both active and passive vocabulary through reading materials which are graded as to level of difficulty. Prerequisite: FLFR 214 or equivalent.

FLFR 231 GE: French for Travelers (3:3:0)

This is an intermediate language course designed for the student who wishes to acquire conversational skills which will enable the student to travel more efficiently and with greater language ease in French-speaking countries. Prerequisites: FLFR 116 and 117, or equivalent.

FLFR 235 Listening/Speaking French (3:3:0)

This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches.

Students will be able to distinguish between formal and colloquial language. Prerequisite: FLFR 214 or equivalent.

FLFR 251 Translation: French (3:3:0)

This is an intermediate course designed to develop the facility of translation into English with texts which are graded as to level of difficulty. Readings may include several modern short stories, current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLFR 214 or equivalent.

FLFR 290 Special Topics (3:3:0) (Semester hours arranged.)

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

FLFR 301 Introduction to French and Francophone Literature (3:3:0)

This course includes reading and analysis of representative works of French and Francophone literature. Students will develop their linguistic skills through a series of interpretative essays and oral reports. Prerequisite: FLFR 215 or equivalent.

FLFR 315 French Grammar and Composition (3:3:0)

This course consists of a thorough review of grammar, verbs, and idioms with much practical exercise in composition; it is required for all majors. The course is offered on demand. Prerequisite: FLFR 235.

FLFR 336 French Oral Practice (3:3:0)

This course is designed to help the student attain fluency in French. It includes a presentation, discussion, and criticism of timed oral reports on a wide variety of subjects, as well as individual use of the language laboratory. The class limit is 12 students and offered on demand. Prerequisite: FLFR 235.

FLFR 343 French Civilization (3:3:0)

This course covers the history, geography and cultural trends of France from early periods to the modern-day. The course is offered on demand. Prerequisite: FLFR 215.

FLFR 423 Nineteenth Century French Literature (3:3:0)

This course examines the backgrounds and distinctive features of Romantic and Realistic periods. It includes readings in prose and poetry from representative authors, including Hugo, Vigny, Musset, Stendhal, Balzac, Zola, Flaubert, and Maupassant. The course is offered on demand. Prerequisites: FLFR 215, 221.

FLFR 424 Twentieth Century French Literature (3:3:0)

This course surveys the significant writers of this century, including Proust, Gide, Colette, Sartre, Camus, and Beckett. The course is offered on demand. Prerequisites: FLFR 215, 221.

FLFR 425 Seventeenth Century French Literature (3:3:0)

This course includes readings from Corneille, Racine, Moliere, and other representative writers of the century, as well as supplementary readings and reports on historical backgrounds. The course is offered on demand. Prerequisites: FLFR 215, 221.

FLFR 426 Modern French Drama (3:3:0)

This course surveys the French Theatre from the late 19th century to the present. It includes a study of various dramatic forms as seen in the reading of significant plays. The course is offered on demand. Prerequisites: FLFR 215, 221.

FLFR 495 Seminar (3:3:0)

German

FLGR 116 GE: German I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language

laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLGR 117 GE: German II (3:3:0)

This is a continuation of German I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLGR 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

FLGR 120 GE: German Masterpieces in Translation (3:3:0)

Readings in English translation may include works by Kafka, Mann, Hesse, Brecht, and others. This is a general education course open to all students except German majors. No prerequisite.

FLGR 214 GE: German III (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in reviewing German grammar. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLGR 117, or 4 years of high school German.

FLGR 215 GE: German IV (3:3:0)

This is a continuation of the German III course. The course is designed to further develop skills already learned as well as to introduce grammatical concepts of a more complex nature. Prerequisite: FLGR 214 or equivalent high school preparation.

FLGR 221 Reading German (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in learning to read German. Students will develop both active and passive vocabulary through reading materials which are graded as to level of difficulty. Prerequisite: FLGR 215 or equivalent.

FLGR 231 GE: German for Travelers (3:3:0)

This is an intermediate language course designed for the student who wishes to acquire conversational skills which will enable the student to travel more efficiently and with greater language ease in German-speaking countries. Prerequisites: FLGR 116 and 117, or equivalent.

FLGR 235 Listening/Speaking German (3:3:0)

This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches. Students will be able to distinguish between formal and colloquial language. Prerequisite: FLGR 215 or equivalent.

FLGR 251 Translation: German (3:3:0)

This is an intermediate course designed to develop the facility of translation into English with texts which are graded as to level of difficulty. Readings may include several modern short stories, current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLGR 215 or equivalent.

FLGR 290 Special Topics (3:3:0) (Semester hours arranged.)

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

FLGR 315 German Grammar and Composition (3:3:0)

This course is a thorough review of grammar with exercises in composition. Offered on demand. Prerequisite: FLGR 215 or equivalent.

FLGR 336 German Oral Practice (3:3:0)

This course is designed to help the student attain fluency in German. It includes the presentation, discussion, and criticism of timed oral reports on a wide variety of subjects,

memorization of prose and poetry for improving diction, and individual use of the language laboratory. The class is limited to 12 students and is offered on demand. Prerequisite: FLGR 235.

Latin

FLLN 116 GE: Latin I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLLN 117 GE: Latin II (3:3:0)

This is a continuation of Latin I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLLN 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

FLLN 221 Reading Latin (3:3:0)

This is an intermediate level course designed to develop reading skills in Latin while exploring the fundamental themes and remarkable diversity of Roman literary culture. A sequence of graded readings will include selections from Caesar, Cicero, Catullus, Ovid, and Virgil. Prerequisite: FLLN 117 or equivalent.

Russian

FLRU 116 GE: Russian I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLRU 117 GE: Russian II (3:3:0)

This is a continuation of Russian I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLRU 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

Spanish

FLSP 116 GE: Spanish I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLSP 117 GE: Spanish II (3:3:0)

This is a continuation of Spanish I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLSP 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

FLSP 120 GE: Spanish Masterpieces in Translation (3:3:0)

This course is designed for non-Spanish majors in which English translations of Peninsular and Latin American literature are read and discussed. Attention is given to

cultural understanding and to the interrelationships of literary works. The course is offered on demand.

FLSP 141 GE: Spanish Folklore (3:3:0)

Through the medium of music, songs, folk-tales and traditional dances, the student will be provided with a knowledge of the way in which Spaniards and Latin Americans think, as well as their view toward life. This course is open to all students except Spanish majors. The course is conducted in English and offered on demand.

FLSP 143 GE: Spanish Language and Culture Through Media (3:3:0)

This course is designed to develop an awareness and understanding of the differences between the cultures of the Spanish-speaking peoples and that of the student. These objectives are met through the use of media, including slides, films, filmstrips, and recordings. This course is open to all students except Spanish majors. The course is conducted in English and offered on demand.

FLSP 214 GE: Spanish III (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in reviewing Spanish grammar. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLSP 117, or 4 years of high school Spanish.

FLSP 215 GE: Spanish IV (3:3:0)

This is a continuation of the Spanish III course. The course is designed to further develop skills already learned, as well as to introduce grammatical concepts of a more complex nature. Prerequisite: FLSP 214 or equivalent high school preparation.

FLSP 221 Reading Spanish (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in learning to read Spanish. Students will develop both active and passive vocabulary through reading materials which are graded as to level of difficulty. Prerequisite: FLSP 215 or equivalent.

FLSP 231 GE: Spanish for Travelers (3:3:0)

This is an intermediate language course designed for the student who wishes to acquire conversational skills which will enable him to travel more efficiently and with greater language ease in Spanish-speaking countries. Prerequisites: FLSP 116 and 117, or equivalent.

FLSP 233 Conversational Spanish for Health Services (3:3:0)

Practical situations will be simulated in the classroom to provide individuals with basic conversational skills in Spanish in order to communicate with Spanish-speaking patients. Students will learn dialogues based upon typical hospital situations, i.e., parts of the body, useful phrases, and questions for testing, diagnosis, and treatment procedures. Students will also learn to respond more effectively to the needs and requests of the patient. The course may not be counted toward the major in Spanish. Prerequisites: FLSP 116 and 117, or high school equivalent.

FLSP 234 Conversational Spanish for Social Services (3:3:0)

Practical situations will be simulated in the classroom to provide opportunities for developing conversational skills useful for personnel in social services (i.e., criminal justice administration and social work). The focus will be on appropriate vocabulary, analysis of native mores, expectations of the U.S. system, and other areas that will promote Spanish communication between social service personnel and people of Spanish-speaking backgrounds. The course may not be counted toward the major in Spanish. Prerequisites: FLSP 116 and 117, or high school equivalent.

FLSP 235 Listening/Speaking Spanish (3:3:0)

This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches. Students will be able to distinguish between formal and colloquial language. Prerequisite:

FLSP 215 or equivalent.

FLSP 251 Translation: Spanish (3:3:0)

This is an intermediate course designed to develop the facility of translation into English with texts which are graded as to level of difficulty. Readings include current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLSP 215 or equivalent.

FLSP 290 Special Topics (3:3:0) (Semester hours arranged.)

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

FLSP 305 Spanish and Latin American Culture through Cinema (3:3:0)

This course is designed to give students the opportunity to examine and appreciate the rich and diverse cultures of Spain, Latin America and Latinos in the United States through films, videos and selected readings, as well as to improve their formal knowledge of the language. The course will combine lecture, film viewing and discussion in each class. Prerequisite: FLSP 235.

FLSP 310 A Critical Approach to Spanish Literature (3:3:0)

This is a course designed to acquaint Spanish students, advancing from skill courses in communication to liberated reading, with basic elements of literary appreciation and methods of literary evaluation. Prerequisite: FLSP 221.

FLSP 315 Spanish Grammar and Composition (3:3:0)

This course is a thorough and systematic survey of Spanish grammar. Composition themes will be based on important phases of Spanish life and culture. Prerequisite: FLSP 215 or equivalent.

FLSP 316 Spanish Language for Native Speakers (3:3:0)

This course is designed for native speakers of Spanish who want to improve their formal knowledge of the language. It is to be taken in place of FLSP 315 (Spanish Grammar and Composition). Admission will be determined by the Spanish component. Prerequisite: Native speaking ability as determined by the Department.

FLSP 336 Spanish Oral Practice (3:3:0)

This course is designed to help the student attain fluency in Spanish. It includes the presentation, discussion, and criticism of timed oral reports on a wide variety of subjects, as well as one-to-one student-teacher conferences and individual sessions in the language laboratory. This class is limited to 12 students and is offered on demand. Prerequisite: FLSP 235.

FLSP 344 Spanish Civilization (3:3:0)

This course consists of selected readings and discussion on the history, civilization, and general culture of Spain. Slides are used to give students a greater insight into geography and culture. This course is offered on demand. Prerequisites: FLSP 215, 221 or equivalent.

FLSP 345 Latin American Civilization (3:3:0)

This course consists of selected readings and discussion on the history, geography, civilization, and general culture of Latin America. Prerequisites: FLSP 215, 221, or equivalent.

FLSP 401 Survey of Spanish Literature (3:3:0)

This course is designed for upper-level students and will provide an overview of the most important periods, movements and genres in Spanish (peninsular) literature from the Middle Ages to the present. It will be presented chronologically and will focus on the analytical reading of major masterpieces. Prerequisites: FLSP 310.

FLSP 402 Survey of Spanish-American Literature (3:3:0)

This course surveys Spanish-American literature from the sixteenth to the twentieth century. It includes a short introduction to the indigenous literature and a brief historical

background of each of the literary movements as well as of the outstanding writers. Analytical reading of the masterpieces of the movements are considered. The course is offered on demand. Prerequisites: FLSP 310.

FLSP 421 Spanish Golden Age Literature (3:3:0)

This course includes reading and analysis of the important literary works of the Spanish Golden Age. These literary works are constantly referred to by both Spanish Peninsular and Latin American contemporary writers. Prerequisites: FLSP 310.

FLSP 423 Mexican Literature (3:3:0)

This course is an intensive study of prose literature which has appeared in Mexico since the Revolution. Reading and discussion of major works by Paz, Rulfo, Azuela, Yanez, Fuentes, and Ruben Romero are included. This course is offered on demand. Prerequisites: FLSP 310.

FLSP 426 Twentieth Century Spanish Drama (3:3:0)

This course is a study of the modern drama including the works of Federico Garcia Lorca and Alejandro Casona, as well as Post-War dramatists. The course is offered on demand. Prerequisites: FLSP 310.

FLSP 427 The Representative Latin American Novel (3:3:0)

This course involves reading and analyzing significant Latin American novels which reflect social, political, intellectual, and cultural developments from the colonial period to the present. The course is offered on demand. Prerequisites: FLSP 310.

FLSP 428 Twentieth Century Spanish Literature (3:3:0)

This course is an in-depth study of representative works of prose and poetry from the generation of 1898 to the present. The course is offered on demand. Prerequisites: FLSP 310.

FLSP 495 Seminar (3:3:0)

French

Bachelor of Arts with a French major—30 semester hours

See Foreign Language.

**Bachelor of Science with a French major (Secondary Education)
31 semester hours**

See Foreign Language.

General Science

School of Arts and Sciences—The Faculty of Science

Bachelor of Science with a General Science major (Secondary Education) —52 semester hours

Required major courses: BIOL 114, 115; CHEM 121, 123, 124, 126; PHYS 121, 122, 131 (or 161), 132 (or 162), 495; GEOG 120 (or 121), 220; Fifteen credits (200-level or above) in BIOL, CHEM and PHYS, with a minimum of three credits in each discipline. Nine of these fifteen credits must be 300-level or above.

Corequisite courses: CPSC 101; MATH 110, 140 (or 131).

Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321, PHYS 499.

Recommended courses: PHYS 486; CMST 111.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

Additional requirements: At least 9 credits of required courses (not corequisites), 300-level or above, must be completed at ESU. A minimum of a C must be obtained in each of the required courses.

For university requirements see page 49.

Geography

School of Arts and Sciences—The Faculty of Social Sciences

Professors: Ackroyd-Kelly (chair), Baxevanis

Assistant Professor: Hardy

Bachelor of Arts with a Geography major—33 semester hours

Required major courses: GEOG 110, 120, 340, 440, 495; two courses from GEOG 230, 231, 234, 330, 331, 333, 334, or 335; 12 semester hours in Physical or Human Geography areas. Physical Geography—one course from Group A and three courses from Group B. Human Geography—three courses from Group A and one course from Group B. Group A—GEOG 210, 212, 310, 311. Group B—GEOG 121, 220, 320, 321, 322.

Corequisite courses: CPSC 100 or 111 and MATH 110.

In order to remain in the program, students must maintain a 2.50 average in major courses. A minimum of 18 credits in Geography requirements must be earned at ESU.

For university requirements see page 49.

Geography minor-21 semester hours

GEOG 110, GEOG 120, GEOG 130, GEOG 340 and either GEOG 440 or GEOG 495., one course from the upper division physical geography courses and one course from the upper division human geography courses.

GEOG 110 GE: Cultural Geography (3:3:0)

This course offers a systematic approach to the understanding of human patterns on the Earth's surface. The course analyzes the form, cause, and interrelationship of economic,

political, social, cultural, and urban landscapes.

GEOG 120 GE: Physical Geography (3:3:0)

This course is a concentrated study of the physical aspects of the environment. Emphasis is placed on understanding the Earth and its planetary relations, the fundamentals of weather, climate, soils, and landforms, and the principles of map projections and interpretations. The course is of particular interest to earth science majors.

GEOG 121 GE: Physical Geology (3:3:0)

This course focuses on a description and interpretation of the Earth's rock and mineral formations and study of their constant change under the influence of streams, wind, glaciers, volcanism, and other forces.

GEOG 130 GE: World Regional Geography (3:3:0)

This course is a regional overview of the countries of the world combined with an introduction to geographic methodology. The course investigates the interaction between physical phenomena and human activity, the distribution of economic development, and the uniqueness of the world's regions.

GEOG 210 GE: Economic Geography (3:3:0)

This course examines and analyzes the spatial patterns of primary, secondary, and tertiary economic activities around the world. The problems of these economies and their relationship to the developing world are emphasized as are the problems and methods of measurement of the developing world. Prerequisite: GEOG 110.

GEOG 212 GE: Political Geography (3:3:0)

This course is a systematic treatment of the geographic patterns of political phenomena at the local, national and multinational levels with an emphasis on territorial control, definition, integrity, and diffusion. Prerequisite: GEOG 110.

GEOG 220 GE: Meteorology (3:3:0)

This course is a descriptive study of the atmosphere providing the student an opportunity to understand the underlying principles of atmospheric change, to become familiar with weather instruments, to observe and record weather data, and to read and interpret weather maps. Prerequisite: GEOG 120.

GEOG 230 GE: Geography of Anglo-America (3:3:0)

This course is the study of the geographic regions of the United States and Canada. Physiography, climate, resources, and industry are reviewed and applied to the various provinces of North America. Special emphasis is placed on the physical and cultural differences among regions. Prerequisite: GEOG 110.

GEOG 231 GE: Historical Geography of the United States (3:3:0)

This course is a study of the spatial patterns of the historical development of the United States from Pre-Columbian times to the present with emphasis on regional development of various cultural phenomena. Prerequisite: GEOG 110.

GEOG 234 GE: Geography of Europe (3:3:0)

The course is a regional analysis of Europe designed to develop spatial relationships underlying economic problems, land utilization, boundary disputes, and dominant international issues. Prerequisite: GEOG 110.

GEOG 290 Special Topics (Semester hours arranged.)

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

GEOG 310 GE: Population Geography (3:3:0)

This course examines the growth, diffusion, and distribution of population throughout the world; it forms a bridge between economic and cultural geography as a means for exploring ideas and methods concerning a problem of increasing interest. Prerequisite: GEOG 110.

GEOG 311 GE: Urban Geography (3:3:0)

This course is a spatial treatment of the origins of urban growth, the economic, social and technological evolution of urban centers, and the design and functions of cities. Prerequisite: GEOG 110.

GEOG 320 GE: Climatology (3:3:0)

This course is a review of climate controls and the regional characteristics of climate and the relation of climate to human activities. Prerequisite: GEOG 120.

GEOG 321 GE: Geomorphology (3:3:0)

This course is an advanced treatment of the processes that shape the earth's surface and the classification of their resulting landforms; it includes a study of the historical development of major theories through selected reading from classic works. Special attention is given to evolution of landscapes in the geological provinces of North America and other world areas. Prerequisite: GEOG 121.

GEOG 322 GE: Vegetation and Soils (3:3:0)

This course examines the way in which plant communities and soil profiles develop. It includes a broad survey of the vegetation and soils of the low, middle, and high latitudes, and a local study to illustrate the variety and contrasts which exist at a level below continental generalization. Prerequisite: GEOG 120.

GEOG 330 GE: Geography of Eastern Asia (3:3:0)

This course is an intensive investigation of geographic, economic and political regions of eastern Asia with an emphasis on geographic background, natural resources, land utilization, population concentrations, and industrialization of countries. Prerequisite: GEOG 110.

GEOG 331 GE: Geography of South and Southeast Asia (3:3:0)

This course examines major geographic conditions and problems of South and Southeast Asia with special emphasis on recent cultural and political changes in the area, the significance of these countries in world economy and affairs, and natural resources, population distribution, strategic areas, and boundary problems. Prerequisite: GEOG 110.

GEOG 333 GE: The Geography of Australasia (3:3:0)

This course is a regional geographic study of the area of Australia and the Pacific Ocean realm. The course will emphasize distinctive regional characteristics, physical geographic phenomena, exploration, and the diffusion of cultural geographic phenomena. Prerequisite: GEOG 110.

GEOG 334 GE: Geography of Africa (3:3:0)

This course is a survey of the physical geography of Africa; a regional study of social and economic development of countries and colonies in relation to their physical environment; political affiliation and geographic aspects of problems of new nations; distribution of races, languages and cultures; land tenure and utilization; and natural resources and their exploitation. Prerequisite: GEOG 110.

GEOG 335 Geography of the Arid Lands (3:3:0)

The common denominator of dryness is used to investigate the geographic, socio-economic, and political developments in areas of the Western Hemisphere, Australia, North Africa, North America, the Middle East, and Central Asia. Prerequisites: GEOG 110, 120.

GEOG 340 Cartography (3:3:0)

This course focuses on the use and interpretation of various map projections from a geographical point of view, the history of mapping, development of map symbols and scales, the construction of selected projections, and the construction and use of maps and diagrams. Prerequisite: GEOG 120.

GEOG 342 GE: The Geography of Viticulture (3:3:0)

An introduction to wine culture including historical, economic, social, and political implications, geographic description and analysis of producing areas' terminology and service. This course is aimed at those expressing an academic interest in wine appreciation as well as

those seeking professional and practical experience. Prerequisite: GEOG 110.

GEOG 421 Marine Geology (3:2:3)

This course is an analysis of the structural and sedimentary environment of the continental shelf, slope, and ocean basin. The techniques and findings of recent geophysical and geochemical research are used to gain an insight into the genesis of ocean basins and their features. Emphasis is on laboratory and field problems. Offered periodically during summer sessions at the Marine Science field station at Wallops Island, Virginia. Prerequisites: GEOG 120, 121.

GEOG 440 Field Techniques in Geography (3:3:0)

This course is an introduction to methods of collecting field data; it includes recognition of features of the physical or cultural environment or a combination of the two, interview procedures, field mapping, preparation of geographical reports and finished maps based on field work, and experience in use of field equipment and aerial photographs. Emphasis on cultural or physical geography depends on class interest. Prerequisites: GEOG 110, 120 and 340.

GEOG 485 Independent Study (Semester hours arranged.)

This course, offered by a faculty member to a student, does not properly fall within the scope of other courses listed in the catalog. Students will receive a reading list which will be accomplished on a set schedule and will meet periodically with the instructor for discussion and examination. The student will also prepare a paper or complete an exercise or workbook. Evaluation will be from discussion, examinations, papers, and/or exercises.

GEOG 486 Field Experiences and Internship (Semester hours arranged.)

GEOG 495 Seminar (3:3:0)

This course is an in-depth study of the history and philosophy of geography, an introduction to professional associations and their periodicals, and presentations of student research papers based on library or field work. Prerequisites: GEOG 110, 120, 340.

Gerontology Certificate Program

Gerontology Interdisciplinary Program—21 semester hours

Required courses: BIOL 420/520; PSY 225; SOC 442; or NURS 420/520; a six semester hour internship in gerontology related to the student's major.

Electives (select two): BIOL 420/520; HLTH 330, 444/544, 530; 532; MSES 420, 560; NURS 420/520; PSY 225; RECR 261; SOC 442; SPPA 321.

For university requirements see page 49.

Coordinator: Elaine Shuey, Speech Pathology and Audiology.

The primary focus of this interdisciplinary program is to provide concentrated knowledge in gerontology to supplement the course work completed in the student's academic major. The Gerontology Program will prepare students to work directly or indirectly with older adults. The program is open to students in any major.

Health

School of Health Sciences and Human Performance—The Faculty of Health Sciences

Professors: Godin, Hillman (chair), Livingood, Shive, Waring, Woodhouse

Associate Professor: Bitto

Assistant Professor: Cardelle

Bachelor of Science with a Allied Health Education major

30 semester hours

Required major courses: HLTH 240, 360, 370, 460, 486.

Corequisite courses: MCOM 262; MATH 110; PSED 161, 242.

Required specialized courses for Dental Hygiene Educational Specialist Certification: HLTH 340, 365, 409 and 470.

For university requirements see page 49.

The Allied Health Education program is designed for students who have completed an Associate Degree in one of the Allied Health areas. It is a unique opportunity that enables the student to apply the work completed in the Associate program to the Bachelor Degree requirements. It differs from the Health Education Degrees in that it does not include health content courses primarily building on the Allied Health skills and competencies gained at the associate level. The college general education requirements for all bachelor degrees are also completed with this program.

Bachelor of Science with a Health Education major—49 semester hours

Concentration: Community Health

Required major courses: HLTH 210, 230, 280, 360, 370, 386, 409, 460, 470, 486; and 12 additional semester hours from 220, 240, 250, 290, 310, 330, 340, 350, 355, 365, 405, 406, 407, 408, 421, 440, 442, 444, 485.

Corequisite courses: BIOL 111, 112; CMST 111; CPSC 100 or 101; MATH 110; MCOM 262; PSY 100, 225; SOC 111.

Note: A full-time, 12-credit internship experience (HLTH 486) is required. Completion of all health education coursework and an overall quality point average of 2.50 and a quality point average of 2.50 within the major is required for approval to enroll in the internship. For university requirements see page 49.

The Community Health Education Program is designed to prepare students for work in the public or private sector related to health promotion, education, and community-based prevention programs. Typical employment includes staff positions in governmental agencies (i.e., state or county health departments), community-based hospitals and medical centers, worksite wellness programs in industry, insurance and managed care companies, and non-profit agencies (i.e., American Cancer Society).

Bachelor of Science with a Health Education major—44 semester hours

Concentration: School Health (Teacher Certification program)

Required major courses: HLTH 210, 220, 230, 240, 310, 340 or 341, 350, 355 or 356, 360, 365, 370, 430 and 431.

Corequisite courses: BIOL 111, 112; MCOM 262; PSED 161, 242; CMST 111; PSY 100; SOC 111.

For university requirements see page 64.

The student must complete the following requirements for admission into the health education teacher certification program:

1. Complete 45 credits of course work.
2. Pass the National Teacher Exam with qualifying scores.
3. Complete CMST 111; HLTH 220, 230.
4. Submit an autobiographical sketch to adviser.
5. Obtain two recommendations from health professors.
6. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

The School Health Education Program is designed to provide training and certification in preparation for a health education career as a teacher in the elementary or secondary schools. The program is also advisable for careers as health coordinators for elementary or secondary schools or as health instructors in school related health centers.

Health Education Teacher Certification concentration

33 semester hours

Required courses: HLTH 220, 230, 240, 310, 340 or 341, 350, 355 or 356, 360, 365, 370, 430 and 431.

Corequisite courses: BIOL 112, MCOM 262; PSY 100; SOC 111; PSED 161, 242; CMST 111.

Note: A full-time student teaching experience (HLTH 431) is required. A 2.50 quality point average is required in the major courses for approval to enroll in student teaching.

Teacher certification in health is built into the school health concentration of the health education degree. Students in other disciplines may enroll in this program as an adjunct to their primary area of study.

Bachelor of Science with a Health and Physical Education Certification Program

See Movement Studies and Exercise Science.

Public Health Administration concentration—21 semester hours

Required concentration courses: EMGT 211; HLTH 230, 370, 460; POLS 293, 416, 467.

Required quality point average: 2.00 for the seven courses.

This concentration program is designed for students planning to enter public health careers. Enrollment in a major related to public health is strongly recommended. Some of these courses offered by other departments are scheduled on an every other year basis.

Course Rotation

Some of the Health Department courses may be available every other year. Therefore, students must begin taking required and elective courses as they become available during the second semester of the sophomore year to be able to accommodate an internship or student teaching in the senior year. Students having questions about the waiver of prerequisites should contact the Health Department.

HLTH 210 Foundations of Health Science (3:3:0)

The historical and philosophical perspectives of the development of health science will be discussed in this course. A comparison will be made of the major concepts and theories

of health and characteristics of health education programs in schools and communities. For those interested in the Health major only.

HLTH 220 Personal and Consumer Health (3:3:0)

This course deals with the identification of individual capability and responsibility for the development of attitudes and patterns of health behavior leading to a full and satisfying life. In addition, the course investigates the factors to be considered by a consumer purchasing products and services, including a study of the agencies and programs designed for consumer protection.

HLTH 230 Community Health (3:3:0)

This course consists of an exploration of the current major community health problems, the programs for preventing and controlling health problems, and the various community organizations which deal with these problems.

HLTH 240 Health Emergencies (3:3:0)

This course deals with training in life saving measures for all types of emergency situations with the opportunity to become certified in First Aid instruction and Cardiopulmonary Resuscitation (heart-lung resuscitation).

HLTH 250 Human Sexuality for Healthful Living (3:3:0)

This course examines the current knowledge and attitudes of human sexual behavior with emphasis on topics ranging from the sex act, orgasm, childbirth, birth control, sexual dysfunction, masturbation, to homosexuality.

HLTH 280: Fundamentals of Health Administration (3:3:0)

This course is designed to acquaint students with fundamental concepts and methods of modern management in health care settings. Various administrative practices among private for-profit, not for profit, and public health agencies are covered with particular focus on common integral principles and responsibilities of administration.

HLTH 290 Special Topics (Semester hours arranged.)

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

HLTH 303 Elementary School Health (3:3:0)

This course develops a health education curriculum designed for K-6 including an investigation of methods, materials, and evaluative techniques.

HLTH 310 Family Health Education (3:3:0)

The course examines human sexual behavior from a historical and socio-psychological perspective. It also includes biological and psychosocial development from infancy to adulthood, sexual response, and sexual dysfunction. The goals of sex education and the need for discussing sexuality in the schools will be stressed. Curriculum development, content and implementation will be included. Prerequisite: 60 semester hours or HLTH 220 or 230.

HLTH 340 Nutrition for Healthful Living (3:3:0)

This course is an overview of the principles of nutrition and how nutrition applies during the critical periods throughout the life cycle. Special attention will be given to the planning of diets for a better quality of health. Prerequisite: Advanced standing of 60 credits.

HLTH 341 Nutrition Education (1.5:1.5:0)

This course is designed to prepare students in the health and physical education teacher certification program to teach the principles of nutrition in the school setting. Emphasis will be placed upon methods and materials necessary for the teaching of nutrition in grades K-12. Prerequisite: HLTH 220 or 230.

HLTH 350 Mental Health for Public and School Health (3:3:0)

This course is designed to assist the health educator in developing an understanding of mental health and mental illness within a total social, physical, and emotional health perspective. Historical and popular approaches to health are examined in relation to mental health with particular emphasis on behavioristic and cultural approaches. Mental health as

a public health problem is studied in relation to individual, economic, and social impact in light of related physical and social health problems and community health programming. Mental health in the school is examined with emphasis on both environment and instruction. Prerequisite: Advanced standing of 60 credits.

HLTH 355 Drug Abuse Education (3:3:0)

This course is designed to prepare teachers who can organize and administer a drug education program in the school and community. Prerequisite: Advanced standing of 60 credits.

HLTH 356 Drug and Alcohol Teacher Preparation (1.5:1.5:0)

This course provides future teachers with the understanding, information, attitudes, and skills for use in the application of primary prevention programs for drug abuse. Special emphasis will be placed on decision-making skills, coping behaviors, and interpersonal growth. Prerequisite: HLTH 220 or 230.

HLTH 360 Methodology in Health Education (3:3:0)

This course is designed to acquaint students with a school health program, which involves health instruction, health services, and a healthful school environment. The major emphasis is focused upon the methods and materials which can be utilized for effective teaching of health content. Prerequisite: HLTH 220 or 230.

HLTH 365 School Health Administration (3:3:0)

This course deals with the organization and administration of the school health program including healthful school living, health services, and health science instruction. Prerequisite: HLTH 220 or 230.

HLTH 370 Planning and Evaluation for Health Education (3:3:0)

The course serves as an introduction to the means of assessing the need for health education, the planning of health education, and the evaluation of the effects of health education. It includes selection and development of appropriate instruments of assessment/evaluation of both Community and School Health, and the theoretical foundations and practical applications of planning for health education. Prerequisite: HLTH 220 or 230.

HLTH 386 Pre-Practicum in Health Education (3:1:5)

This guided early field experience is designed to introduce students to the application of health education skills in a supervised setting. This practicum provides an introduction to the various roles and competencies for health education in applied settings. Prerequisite: HLTH 210, 230 and two additional health courses.

HLTH 405 Non-Medical Healing Arts (1:1:0)

This course examines the role of Osteopathy, Acupuncture, Faith Healing, and other health 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 health education in utilization of these services are studied. Focus of the course will be on the development of guidelines for utilization of these services. Prerequisite: Advanced standing of 90 credits.

HLTH 406 Analysis of Health Information (1:1:0)

This course is an overview of the use and misuse of statistics, the manipulation of human needs and drives, and the provision of false and misleading information by providers and suppliers of health products and services. All major sources of information related to consumer health will be examined for inherent biases and common forms of misinformation. Prerequisite: Advanced standing of 90 credits.

HLTH 407 Trends in Dieting (1:1:0)

This course is a study of the issues surrounding popular health foods and diets. The desirable and undesirable qualities of "natural" and "organic" foods, "exotic" foods, and nutrient enriched foods are examined. The advantages and disadvantages of diets emphasizing

specific nutrients or types of foods, crash diets, drug aided diets, and diets for specific purposes are also studied. Focus of the course is on development of guidelines for evaluating information and sources of information. Prerequisite: Advanced standing of 90 credits.

HLTH 408 Women's Health Concerns (3:3:0)

This course is designed to address the unique health concerns of women in today's society. Specific topics such as alcoholism, anorexia nervosa, premenstrual syndrome, sexually transmitted diseases, domestic violence, child abuse, rape, and others will be included. Prerequisite: Advanced standing of 90 credits.

HLTH 409 Health Counseling (1:1:0)

The purpose of this course is to provide health professionals with an introduction to counseling theory and the skills of counseling techniques. The course emphasis is on the use of counseling techniques to improve the quality of health care, facilitate health-related decision-making, and enhance the relationships between client and the health professional. Health behavior theory will also be addressed. Prerequisite: HLTH 360; PSY 225.

HLTH 420 Cardiopulmonary Resuscitation Instructor's Training (1:1:0)

This is an instructor's training course in cardiopulmonary resuscitation. This course is designed to train the student in proper techniques and procedures in emergency measures in cardiopulmonary resuscitation. The course is recognized by the American Heart Association and the American Red Cross. Offered on demand. Prerequisites: Advanced standing of 90 credits, HLTH 240.

HLTH 421 Advanced Emergency Care (3:3:0)

The course will consist of advanced emergency procedures including CPR during transportation, shallow water rescue and emergency measures in cervical (neck) and back injuries, extrication from an automobile, and proper procedures in the administration of oxygen to a victim of an accident or sudden illness. There is also the opportunity to become certified in advanced emergency care and as an emergency medical technician. Prerequisites: Advanced standing of 90 credits, HLTH 240.

HLTH 430 Professional Practicum in Health Education (2:2:0)

This course is designed to develop insight during field experiences of student teachers. It includes the study of typical problems encountered in student teaching, analysis of materials and methods being used, management of health promotion activities, consideration of current priorities in the field, and orientation to professional and legal responsibilities in the field. Prerequisites: Advanced standing of 96 credits; department approval; HLTH 360, 220, or 230.

HLTH 431 Student Teaching in Health Education (6-12:0:3)

This experience consists of a semester of guided teaching experience in the elementary and/or secondary school. This field experience is designed to provide the student teacher with the opportunity to develop and refine competencies and understanding of the teaching-learning process. Prerequisites: Cumulative quality point average of 2.5 overall and a 2.5 in Health; department approval; HLTH 220, 230, 240, 310, 355 or 356, 360; PSED 161, 242; MCOM 262.

HLTH 432 Death and Dying—Implications for Health (3:3:0)

This course investigates the phenomenon of death and dying with the focus on the development of reinforcement of healthy attitudes, values, and behaviors. Prerequisite: Advanced standing of 60 credits.

HLTH 440 Behavior Modification for Health Education (3:3:0)

This course is an overview of the major principles of behavior modification as they relate to health education in both theory and practice. It examines theory in relation to current issues of education in general and health education in particular. Applications of principles are studied in the context of health programs specifically designed as behavior modification programs

and in the context of health programs which contain behavior modification principles but were not designed with these principles in mind. Prerequisite: HLTH 360, 220, or 230.

HLTH 442 HIV and AIDS Prevention and Education (3:3:0)

This course is designed to provide a comprehensive overview of HIV/AIDS infection in Pennsylvania, New Jersey, and other states. The course will provide information about recent research on modes of HIV transmission and risk reduction strategies. Particular emphasis will be placed on the design and evaluation of HIV prevention and education programs geared towards high risk populations.

HLTH 444 Health Promotion Programs and Aging (3:3:0)

This course will emphasize health promotion programming for elderly populations. Social and demographic factors will be addressed in regard to health education's role in the aging process. Healthful aging will be examined and discussed from a public health and school health perspective with a primary focus on developing and implementing programs that enhance the health of the elderly.

HLTH 460 Community Health Organizations (3:3:0)

This course is designed to investigate the theories, principles, and practices of community organizations for health, techniques of group work, current research in community organizations, and examination of programs of community health agencies. Prerequisites: Advanced standing of 90 credits; HLTH 230.

HLTH 470 International Health Science (3:3:0)

The course is designed to familiarize the student with international health problems and the social, physical, emotional, and spiritual complexities related to changing health status. Emphasis is placed on how change instituted for improvement of physical health may positively or negatively affect the total well-being of people. Examination of international health organizations and programs is included. Prerequisites: HLTH 230; advanced standing of 90 credits.

HLTH 485 Independent Study (Semester hours arranged.)

With the guidance of a faculty member of the Health Department, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in health science. Topics should be established prior to enrollment. Prerequisites: Department approval; advanced standing of 90 credits.

HLTH 486 Field Experiences and Internships (Semester hours arranged.)

Prerequisites: Department approval; 2.50 overall QPA, 2.50 QPA in major, completion of all requisite and corequisite courses, and advanced standing of 90 credits.

History

School of Arts and Sciences—The Faculty of Social Sciences

Professors: Henwood, Hogan, Muncie, Squeri (chair)

Associate Professors: Donaghay, Jarvis

Instructor: Dellipriscoli

Bachelor of Arts with a History major—36 semester hours

Required major courses: HIST 495; at least one course in each of three areas: United States History, European History, and Area Studies—World History; 24 additional semester hours. Twenty-one hours of this total must be completed at ESU. Fifteen hours of electives must be 300/400 level courses; with the permission of an adviser one elective may be taken in geography, political science, economics, or sociology.

Note: United States History Courses—HIST 141, 142, 143, 144, 241, 242, 243, 251, 252, 253, 278, 341, 346, 347, 441, 442.

European History Courses—HIST 270, 271, 272, 281, 282, 288, 335, 371, 381, 382, 424, 471, 472, 473, 474.

Area Studies—World History—HIST 111, 112, 113, 115, 211, 230, 313, 314, 333, 343.

For university requirements see page 49.

History minor—18 semester hours

Required courses: HIST 495; at least one course in each of three areas: United States History, European History, and Area Studies/World History; 6 additional semester hours of History.

Note: Nine credits of this coursework must be at the 300-400 level including HIST 495.

HIST 111 GE: World Civilization to 1300 (3:3:0)

This course traces the development of civilization through the rise and fall of cultures in Europe, Asia, Africa and the Americas to 1300 A.D.

HIST 112 GE: Modern World Civilization, 1300-1914 (3:3:0)

This course acquaints students with the history of Europe, Asia, Latin America, and Africa.

HIST 113 GE: Twentieth Century World, Since 1914 (3:3:0)

This course examines political and social developments since World War I and their relationship to the wars of the century, materialism, imperialism, industrialism, socialism, communism and democracy. Selected events and problems may be examined to illustrate basic trends and concepts.

HIST 115 GE: History of the Non-Western World, Since 1800 (3:3:0)

This course traces developments in Asia, Africa, and Latin America from the colonial era to independence. Special emphasis is given to the diverse cultures in the non-western world and their interaction with the west.

HIST 141 GE: Foundations of the United States, to 1829 (3:3:0)

This course deals with studies in European colonization of the New World, the social, economic and political development of the colonies, the growth of revolutionary movements, and independence and the political and social consequences.

HIST 142 GE: The United States as a Developing Nation in the Nineteenth Century (3:3:0)

This course is a study of continued growth of the federal republic from the age of Jackson to the end of the century with particular attention to political problems, economic

development, social changes, the Civil War and growing industrialization, culminating with the emergence of the United States as a world power.

HIST 143 GE: Twentieth Century America I, to 1941 (3:3:0)

This course is a study of the United States from the beginning of the century to the start of World War II with particular stress on the Progressive movement, World War I, the New Deal, economic growth and problems, and social change. Pennsylvania is cited as an example of an eastern industrial state.

HIST 144 GE: Twentieth Century America II, Since 1945 (3:3:0)

This course acquaints the student with contemporary social, political and cultural changes and their origins over the past 55 years. It provides the proper historical background necessary to understand these changes.

HIST 211 GE: The Ancient World (3:3:0)

This studies the origins of western cultural traditions in the Middle East and the rise and fall of the Greco-Roman world with special emphasis on political institutions, intellectual, religious, artistic, and literary achievements.

HIST 230 South Asia (3:3:0)

The course will deal with India, Pakistan, Bangladesh, Sri Lanka, and the Himalayan Kingdoms. Emphasis will be on political developments, economic and social problems, and modernization. Foreign policies also will be surveyed.

HIST 241 GE: American Colonial History (3:3:0)

This course is an in-depth study of the colonial period stressing those developments which later contributed to the growth of the United States. Prerequisite: HIST 112 or 141.

HIST 242 GE: The Coming of the Civil War (3:3:0)

This course is an examination into the background of the Civil War with a stress on the political, social, and economic conditions of the 1850's, the failure of compromise efforts, and the causes of secession. Prerequisite: HIST 141 or 142.

HIST 243 GE: Civil War and Reconstruction (3:3:0)

This course examines the major events, battles, and leaders of the Civil War, Union and Confederate, and the ultimate outcome of the conflict. A study of the Reconstruction period with emphasis on the political, social, and economic conflicts of the era, and the reasons for the failure of Reconstruction, is made. Prerequisite: HIST 141 or 142.

HIST 251 GE: History of American Transportation (3:3:0)

This course is a study of the development of various forms of transportation from colonial times to the present. Emphasis is placed on the impact of transportation growth and changing forms on the economic, political, and social changes which took place in the United States. Prerequisite: One of HIST 141 or 142, 143, or 144.

HIST 252 GE: History of Pennsylvania (3:3:0)

This course will cover the development of Pennsylvania from the period of exploration and colonization to the present and its inter-relationships with the rest of the country. Prerequisite: One of HIST 141, 142, 143, or 144.

HIST 253 GE: Women in American History (3:3:0)

This course is a study of the role of women in American history from colonial times to the present. Prerequisite: One of HIST 141, 142, 143, or 144.

HIST 270 GE: Early Modern Europe, 1500-1789 (3:3:0)

This course explores the development of Europe between the Reformation and the French Revolution, focusing on the religious revolution of the sixteenth century, the rise of absolute rulers, mercantilism and the European state system, the Scientific Revolution, and the Enlightenment. Prerequisite: HIST 112.

HIST 271 GE: Foundations of Modern Europe, 1789-1914 (3:3:0)

The course presents the history of Europe from the French Revolution to World War

I: the fall of the Old Regime in France and its effect upon European political developments in the 19th century; the Napoleonic episode and the conservative reaction; romanticism, nationalism, socialism, democracy; and imperialism, and international relations. Prerequisite: HIST 112.

HIST 272 GE: Modern European History, 1914-1990 (3:3:0)

This course presents Europe since 1914; World War I, Paris Peace Conference, The League of Nations and Collective Security, rise of Bolshevism and Facism, World War II, the Cold War, NATO and the Warsaw Pact, the political and economic search for a new Europe in the 1980's. Prerequisite: HIST 112 or 113.

HIST 278 GE: History of Everyday Life, Since 1800 (3:3:0)

This course explores changes in the everyday activities of common people. It deals with leisure, entertainment, sports, health, popular religion, urban and suburban life, non-elite mass media, the social effects of modern transportation, and other selected topics. Prerequisite: One of HIST 112, 113, 141, 142, 143, or 144.

HIST 281 GE: The Third Reich—from Hitler to Holocaust (3:3:0)

This is an interpretive survey of Europe during the Hitler era centered on the history of Nazi Germany. Topics to be covered include the origins of National Socialism, Adolf Hitler, Nazi Political and Social Revolutions, the S.S. Terror system, the Nazi "new order" in Europe, Holocaust, and the Nuremberg Trials. Prerequisite: HIST 112 or 113 or 144.

HIST 282 GE: Women in European History (3:3:0)

This course is a study of the role of women in European history up to the present. Emphasis is placed on changing social and political position of women in European society since the Industrial Revolution. Prerequisite: One of HIST 111, 112, 113, 141, 142, or 143.

HIST 288 GE: Social History of Victorian & Twentieth Century

England (3:3:0)

Using the new social history the course will explore the character of upper, middle, and working class society in England from the Victorian era to the present. It will study the social changes and continuity of English society since 1832. Prerequisite: HIST 112 or 113.

HIST 290 Special Topics (Semester hours arranged.)

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

HIST 313 GE: China: History and Politics (3:3:0)

This is a study of China since traditional times examining political, cultural, and economic aspects of her society up to the present and her influence on East Asia and the world. A companion to HIST 314. Prerequisite: One of HIST 111, 112, 113, or 115.

HIST 314 GE: Japan and the Rimland of East Asia (3:3:0)

This course presents historical and cultural evolution of Japan, Korea, and the nations of Southeast Asia and their contemporary government and politics. This is a companion course to HIST 313. Prerequisite: One of HIST 111, 112, 113, or 115.

HIST 333 Africa (3:3:0)

Substantial attention is given to the African experiences before 1800, emphasizing the roots of modern Africa. The course traces the development of European empires in the 19th century and the emergence of African nationalism in the 20th Century, and focus on interaction of Western and African cultures is presented. Prerequisite: Advanced standing of 60 credits.

HIST 335 GE: History of Modern Italy (3:3:0)

This course traces the development of Italy from the Napoleonic Era to the present. Among topics covered are unification, the Liberal Period, Fascism, and the postwar years. Emphasis is on social, political, and economic trends. Prerequisite: HIST 112 or 113.

HIST 341 GE: U.S. Military History (3:3:0)

This course is a study of the development of American military institutions, policies, and traditions from colonial times to the present. Emphasis is on the strategic and tactical deployment of our armed forces in war and peace. Prerequisite: One of HIST 141, 142, 143 or 144.

HIST 343 GE: The Middle East (3:3:0)

This is an introductory survey of ancient civilization and an intensive study of growth and effects of colonialism and imperialism. Emphasis is placed on cultural backgrounds and the revolutionary nationalism of the modern period, and discussion of contemporary events. Prerequisite: One of HIST 111, 112, 113, or 115.

HIST 346 GE: History of Urban America (3:3:0)

An examination of the growth and transformation of the American city from the colonial period to the present, attention is focused on the evolution of political and economic institutions, social change, technological innovations, planning theories, and reactions of sensitive observers to the process of urbanization as expressed in imaginative literature and scholarly studies. Prerequisite: One of HIST 141, 142, 143, or 144.

HIST 347 GE: American Business History (3:3:0)

This course traces the growth and development of American business from the late 18th century to the present. Emphasis is placed on the transportation revolution, labor, technology, the impact of a Civil War, modern industrialization, trusts and antitrust movements, unionization, the Great Depression, World War II, and the problems of contemporary business. Prerequisite: One of HIST 141, 142, 143, 144.

HIST 371 GE: Medieval and Renaissance Europe, 500-1500 (3:3:0)

This course traces the history of Europe from the fall of the Roman Empire to the Reformation: formative stage, origins of the European States, the feudal system, Church-State relations, international relations, origins of the universities, scholasticisms, literature and arts, the Renaissance of the 14th and 15th centuries. Prerequisite: HIST 111 or 112.

HIST 381 GE: The Rise of England to 1760 (3:3:0)

This course is a survey from the Anglo-Saxon Conquest to the beginning of the Industrial Revolution centering around the development of the common law and Parliament as well as the growth of England as a national state. Particular emphasis is placed on economic, social, and political developments in the Tudor, Stuart, and early Georgian periods. Prerequisite: One of HIST 111, 112, 113 or 141.

HIST 382 GE: Modern Britain (3:3:0)

This course stresses the growth of modern industrial Britain from 1760 with emphasis on social and economic factors of growth, the position of Britain as a world power, the development of the cabinet system, and the emergence of modern social and political reform, including the welfare state. Britain's role in world affairs is analyzed along with her changing status in contemporary Europe. Prerequisite: One of HIST 112, 113, 141, 142 or 144.

HIST 395 Scapegoats and Witchhunts (3:3:0)

This course is an interdisciplinary seminar which explores the phenomena of cultural scapegoating and witchhunting. The primary perspectives will be rhetorical, historical, and psychological. By focusing on various targeted individuals and groups, past and present, the seminar will culminate in a synthesized view based on the instructor's various disciplines. Prerequisite: Honors program or permission of instructor.

HIST 424 Russia and Eurasia (3:3:0)

This course focuses on the emerging political units created as a result of the break up of the Soviet Union. Students will examine the causes, nature, and course of the Soviet collapse, the challenges of the successor states, and the consequences of this major historical development for the post-cold war world. Prerequisites: Advanced standing of 90 credits; one of POLS 101, 111, 211, 222.

HIST 441 Diplomatic History of the United States, to 1900 (3:3:0)

This course examines American diplomacy and foreign policies from the Revolution to the end of the Spanish-American War. Particular attention is given to the evolution of basic concepts such as isolationism, neutrality, and manifest destiny. Prerequisite: Advanced standing of 90 credits.

HIST 442 Diplomatic History of the United States, Since 1900 (3:3:0)

This course emphasizes the United States' emergence from a tradition of isolationism into a position of international responsibility by examining its progressively deeper involvement in the world's diplomatic and military confrontations. Prerequisites: Two of HIST 111, 112, 141, 142, 143, 144.

HIST 471 History of Russia, to 1917 (3:3:0)

This is a study of the political, social, and cultural evolution of Russia from the 9th century to the Bolshevik Revolution of 1917 with special emphasis on the development of institutions, social classes, reform and revolutionary movement, foreign policy objectives and achievements, and the growth of Russia as a world power. Prerequisite: Advanced standing of 90 credits.

HIST 472 The Soviet Union (3:3:0)

This course is a study of the origins of the development of the U.S.S.R., the social, economic and political transformation of old Russia into socialist state under Lenin and Stalin, the Bolshevik Revolution of 1917, the civil war, the struggle for power and the great purges, Soviet foreign policy before and after World War II, the cold war, and the post-Stalin era of Khrushchev and Brezhnev-Kosygin regimes. Prerequisite: Advanced standing of 90 credits.

HIST 473 Modern Germany (3:3:0)

This course studies the Napoleonic impact, the Prussian reform movement, romanticism, liberalism, and nationalism in Germany, the Revolutions of 1848, the age of Bismark, Wilhelminian period, World War I, the Weimer Republic, the Nazi revolution, World War II, and the post war era. Emphasis is on political, cultural, and economic changes, 1789-1994. Prerequisite: Advanced standing of 90 credits.

HIST 474 History of Modern France, 1789-1990 (3:3:0)

This course acquaints students with a basic knowledge of France's political, social, economic, and diplomatic history since 1789 and provides a firm grasp of French institutions. Prerequisites: HIST 112 or 113 or advanced standing of 90 credits.

HIST 485 Independent Study (Semester hours arranged.)

Independent study is designed to provide in-depth coverage of subject matter not covered in courses offered by the Department and must be justified to meet a specific need. A student wishing to take independent study should discuss the plan first with his/her adviser and then with a member of the Department. If a faculty member agrees to supervise the study, the proposal will be submitted to the chair of the Department. The chair, after acting on the proposal, shall present it to the Department for action. It will then be transmitted to the dean of the school.

HIST 486 Field Experiences and Internships (Semester hours arranged.)

HIST 495 Seminar (Semester hours arranged.)

This course acquaints students with the basic principles of a historical period, makes them familiar with the important literature in the field, gives them a firm foundation in the techniques of research and writing, and illustrates various and changing interpretations.

HIST 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching

experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy.

Hotel, Restaurant and Tourism Management

School of Professional Studies—The Faculty of Hospitality and Leisure Management

Associate Professors: Burt, McMullin, Miller

Assistant Professors: Clark, Moranville (chair), Persia

Bachelor of Science with a Hotel, Restaurant and Tourism Management major—69 semester hours

Concentration: Hotel Management

Required major courses: HRTM 101, 211, 212, 241, 321, 331, 351, 391, 392, 421, 431, 441, 451, 486, 491.

Corequisite courses: ECON 111, 112; ENGL 205; PSY 100; CMST 111 or 210; EMGT 211.

For university requirements see page 49.

Majors must maintain an overall quality point average of not less than 2.5 for enrollment in HRTM 486 and graduation.

Concentration: Restaurant Management

Required major courses: HRTM 101, 211, 212, 251, 311, 321, 331, 351, 391, 392, 421, 441, 451, 486, 492.

Corequisite courses: ECON 111, 112; ENGL 205; PSY 100; CMST 111 or 210; EMGT 211.

For university requirements see page 49.

Majors must maintain an overall quality point average of not less than 2.50 for enrollment in HRTM 486 and graduation.

Concentration: Tourism Management

Required major courses: HRTM 101, 211, 212, 232, 321, 331, 334, 335, 336, 351, 421, 431, 441, 451, 486.

Corequisite courses: PSY 100; SOC 111; CMST 111 or 210; ECON 112; EMGT 211; RECR 270.

For university requirements see page 49.

Majors must maintain an overall quality point average of not less than 2.5 for enrollment

in HRTM 486 and graduation.

HRTM 101 Introduction to Hotel Management (3:3:0)

This course introduces the scope, historical development, and current trends and prospects in hotel administration. It includes an investigation into the goals, managerial duties and responsibilities, organization structure, and career opportunities in the hospitality industry.

HRTM 211 Basic Food Techniques (3:2:2)

This course is an introduction to the science of foods with special attention given to foods as ingredients of recipes. It includes explanation and demonstration of the physical and chemical changes that occur in the preparation, mixing, and cooking phases of food production.

HRTM 212 Menu Planning and Presentation (3:2:2)

This course is designed to develop the student's knowledge of recipe use, menu preparation, and the concepts of theme, color, and decor in food production. Emphasis on international foods and an introduction to wines in relation to foods is included. Prerequisite: HRTM 211.

HRTM 232 Principles of Travel and Tourism (3:3:0)

This course is designed to acquaint the student with the growing importance of travel and tourism as a worldwide industry. Topics include an overview of tourism terminology, travel and tourism suppliers, the social, cultural, and economic impacts of tourism, trends in transportation, research, and consumerism, introduction to tourism marketing, and tourism in the future.

HRTM 241 Rooms Division Management (3:3:0)

This course is the study of the service function as it relates to the Rooms Division. Specifically, it is the study of the front office and housekeeping departments as they relate to the total hotel organization. Topics include organizational structure of the Rooms Division, front office and reservation procedures, price structures and accounting, and scheduling and training in these areas. Prerequisite: HRTM 101.

HRTM 251 Applied Foodservice Safety and Sanitation (3:3:0)

Applied Foodservice Safety and Sanitation is a course designed to provide the student with the fundamentals and techniques of food management that apply to environmental sanitation. Emphasis is placed on the application of principles necessary to manage a sanitary and safe foodservice operation. For Certification with the National Restaurant Association. Prerequisite: HRTM 212.

HRTM 261 Club Management (3:3:0)

An overview of the club management industry with emphasis on the analysis of country clubs, night clubs, and private clubs. Students should be exposed to the history and structure of club management, physical organization, operating club departments, and entertainment. Within club management, an introduction to beverage management component will include the history, development, preparation, and implementing of mixed beverages.

HRTM 271 Casino Management (3:3:0)

An overview of Casino Management with emphasis on the analysis of casino hotel operations, the gaming industry and its trends, and casino organizational structure. Students will learn the gaming history, casino management, physical organizations, and government regulations of gambling. Related topics include layout and design of facilities, surveillance, demographic profiles, psychological profiles, and economic impact.

HRTM 290 Special Topics (Semester hours arranged.)

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

HRTM 311 Haute Cuisine and Oenology (3:3:0)

This course consists of an introduction to the classic dishes of haute cuisine, general information on menu planning, preparation of various international dishes, and sources and characteristics of selected wines of the world, how they are produced, stored, and selected. Prerequisites: HRTM 101, 212.

HRTM 321 Human Resources I (3:3:0)

This course introduces the language, responsibilities, and relationships of the personnel function in a hotel. It stresses interviewing techniques, staffing, training, employee relations, and wage and benefit administration in the hospitality field. Prerequisites: HRTM 101, 211.

HRTM 331 Hospitality Marketing I (3:3:0)

This course establishes the importance of a formalized marketing/advertising program in successful hotel operation. It traces the steps in developing a sales presentation, a product and marketing analysis and the development of a marketing plan and its relationship to the overall profitable operation of the hotel or restaurant. Prerequisites: HRTM 101, 211.

HRTM 334 Tourism Destination (3:3:0)

This course examines the major national and international tourism destinations according to their attractiveness and accessibility to tourists. Prerequisite: HRTM 232.

HRTM 335 Perspectives of International Tourism (3:3:0)

This course presents an overall view of the scope, structure, and function of international tourism. Political relationships necessary for international tourism exchange are investigated, and cultural, social, and economic impacts of travel and tourism are examined. Prerequisite: HRTM 232.

HRTM 336 Community Tourism Development (3:3:0)

This course presents a localized perspective of the organizational, planning, promotional, and operational procedures utilized for successful tourism development at the community level. Prerequisite: HRTM 232.

HRTM 351 Information Systems for Hospitality Management (3:3:0)

This course is a study of the various types of computer-based information and communication systems used by managers in the hospitality industry. Topics will include reservations, registration, accounting and point of sale systems, telecommunications, spreadsheet applications, and information processing. Prerequisites: HRTM 321, 331; EMGT 211; CPSC 100.

HRTM 371 Hotel Development and Design (3:3:0)

The development of market and feasibility studies, location and site selection, creation of concept, budgetary planning, selection of equipment, space allocation, and maintenance costs are covered in this course. Prerequisites: HRTM 101, HRTM 211.

HRTM 381 Hotel Energy/Engineering Management (3:3:0)

This course consists of an introduction to the management of the major engineering systems required to operate the physical plant of a hotel, the importance of energy conservation and controls, impact on efficient cost management, and the need for a continuing rehabilitation program for all areas of the physical plant. Prerequisites: HRTM 101, 211; one of PHYS 101, 103, 117.

HRTM 391 Hotel Purchasing (3:3:0)

This course presents the vocabulary, systems, controls specifications, and products typical to hotels. It shows how to set up a purchasing department and defines and establishes its relationship to other hotel departments and hotel operations as a whole. Prerequisites: HRTM 101, 211.

HRTM 392 Quantity Food Production and Service (3:0:6)

In this course the student learns to integrate all of the techniques and information of previous culinary courses and participates in the operation of a food service business on

campus. Emphasis is placed on planning, preparation, service, and stewarding phases of the operation. Prerequisites: HRTM 101, 211.

HRTM 421 Human Resources II (3:3:0)

This course provides an in-depth study of supervisory techniques from first-line to top management in a hotel. It investigates training programs and techniques at all levels of supervision in a hotel, including hotel opening. Prerequisite: HRTM 321.

HRTM 431 Hospitality Marketing II (3:3:0)

This course is designed to introduce the student to the scope and importance of group business to hotels. Market sources for tour groups and corporate business, as well as conventions and conferences, will be investigated. Instruction in the importance of association and meeting planners will be emphasized. Sales management techniques for servicing this segment of the hospitality market so important to successful sales operations will be stressed. Prerequisites: HRTM 101, 211, 331.

HRTM 432 Tour Planning and Management (3:3:0)

This course familiarizes the student with the tour planning process including designing, costing, and marketing an escorted tour. Responsibilities of the tour manager and the tour operator are discussed. Prerequisites: HRTM 232, 334 or 335.

HRTM 436 Meeting and Convention Planning and Management (3:3:0)

This course provides students with a basic understanding of the organizational and operational aspects of meeting and convention planning and management from the perspectives of the sponsoring organization as well as that of the facility manager. Prerequisites: HRTM 232, 331.

HRTM 439 Touring Abroad (3:3:0)

This course is designed to be an educational experience which combines classroom instruction in the basics of international travel and tour operations within an authentic setting. Destination of the tour varies. Prerequisites: HRTM 232, 335.

HRTM 441 Hospitality Financial Management (3:3:0)

This course continues the study of the financial structure of business at an advanced level with emphasis in the hotel/restaurant (hospitality) industry. It includes an examination of food, beverage, room, and labor cost controls, franchise accounting, hotel/restaurant cost-volume-profit analysis, pricing methods, and other management interests in the financial structure of the hotel entity. Emphasis is placed upon the preparation, interpretation, and application of financial instruments. Prerequisites: HRTM 101, 211; EMGT 211

HRTM 451 Hotel Law (3:3:0)

This course traces the origin and development of innkeeping law and introduces the language and role of common law and statutory law in delineating the legal rights and responsibilities in the hotel industry through the analysis and interpretation of actual case studies. Prerequisites: HRTM 101, 211, 321.

HRTM 485 Independent Study (Semester hours arranged.)

Enrollment is contingent upon the student's compliance with all departmental standards and requirements.

HRTM 486 Field Experience and Internship (Semester hours arranged.)

Placement for the intern is arranged on an individual basis by the internship instructor in consultation with the intern and the intern-employer. Enrollment in this course requires a minimum cumulative point average of 2.5, 90 semester credits, departmental approval, and 400 hours of documented work experience in the hospitality industry.

HRTM 488 Research Skills in Psychology and Hospitality (Semester hours arranged.)

This course is designed for students preparing for and others already employed in the hospitality industry who need a greater degree of sophistication in the methodological problems and the research strategies which are employed in the industry to enable them to

become better consumers as well as planners of such applied research. Also listed as PSY 488. Prerequisites: PSY 101; HRTM 101; or advanced standing of 90 credits and permission of departments.

HRTM 491 Advanced Hotel Management (3:3:0)

This course involves the techniques for developing management policy and managerial expertise including goal setting, financial planning, and property development and maintenance. Prerequisites: HRTM 321, 392.

HRTM 492 Advanced Food and Beverage Management (3:3:0)

This course is an advanced investigation into the vocabulary, systems, policies, and procedures for all of the food and beverage operations in a hotel including food and beverage management. Prerequisite: HRTM 392.

Interdisciplinary Studies

Bachelor of Arts or Bachelor of Science with an Interdisciplinary Studies major—42 semester hours

An interdisciplinary program of study can be arranged to satisfy an educational objective of an individual student. Such programs may involve either 2 or 3 departments. Normally a student must declare an interdisciplinary studies major before completing 60 credits (or before the completion of the first semester for students transferring 60 or more credits). Exceptions may be approved in extraordinary circumstances. In any case, the student must complete 30 credits after officially declaring an interdisciplinary studies major.

Application forms, available in the Registrar's Office, require a student statement of the goals of the program and how it addresses the student's professional aspirations, a list of courses to be taken from each department, and dated signatures of the student and of the department chair of each cooperating department. The completed form will be filed in the Registrar's Office and copied to the student and each adviser.

Required Courses:

Two department program—a minimum of 21 credits (at least 9 at the 300 level or above) from each department.

Three department program—a minimum of 15 credits (at least 6 at the 300 level or above) from each of two departments and a minimum of 12 credits (at least 3 at the 300 level or above) from the third department.

Note: Grades of A, B, or C must be earned in all 42 credits.

For university requirements see page 49.

International Studies

International Studies concentration—24 semester hours

The International Studies concentration at East Stroudsburg University is based on the philosophy that international studies should enhance the knowledge and skills acquired in the student's major. It is designed to provide the undergraduate student with a structured interdisciplinary program of international studies which complements a field of study in a traditional major. The concentration is open to all matriculating students at East Stroudsburg University, and it may be used to enrich any degree program.

Required concentration courses: POLS 322; three semester hours each in Geography, History, and Political Science; six semester hours in a related foreign language; six semester hours in approved international or intercultural courses.

Note: One must be selected for study of a specific area of the world: Middle East and North America, Latin America, East Asia, South Asia, Western Europe, Central and Eastern Europe, Russia, Sub-Sahara Africa, or the British Commonwealth.

Coordinating Department: Foreign Languages.

This concentration provides an interdisciplinary program of international study within available degree programs.

Management

School of Arts and Sciences—The Faculty of Social Sciences

Bachelor of Science with a Management major—48 semester hours

Required courses: ECON 111, 112, 312, 322, 413; EMGT 211, 212, 215, 225, 233, 236.

Specialization courses: Fifteen semester hours from one of the following areas: accounting, finance, or management.

Corequisite courses: Three courses in MATH, two courses in ENGL, and one course in each of CMST; CPSC; GEOG; HIST; PHIL (Ethics); PSY; SOC.

For university requirements see page 49.

Note: Admission to the Management program is limited. Before a student can apply for admission to the program and be designated as a management major, the candidate must complete at least 30 credit hours of instruction with a cumulative quality point average of 2.5 or better. Management majors must complete at least 10 courses at ESU with rubrics that begin with either ECON or EMGT. The department does not accept transfer credit in upper division coursework (i.e., 300 and 400 level courses) for EMGT or ECON courses completed at community colleges, junior colleges, trade schools, etc. Management majors are required to attain a QPA of 2.5 or better to graduate. Management majors whose QPA falls below 2.5 for more than one semester will be removed from the program.

Coordinating Department: Economics

Management concentration—21 semester hours

Required concentration courses: ECON 312, 322, 413; EMGT 215, 225, 233, 236.

Required admission standards: Written approval of the department in which the student is pursuing a major; 30 or more undergraduate credits; cumulative quality point average of 2.5 or better; written permission of the Department of Economics.

EMGT 201 Decision Science I (3:3:0)

This course introduces students to the ways in which decision tools are used in business, economics, and management. Emphasis is placed on application areas and analyzing results. Numerous examples of practical decision-making techniques (in business and economic models) will be presented. Prerequisite: MATH 130.

EMGT 211 Financial Accounting Fundamentals (3:3:0)

Financial accounting provides information about a firm's economic performance (revenues, expenses, income, cash flow) and condition (assets, liabilities, equity) to external constituencies such as creditors and investors. The fundamentals of how to measure, communicate, and utilize financial accounting information are covered.

EMGT 212 Managerial & Cost Accounting Fundamentals (3:3:0)

Managerial and Cost accounting provide decision-relevant information to internal managers of a firm which is useful in planning and controlling operations. Basic techniques and issues of cost measurement, cost behavior, budgeting, quality conformity, segment analysis, and information relevancy are covered in the context of evaluating, and improving the firm's efficiency and effectiveness. Prerequisites: EMGT 211 and 236.

EMGT 215 Principles of Marketing (3:3:0)

This course is an introductory survey of the principles which apply to exchange transactions for goods and services in consumer and industrial markets as presented from a management perspective. Marketing research procedures, information systems, coordination techniques, and control devices are studied. Emphasis is placed on product planning, pricing, promotion, and distribution practices. Prerequisite: ECON 112.

EMGT 222 Advertising (3:3:0)

A comprehensive survey of the principles of advertising is combined with advertising practices to introduce students to the functions that advertising performs in selling activities. Advertisers, advertising agencies, consumer behavior, and market research are analyzed in terms of their relationships to advertising media, market segmentation, and advertising strategies. While emphasis is placed on creative advertising and advertising testing, special types of advertising are also covered.

EMGT 223 Retail Management (3:3:0)

The structure, strategy, and changing environment of retail management are presented in a comprehensive survey. The topics analyzed include retail institutions, site location, merchandise planning, customer communications, and retail pricing. Emphasis is placed on case studies.

EMGT 224 Small Business Management (3:3:0)

A comprehensive survey of the challenges that confront the managers of small businesses is presented on an introductory level. Topics covered include the characteristics of small business, starting a small business, organizing the enterprise, marketing; production and operations management, and administrative and financial controls. Problem areas—e.g., financial planning, product strategies, pricing, credit policies, inventory control and capital budgeting—are emphasized via a case study approach.

EMGT 225 Business Law (3:3:0)

An introductory, yet comprehensive, survey of the fundamental topics in business law is presented to provide an understanding of the law and the ways in which it and the courts affect business activity.

EMGT 226 Business Law II (3:3:0)

This course presents basic topics in business law relating to business activity including agency, forms of business organization, government regulation and ethical behavior.

EMGT 233 Corporate Finance (3:3:0)

This is an introduction to the fundamentals and principles of business finance as viewed by the financial manager. The topics covered in this course are risk and return, working-capital management, financial planning, capital investment decisions, evaluation of financial alternatives, and managing long-term funds. Prerequisite: EMGT 211.

EMGT 236 Business Organization and Management (3:3:0)

This is a survey of management and organization theory and practice. Elements of the managerial process are analyzed, including planning, organizing, staffing, directing, and controlling. Case studies illustrating the role of manager within an organizational structure are presented.

EMGT 250 Quantitative Business Analysis I (3:3:0)

This is an introduction to business data analysis and applications. Students will be exposed to economic data sources and techniques used for managerial decision making. Managerial applications will include market research, sampling theory and quality control. Prerequisites: EMGT 201 or MATH 110.

EMGT 322 Personnel Management (3:3:0)

A comprehensive survey of the functions, activities, challenges, and tradeoffs of personnel management is presented from the perspective of efficiency criteria. Individuals and groups are recruited, selected, developed, and utilized as human resources are accommodated to the needs of the workplace. Topics covered include planning and behavioral science concepts and assumptions; job and work design; staffing, appraisal, training, development, and compensation processes; collective bargaining; occupational health and safety; and international personnel management. Prerequisite: EMGT 236.

EMGT 323 Organizational Theory (3:3:0)

A detailed, comprehensive analysis of organizations is presented at an intermediate level. Organizational linkage systems provide the framework in which the internal environment and organizational dynamics are studied. Topics covered include organizational goals, structure, design, size, complexity, culture, conflict, change, control, power, technology, and strategic planning. Emphasis is placed on understanding why organizations function as they do and how they should be designed and managed to achieve maximum effectiveness. Prerequisite: EMGT 236.

EMGT 331 Intermediate Financial Accounting I (3:3:0)

In-depth study of Financial Accounting Standards Board body of principles of accounting recognition and measurement used to prepare financial statements for external reporting. Topics include: FASB conceptual framework, financial statement structure and content, time-value of money, current assets, non-current assets, and current liabilities. Prerequisites: EMGT 211 and 212.

EMGT 332 Intermediate Financial Accounting II (3:3:0)

A continuation of the in-depth study of the Financial Accounting Standards Board body of principles of recognition and measurement for external reporting begun in EMGT 331. Topics include: long-term liabilities, stockholders' equity, earnings-per-share, investments, income taxes, pensions, leases, cash flows, financial statement analysis, and disclosure requirements. Prerequisites: EMGT 211, 212, and 331.

EMGT 333 Intermediate Managerial & Cost Accounting (3:3:0)

An in-depth study of the analytical perspectives and tools of managerial/cost accounting with the objective of equipping the accountant to assist managers to improve organizational efficiency and effectiveness. Topics include: cost accounting systems, tools for planning and control, cost information for decision making, cost allocation, quality and JIT, capital budgeting and management control systems. Prerequisites: EMGT 211, 212.

EMGT 335 Tax Accounting I (3:3:0)

This course presents a comprehensive examination of the federal income tax regulations

that apply to individuals. Topics include: tax research, planning, compliance, deductions, property sales, non-taxable exchanges, shelters, credits, and computations. Prerequisites: EMGT 211, 212, and 236.

EMGT 336 Tax Accounting II (3:3:0)

This course presents a comprehensive examination of the federal tax regulations that apply to corporations, partnerships, estates, and trusts. Topics include: acquisitions, reorganizations, consolidations, closely-held corporations, S-Corporations, liquidating and non-liquidating distributions, retirement plans, social security taxes, and gift taxes. Prerequisites: EMGT 211, 212, 335.

EMGT 342 Investment Analysis (3:3:0)

A detailed analysis of investment instruments is presented in the context of portfolio theory. Risk and return analyses, securities markets operation, and valuation models are reviewed. Emphasis is placed on asset pricing and investment strategies. Topics covered include equity and fixed-income securities, financial commodities futures, stock and index options, institutional operations, and international investment opportunities. Prerequisite: EMGT 233 or 236.

EMGT 350 Quantitative Business Analysis II (3:3:0)

This is an intermediate course in business and economic data analysis. It is a formal introduction to research methods and techniques used in managerial and financial forecasting. Students will be introduced to basic time series analysis, decision analysis and regression. Prerequisite: EMGT 250.

EMGT 430 Internal/Operational Auditing (3:3:0)

Internal auditors act as agents of continuous organizational improvement through their analysis of information system integrity and reliability, resource security and productivity, policy compliance, and operational efficiency and effectiveness. This course is a comprehensive survey of Institute of Internal Auditor standards, procedures and practices for this important value-added activity. Prerequisites: EMGT 211, 212, and 236.

EMGT 431 External/Financial Auditing (3:3:0)

Independent external auditors (CPA's) examine evidence regarding a firm's transactions and condition and report their conclusions about the fairness of the firm's financial reporting. This course is a comprehensive survey of American Institute of CPA auditing standards, procedures, and reports. Prerequisites: EMGT 211, 212, 331, 332. May be taken concurrently with EMGT 332.

EMGT 451 Management Science I (3:3:0)

This is an intermediate course in Management Science. It is a survey of analytical techniques used by modern management to formulate and solve problems. Some of the topics covered are Linear and Integer Programming, Transportation Models, Inventory Theory, and Game Theory. Prerequisites: EMGT 236; MATH 110, 130.

EMGT 485 Independent Study (Hours to be arranged.)

Independent study is an in-depth directed research into subject matter which is not covered in courses listed in the current catalog. It is open to an advanced student (90 credits) who discusses the research topic with an adviser before contacting the professor who will serve as the instructor. At least five (5) hours of student-professor conference time are required for each credit undertaken. Prerequisites: 90 credits and approval of the adviser, instructor, department chair and dean.

EMGT 486 Field Experience and Internship (Semester hours arranged.)

Marine Science

School of Arts and Sciences—The Faculty of Sciences

Bachelor of Science with a Marine Science major—63 semester hours

See Biological Sciences.

Mathematics

School of Arts and Sciences—The Faculty of Science

Professors: Cavanaugh (chair), Hogan, Jacobs, Matras, Prince, Zarach

Associate Professors: Schembari, Shi

Bachelor of Arts with a Mathematics major—40 semester hours

Required major courses: MATH 140, 141, 220, 240, 320, 325, 421, 440; 311 or 341, 422 or 441; three semester hours from courses numbered 300 to 485.

Corequisite course: CPSC 111.

For university requirements see page 49.

Note: Grades of A, B, or C must be earned in all of the required MATH and CPSC courses. A minimum cumulative quality point average of 2.00 in Mathematics is required.

A minimum of 15 credits of the mathematics courses required for this degree must be completed at East Stroudsburg University.

Suggested four-year schedule of required courses

Year 1: Fall MATH 135 or 140; Spring MATH 140 or 141, CPSC 111

Year 2: Fall MATH 141 or 240, 220; Spring MATH 240, 320

Year 3: Fall MATH *311, elective; Spring MATH 325, *341

Year 4: Fall MATH 421, 440; Spring MATH 422 or 441

(* Only one of MATH 311 and 341 is required)

Bachelor of Science with a Mathematics major (Secondary Education)

41 semester hours

Required major courses: MATH 140, 141, 220, 240, 311, 320, 325, 351, 421, 430, 499; three semester hours from courses numbered 300 to 485.

Corequisite course: CPSC 111.

Required professional education courses: MCOM 262; PSED 161, 242, 336, 420, 421,

430, 431; REED 321.

Note: Grades of A, B, or C must be earned in all of the required MATH and CPSC courses. A minimum of 15 credits of the mathematics courses required for this degree must be completed at East Stroudsburg University. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Suggested four-year schedule of required courses

Year 1: Fall MATH 135 or 140; Spring MATH 140 or 141, CPSC 111

Year 2: Fall MATH 141 or 240, 220; Spring MATH 240, 320

Year 3: Fall MATH 311, 351; Spring MATH 325, elective, PSED 336

Year 4: Fall MATH 421, 430; Spring PSED 430, 431MATH 499

Mathematics minor—21 semester hours

Required courses: MATH 140, 141, 220, 240, 320, and one MATH elective (300 level or higher).

Actuarial Science Concentration—21 semester hours

Required courses: MATH 140, 141, 240, 311, 320, 411.

The above courses should provide the student with the mathematics background needed for the first two actuarial examinations. Students who wish to take the third examination should also take MATH 480.

Suggested courses: MATH 280; ECON 111, 112.

Students must demonstrate competency in Basic Mathematical Skills before enrolling in mathematics courses numbered 100 or higher. (See page 50.)

MATH 090 Intermediate Algebra (3:1:4)

This course covers topics from basic algebra, solutions of first degree equations and inequalities, graphing of polynomial functions, polynomial functions, polynomial algebra, solutions to linear systems of equations, exponential and logarithmic expressions. Credits may not be used toward the 128 hours required for graduation.

MATH 100 GE: Numbers Sets and Structures (3:3:0)

This course presents mathematics as a deductive science which starts with empirical observations but goes beyond the level of simple, unrelated facts. Search for patterns and, when discovered, justification of them is the essence of this course. Similarities and differences between structures of numbers, sets, and some algebraic objects are discussed. Does not apply toward the Mathematics major. Prerequisite: MATH 090 or 3 units of high school mathematics including Algebra 1 and Geometry.

MATH 101 GE: Excursions in Mathematics (3:3:0)

This introductory course deals with selected topics in contemporary mathematics applied to the social and natural sciences. Topics include voting and weighted systems, fair division, apportionment, game theory, Euler circuits, the Traveling Salesman Problem, minimum networks, scheduling, linear programming, types of growth, measurement, symmetry and patterns, collecting and describing data, elementary probability and inference. Does not apply to the Mathematics Major. Prerequisite: MATH 090 or three units of high school mathematics including Algebra I.

MATH 105 Mathematical Problem Solving for Elementary Education

Majors (3:3:0)

This course is designed to give elementary education majors experiences in being independent solvers of mathematical problems while giving them the mathematical foundation for early mathematics. Concepts in elementary education including sets, whole, integer, rational, real, and complex numbers are covered. Prerequisite: MATH 090 or three units of high school mathematics including Algebra I.

MATH 110 GE: General Statistics (3:3:0)

This course deals with the collection and presentation of data, frequency distributions, measures of central tendency and dispersion, elementary probability, randomness, expectations, significance testing on large and small samples, correlation, regression, introduction to analysis of variance, and other common statistical methods. Does not apply toward Mathematics major. Prerequisite: MATH 090 or three units of high school mathematics including Algebra 1.

MATH 130 GE: Applied Algebraic Methods (3:3:0)

This course introduces students to mathematical modeling using linear, exponential, and power functions and systems of equations. Algebraic and geometric techniques are developed. Applications to the life, social, and management sciences include linear programming and difference equations. Does not apply toward the Mathematics major. Prerequisite: MATH 090 or three years of college preparatory high school mathematics including Algebra I and Geometry.

MATH 131 GE: Applied Calculus (3:3:0)

A one semester introduction to the techniques of differential and integral calculus, this course will concentrate on the application of these techniques in the life and social sciences. Does not apply toward the mathematics major. Prerequisite: MATH 130 with a grade of C or higher.

MATH 135 GE: Pre-Calculus (3:3:0)

This course is designed to prepare students for calculus. Topics include equations, inequalities, functions and their graphs, polynomial, rational, exponential, logarithmic, and trigonometric functions. Prerequisites: College preparatory mathematics including Algebra 2 and Geometry and an appropriate score on the mathematics placement test.

MATH 140 GE: Calculus 1 (4:4:0)

Together with Calculus 2 and Multivariate Calculus, the basic concepts and applications of elementary analysis are covered. Calculus 1 topics include functions, continuity, the derivative and its applications, and an introduction to the definite integral. Prerequisites: MATH 135 with a grade of C or better, or four units of college preparatory mathematics including Algebra 2, Geometry, and Trigonometry and a satisfactory score on the Calculus Readiness Test.

MATH 141 GE: Calculus 2 (4:4:0)

The concept of the integral is developed in detail. Techniques of integration, applications of the integral, and an introduction to differential equations are covered. Also, infinite series of numbers and functions are used to illustrate approximation theory. Prerequisite: MATH 140 with a grade of C or higher.

MATH 150 GE: Mathematics and Western Civilization (3:3:0)

This course examines mathematics as a cultural force in Western civilization. Some of the relationships of mathematics to philosophy, economics, politics, art, and the natural sciences will be considered. Emphasis will be placed on how mathematical solutions were obtained for human problems.

MATH 205 Geometry for Elementary Education Majors (3:3:0)

This course is designed to give Elementary Education majors experiences in being independent solvers of mathematical problems while giving them the mathematical

foundation for early mathematics. Topics include probability, geometry, and geometric systems. Prerequisite: MATH 105; Early Childhood or Elementary Education major.

MATH 220 Discrete Mathematical Structures (3:3:0)

This course introduces some basic concepts of finite algebraic structures. Topics covered include logic, sets, induction, matrices, order relations, Boolean algebras, semigroups, and groups. Prerequisite: MATH 140.

MATH 240 Multivariate Calculus (4:4:0)

This course develops calculus of several variables. Topics covered include vectors, functions of many variables and their derivatives and integrals, optimization, parametric curves and surfaces, and applications. Prerequisite: MATH 141 with a grade of C or higher.

MATH 280 Mathematics of Finance (3:3:0)

This course consists of an introduction to the theory and mathematics of simple and compound interest with application to and emphasis on annuities, sinking funds, amortization, life insurance, stocks, bonds, and installment buying. Prerequisite: MATH 130.

MATH 290 Special Topics (Semester hours arranged.)

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

MATH 311 Statistics I (3:3:0)

This course gives a rigorous introduction to descriptive statistics, discrete and continuous probability distributions, sampling estimation, and hypothesis testing. Prerequisite: MATH 141.

MATH 320 Linear Algebra (3:3:0)

This course deals with the arithmetic of matrices, linear transformation of the plane, algebra of determinants with applications to the systems of linear equations, vector spaces, characteristic values and their application. Prerequisite: MATH 220.

MATH 325 Introduction to Mathematical Modeling (3:3:0)

This course initiates the construction, analysis and research of real world mathematical models in order to promote creativity and emphasize ingenuity for finding reasonable solutions to open-ended problems, including experimentation and simulation. The study of theoretical model types is left for more advanced courses. Prerequisites: MATH 140, 141, 320; CPSC 111.

MATH 341 Differential Equations (3:3:0)

This course examines solutions of first order differential equations, linear equations of higher order, numerical techniques of solution, power series methods, Laplace transform, and applications. Prerequisite: MATH 240 or permission of instructor.

MATH 351 Modern Geometry (3:3:0)

Problem solving in geometry will be the main focus of this course. Three types of problems are studied. The first will be straightedge and compass constructions from Euclidean Geometry. The next will develop the Newton-Poincare model of Lobachevskian Geometry. The third will be isometries of the Euclidean plane. Prerequisite: MATH 220.

MATH 360 Introduction to Combinatorics (3:3:0)

This course introduces the basic techniques and modes of reasoning of combinatorial problem-solving. Topics covered include elementary counting principles, permutations and combinations, the inclusion/exclusion principle, recurrence relations, basic properties of graphs and digraphs, trees, graph coloring, and Eulerian and Hamiltonian circuits. Prerequisite: MATH 220.

MATH 411 Statistics II (3:3:0)

The mathematical properties of the sampling distributions of statistics will be investigated to develop criteria for precise estimation, powerful hypothesis testing, and assessing the

robustness of model assumptions. Emphasis will be placed on the classical methods associated with the normal distribution and to the analysis of real data with linear models. Standard software packages will be used. Prerequisite: Math 311.

MATH 416 Linear Statistical Modeling Methods with SAS (3:3:0)

This course is intended for advanced undergraduate students, graduate students, and working professionals who engage in applied research. Statistical linear modeling methods are used in conjunction with SAS computer software to analyze data from experiments and observational studies. Topics include regression analysis, analysis of variance, multiple comparisons and multiple tests, mixed models, analysis of covariance, logistic regression, and generalized linear models. Prerequisites: Satisfactory completion of a college course in statistics.

MATH 420 Number Theory (3:3:0)

This course deals with the study of the divisibility properties of integers, the theory of congruences, continued fractions, linear diophantine equation in one variable and more than one variable, algebraic number fields, and rings of algebraic integers. Prerequisite: 12 hours of college mathematics.

MATH 421 Abstract Algebra I (3:3:0)

This course will introduce the students to the basic algebraic structures, including groups, rings, and fields. Prerequisites: MATH 220, 240.

MATH 422 Abstract Algebra II (3:3:0)

A continuation of MATH 421, this course will cover the structure of abelian groups, the Sylow Theorem, polynomial rings and unique factorization, algebraic extension fields, finite fields, and Galois Theory. Prerequisite: MATH 421.

MATH 430 History of Mathematics (3:3:0)

This course studies the biographies of leading mathematicians and their contributions to mathematics, the historical development of subject-matter fields of mathematics, and the role that mathematics has played in the development of civilization. Prerequisite: MATH 220, 240

MATH 440 Real Analysis I (3:3:0)

This course introduces students to the basic analytical structures of the real number and functions, including limits, sequences, series, topology, and continuity. Prerequisites: MATH 220, 240.

MATH 441 Real Analysis II (3:3:0)

A continuation of MATH 440, this course will cover differentiation, integration, sequences and series of functions and additional topics such as Fourier series, metric spaces, and approximation. Prerequisite: MATH 440.

MATH 470 Numerical Methods I (3:3:0)

This course will develop the numerical algorithms and error estimates for finding roots, solving equations, and curve fitting. The emphasis is on algorithms with good error characteristics and reduction of round off error. Prerequisites: MATH 240, 320; CPSC 111 or 211.

MATH 480 Operations Research (3:3:0)

This course gives an introduction to both deterministic and stochastic operations research. The covered topics will include the nature of operations research, linear programming, project scheduling, dynamic programming, integer programming, queuing theory and stochastic simulation. Prerequisites: MATH 311 and 320 with grades of C or higher

MATH 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline.

MATH 499 Student Teaching Internship (1:0:TBA)

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

Media Communication and Technology

School of Professional Studies—The Faculty of Education

Professors: Camper, Giffel

Associate Professors: Braman (chair), Weaver

Assistant Professor: Schneider

This four-year program in Media Communication and Technology is designed to offer students a curriculum of communication theory, application and practice in media production. The curriculum is designed to produce a media generalist with knowledge and application skills in photographic, electronic (television and video) and graphic processes applicable in the media field. Majors are encouraged to qualify for either the semester or summer-long internship where they can apply their skills to an on-the-job situation. The program prepares students for entry level positions in the communications field.

Bachelor of Science with a Media Communication and Technology major—48 semester hours

Required major courses: MCOM 100 or 105, 140, 160, 210, 225, 230, 255, 275, 315, 440; any 3 of prescribed advanced MCOM courses; and completion of 9 semester hours of related electives. Corequisites: CMST 111 or 253; PSY 100; SOC 111, and an advanced writing course.

A 2.50 grade average in the major is required for graduation.

For university requirements see page 49.

Track I Internship and Practicum—(14 semester hours).

A 2.75 grade average in MCOM courses, no incompletes in MCOM courses, and faculty approval are required before enrolling in an Internship. Application for Internship (to the adviser) must be made upon completion of 90 semester hours and before completing 100 semester hours.

- or -

Track II—(15 semester hours)

A minimum of 9 additional hours of 300 or 400 level MCOM courses and 6 hours of 200 level MCOM courses or related electives.

Media Communication and Technology Minor—18 semester hours

This program offers a choice of one of three different tracks—photography, graphics or video. Selection of one of these tracks is done after consultation with the appropriate faculty adviser in the student's major and the chair of the Department of Media Communication and Technology.

Track requirements:

Photography: MCOM 100, 105, 140, 160, 205, 305.

Graphics: MCOM 140, 160, 255, 275, 350 and either MCOM 100 or 105.

Video: MCOM 140, 160, 210, 225, 310, 315.

MCOM 001 Information Highway: Coming up to Speed (0:1:0)

This one-day workshop will focus on the electronic information highway now being developed. The sessions will introduce e-mail, Internet, etc. to the novice user and will offer a diverse mix of computer practice, public policy, and simplified media presentation techniques.

MCOM 100 Black and White Photography I (3:2:2)

Introductory techniques in black and white still photography including camera operation, lens use, darkroom techniques (developing and enlarging), and portrait photography are presented.

MCOM 105 Photography: Camera Techniques (3:3:0)

Designed for the student who wishes to learn the skill of taking quality photographs, this course concentrates on those elements and skills which may be applied by a photographer to produce good photographs. General topics include how a camera works, how to take better pictures, special techniques, handling color, how to choose films, how to have pictures processed, and how to display pictures. The course will consist only of picture taking, analysis and technique application. No darkroom processes or skills will be taught. Students desiring to learn darkroom skills should take MCOM 100.

MCOM 140 Communication Theories and Practices (3:3:0)

Communication theories, practices, problems, and issues in a variety of settings are examined. This is a foundation survey course for the majors in the Media Communication and Technology program.

MCOM 160 Electronic Communication Technologies (3:2:2)

The use of desktop media, the application of microcomputers to text editing, graphic design and layout, desktop publishing, and desktop video are presented. This is a foundation course giving competencies applicable to Department of Media Communication and Technology courses.

MCOM 205 Photography: Wildlife and Nature (3:2:2)

Methods for photographing wildlife and nature are explored. Equipment needs, field work techniques, and special considerations necessary in performing wildlife and nature photography will be emphasized.

MCOM 210 Television: Studio Production I (3:2:2)

Television studio production techniques including directing, lighting, audio, and camera operation are covered with actual practice and application in the TV studio. Students will script and produce a variety of television programs.

MCOM 225 Introduction to Motion Media (3:3:0)

This course presents the common elements of basic motion media production, including filmmaking and videotaping. It includes the study of the theoretical, photographic, mechanical, and electronic methods used in the production of motion media. In addition to studying the various aspects of motion media, students will also produce motion media projects. Prerequisites: MCOM 140, 160.

MCOM 230 Sound Recording and Amplification Techniques (3:3:0)

This course offers preparation necessary for successful activity in music sound recording

and reinforcement. It deals with the history of recorded sound, technical principles of microphone usage, and console and tape recorder operations including multi-track and sound amplification techniques. The course includes actual hands-on experience in recording sessions and concert reinforcement.

MCOM 255 Desktop Publishing (3:3:0)

This course gives the student the opportunity to use the microcomputer for producing camera-ready layout to be used in various print media. Topics include graphic design image manipulation, publication layout, typography, and type specification. Prerequisite: MCOM 160.

MCOM 262 Educational Communications and Technology (3:2:2)

Techniques in the preparation, selection, and proper use of media for educational communications are presented. Included are the design, preparation, and selection of still photographs, motion pictures, audiotape, videotape, transparencies, and microcomputer software.

MCOM 265 Instructional Computing Methods (3:2:2)

Techniques of using computers in the classroom will be presented. Students will become familiar with software and computer tools used for instructional and classroom administrative tasks. Prerequisite: MCOM 262.

MCOM 275 Imaging Technology (3:2:2)

This course offers an introduction to the use of image design and production for education, marketing, business, and training. Extensive work will be on the use of the microcomputer as a tool in image creation. Animation, 3D effects, and overlay techniques will be introduced. Prerequisite: MCOM 160.

MCOM 290 Special Topics (Semester hours arranged.)

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

MCOM 305 Digital Photography (3:2:2)

Students will create photographic images in a variety of situations. These photographs will be manipulated using computer technology to create images that can be used in various media formats. Prerequisites: MCOM 100 or 105, and 160.

MCOM 310 Television: Studio Production II (3:2:2)

Studio production techniques beyond those presented in Television: Studio Production I including electronic special effects, computer graphics and the directing of programs to be broadcast from a television studio are covered. Prerequisite: MCOM 210.

MCOM 315 Videotaping Techniques (3:3:0)

This course is an introduction to the uses of videotaping as well as hands-on experiences in designing and producing a variety of videotape productions. The course will focus on the uses of videotape for public relations, performance evaluation, skill developing, coaching and athletics, and creative video. Simple, readily available videotaping equipment will be used. Prerequisites: MCOM 100 or 105, and 225.

MCOM 318 New Media Technologies (3:3:0)

This course introduces students to new media product development and emerging trends in the areas of media communication and technology. The rapidity of change in media product development in photography, graphics, television and film and the application and implementation of evolving regulatory communications policy in accessing of and production in telecommunications for academic and business will be covered.

MCOM 350 Media Graphics and Design II (3:2:2)

This course expands upon the concepts and processes presented in Instructional Graphics and Design I. Classroom demonstrations are presented, and students gain hands-on experience through work on assigned projects. Prerequisite: MCOM 255.

MCOM 355 Electronic Publishing (3:2:2)

Students will learn the basics of producing electronic publications which can be used for various media including the Internet. Assignments will give students hands-on experience in designing and producing Web pages. Topics include: Web page design, anatomy of the Internet, proper use of type and graphics in electronic publishing, creating links and integration of various media into electronic publications. Prerequisite: MCOM 255.

MCOM 440 Law and Ethics in Media (3:3:0)

This course offers an examination of the role of ethics and legal issues in the field of professional media. Students will study how society's ethical heritage provides a basis for guidance in ethical decision making. Prerequisite: MCOM 140 and junior class standing.

MCOM 464 Media Communication & Technology Projects

(Semester hours arranged.)

Students are provided with the opportunity to work on an in-depth project which presents experiences in planning, implementation, and follow-up activities. Projects are done with a cooperating faculty member. Prerequisite: 90 credit hours.

MCOM 475 Educational Software for Computers (3:3:0)

Techniques for designing and developing educational courseware for computers are presented. Author language systems and interactive instructional system software will be examined. Students will also learn to develop materials which combine computer and video technologies (interactive video). Prerequisites: MCOM 262, 470.

MCOM 477 Interactive Media (3:3:0)

This course is designed to introduce the student to the technology of interactive media. Special emphasis is placed on the various applications for interactive media. Students will gain practical experience in creating interactive media programs. Prerequisite: MCOM 160, 275.

MCOM 485 Independent Study (Semester hours arranged.)

Directed research and study on an individual basis.

MCOM 486 Field Experiences and Internship (Semester hours arranged.)

The internship experience is to provide professional supervision in an on-the-job situation to apply skills learned in the university classroom. Enrollment requires the completion of 90 semester hours, a 2.75 cumulative point average in the major, no incompletes in the major, and departmental approval.

MCOM 488 Professional Practicum (2:2:0)

Students are provided with insights into professional experiences and job requirements through an examination of the activities of the internship. This course must be taken concurrently or the semester immediately following MCOM 486. Prerequisites: Senior class standing; approval of instructor.

Media Paraprofessional Program

This two-year technically-oriented program is designed for students seeking to develop media production skills. Completion of the program prepares students for entry level positions in the field of communication. Students may transfer into the four-year Bachelor of Science degree program.

Associate of Science with a Media Paraprofessional Program major—60 semester hours

Required major courses: MCOM 100, 160, 210, 225, 230, 255, 275, 315 and 486 (12 credits); six semester hours of advanced level MCOM courses.

Corequisite courses: ENGL 103 and 3 semester hours of prescribed courses. The balance of coursework is to be selected with approval of the faculty adviser.
Coordinating Department: Media Communication and Technology.

Medical Technology

Bachelor of Science with a Medical Technology major—62 semester hours See Biological Sciences.

Movement Studies and Exercise Science

School of Health Sciences and Human Performance—The Faculty of Human Performance

Professors: Goldfuss, Mueller, Pullo, Sutton

Associate Professors: Cummings, Fleischman (assistant chair), Gibbons, Hauth, Shane, Sheska, J. Smith, Sweeney, Thatcher, Wagner

Assistant Professors: Casebolt, Davis (graduate coordinator), Douds, Dwyer, Harrison, Kuchinski, Lally, Saffici, R. Smith (chair), White

Instructor: Witmer

Bachelor of Science with an Athletic Training major (MS-ATSM)—77 semester hours

Required major courses: MSES 100, 202, 230, 301, 302, 306, 415, 430, 431, 432, 433, 434, 486 (12 credits); MSES 120 and two activity courses.

Corequisites: BIOL 111, 112; HLTH 220 or 230, 240; CPSC 100, PHYS 110; PSY 100.

For university requirements see page 49.

Admission to the Athletic Training Program at East Stroudsburg University is competitive among eligible applicants. Minimum academic requirements have been established for students admitted to the Athletic Training program at ESU. Exceptions to this requirement may be approved by the ESU Athletic Training/Sports Medicine faculty.

Criteria for Admission Into Athletic Training Major as a Freshman

Include:

1. An overall assessment of academic success including SAT scores and high school class rank with consideration given to the high school attended and the courses taken. *A profile of the typical student who is admitted to the major and who is successful in becoming a certified athletic trainer would include SAT scores of 1000 or above, a class rank in the top one third, an outgoing personality, a solid work ethic, good "people" skills, and a sincere interest in sport and in athletes.*
2. Satisfactory completion of an interview with the Director of Athletic Training/Sports Medicine or their designee.
3. Satisfactory acceptance of a narrative outlining the applicant's reason(s) for pursuing a degree in athletic training.

All students admitted into the ESU Athletic Training curriculum are evaluated at the end of each semester and are required to meet the following standards:

1. Students must maintain a minimum quality point average of 2.49 overall and 3.00 in the major.
2. Students must achieve a minimum quality point average of 2.50 in BIOL 111 and BIOL 112.
3. Students must achieve a grade of "B" or better in HLTH 240, MSES 202 and MSES 230.

Students who fall below these standards will be placed on probation for one semester. Students who are below academic standard for two consecutive semesters will be dismissed from the program after an interview with the Director of Athletic Training/Sports Medicine.

Additionally, failure to demonstrate appropriate professional skills in any clinical experience is grounds for immediate dismissal from the program.

Admission Standards For Resident Students and Transfer Students:

Resident students and transfer students may apply for admission into the ESU Athletic Training Program, however, admission is competitive among eligible candidates and is dependent upon available openings each semester. Students must meet the following standards to be eligible:

1. Completion of at least 45 semester hours (30 at ESU), including BIOL 111 and BIOL 112, Care and Prevention of Athletic Injuries, Kinesiology and Health Emergencies.
2. Students must maintain a minimum quality point average of 2.49 overall and 3.00 in the Major
3. Students must achieve a minimum quality point average of 2.50 in BIOL 111 and BIOL 112.
4. Students must achieve a grade of "B" or better in HLTH 240, MSES 202 and MSES 230.
5. Completion of minimum of 100 clock hours of observation in the ESU Athletic Training/Sports Medicine Clinic.
6. Approval of Athletic Training/Sports Medicine Faculty as indicated by appropriate signatures on the student's contract.

Students who do not meet these standards will be placed on probation for one semester.

Bachelor of Science with an Exercise Science major—66 semester hours

Concentration: Exercise Physiology (MS-EXPH)

Required major courses: MSES 100, 202 or 203, 230, 301, 302, 306, 320, 415, 420, 421, 422, 423; 6 credits from MSES 327, 424, 425, 426, 427; MSES 120, 2 (two) activity courses.

Corequisites: Twenty-one additional semester hours from Biology, Chemistry, Mathematics, Movement Studies and Exercise Science, or other supporting programs to constitute a focus in an area of the student's interest. Examples are graduate study, Fitness Professional, Gerontology, etc.

Notes:

1. A minimum cumulative quality point average of 2.00 overall and in the major is required for graduation.
2. A plan of study, including a contract, is developed with the assistance of the academic adviser and must be approved and submitted to the Department.
3. A field experience or internship may be included for credit if it is appropriate to the plan of study. Refer to requirements listed under MSES 486.

For university requirements see page 49.

Bachelor of Science with an Exercise Science major—58 semester hours

Concentration: Exercise Professional (MS-EXPR)

Required major courses: MSES 100, 202 or 203, 230, 301, 302, 306, 320, 327, 402, 415, 420, 424, 425, 427; MSES 120, 2 (two) activity courses.

Corequisites: Seventeen additional semester hours from Biology, Chemistry, Mathematics, Movement Studies and Exercise Science, or other supporting programs to constitute a focus in an area of the student's interest. Examples are graduate study, Fitness Professional, Gerontology, etc.

Notes:

1. A minimum cumulative quality point average of 2.00 overall and in the major is required for graduation.
2. A plan of study, including a contract, is developed with the assistance of the academic adviser and must be approved and submitted to the Department.
3. A field experience or internship may be included for credit if it is appropriate to the plan of study. Refer to requirements listed under MSES 486.

For university requirements see page 49.

Bachelor of Science with a Physical Education major—88 semester hours

Concentration: Health and Physical Education Teacher Certification (PH-CERT)

Required major courses: MSES 100, 110, 111, 120, 121 or 123, 140, 143, 151, 153 or 453, 200, 202 or 203, 240, 241, 301, 302, 340, 341, 345, 440, 441, 445, 446 plus one team sport and one individual sport, and either one more team or individual sport, for a total of 13 activity credits.

NOTE: Students who qualify may take six (6) credits in Health Education at the graduate level to count toward their Master's degree and complete their certification requirements in Physical Education and Health.

Required Health courses: HLTH 220, 230, 240, 310, 341, 350, 356, 360, 365, 370, 431.

Required professional education courses: MCOM 262; PSED 161, 242.

Notes:

1. Physical education teacher education faculty approval is required for admission to this concentration. (Admission packet available.)

2. Graduates of this program will be eligible to apply for certification to teach in Physical Education and Health in kindergarten through the twelfth grade within the schools of the Commonwealth of Pennsylvania.
3. Eligibility for Pennsylvania Teacher Certification in Physical Education and Health requires the student to pass the National Teacher Exam.
4. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

For university requirements see page 49.

Bachelor of Science with a Physical Education major—40 semester hours Concentration: Movement and Sport Studies (MS-MSST)

Required major courses: MSES 100, 200, 202 or 203, 301, 302, 304, 404; one activity course from dance, exercise, and sport; 2 courses from MSES 303, 305, 401, 402, 403; 7 additional activity courses.

Corequisites: Twenty-one semester hours selected from courses which support the student's declared area of focus. Areas of focus are Adult Fitness, Coaching, Dance Performance, Sport/Fitness Management, Sport Journalism/Broadcasting, Sport Psychology or Sociology, Gerontology, Outdoor Commercial or Community Recreation, and/or other chosen areas of interest. These could include courses in Communications, Economics, Journalism, Management, Psychology, the expressive arts, or other related subjects.

Notes:

1. A minimum cumulative quality point average of 2.00 overall and in the major is required for graduation.
2. A plan of study, including a contract, is developed with the assistance of the academic adviser and must be approved and submitted to the Department.
3. A field experience or internship appropriate to the plan of study is required in Adult Fitness, Corporate Fitness, and Sport/Fitness Management. Refer to requirements listed under MSES 486.

For university requirements see page 49.

General Education Activity Courses

FIT courses are activity courses designed to meet General Education Requirements. (See page 51.) These courses are for non physical education majors.

Exemptions or Limitations

Courses in this department are to be taken by non-physical education majors. Exemption from the basic physical education activity requirements must be approved by the department chair. The chair will evaluate medical evidence submitted for exemption from these requirements and either authorize an exemption or develop an appropriate set of alternative experiences.

FIT 110 Aerobic Dance (1:0:1.5)

This course is designed to develop cardiorespiratory conditioning, muscle tone, improved posture, and other elements of fitness through a variety of dance and exercise movements performed to a musical accompaniment.

FIT 111 Personal Fitness I (1:0:1.5)

This course assists the student in developing a physical activity program based upon a wellness assessment of body composition, flexibility, strength, CHD risk factors, aerobic capacity, and diet. Students work with the instructor during the quarter to determine what prescriptive activities will compose their future program and how to implement those suggestions.

FIT 112 Gymnastics (1:0:1.5)

This course is designed to help the student acquire basic gymnastic skills and techniques which may be of interest to the student.

FIT 113 Self Defense (1:0:1.5)

This course is designed to give student exposure to all phases of self defense. It includes: combative skills, counter moves, body attitudes, self assertion, legal implications and psychological aspects of self defense.

FIT 114 Weight Training (1:0:1.5)

The course provides students the opportunity to acquire a basic knowledge concerning weight training programs and their uses, to become familiar with a wide range of basic lifts and various self-testing procedures, and to develop an individualized weight training program which will promote an optimal level of functional strength and endurance.

FIT 115 Tae Kwon Do I (1:0:1.5)

Students receive instruction in the basic skills of this martial art: sparring, kicking, punching, self defense, and breathing techniques. The mental training elements such as patience, self control, concentration, perseverance, and courtesy are an integral part of this course.

FIT 116 Aqua Aerobics (1:0:1.5)

This course is designed to develop cardiorespiratory conditioning and muscle tone, improve posture, increase flexibility, and enhance other elements of fitness through a wide variety of dance and calisthenic moves performed in the water. **If the student is presently under a physician's care and/or is presently taking medication for any reason, the student must indicate this to the instructor.*

FIT 120 Archery (1:0:1.5)

This course provides instruction in the basic techniques of target archery, low methods of anchoring, and bowsight method of aiming. The course includes archery films, novelty, and tournament shooting.

FIT 121 Fencing I (1:0:1.5)

This course develops basic skills and an understanding of foil fencing. Position and footwork are mastered, and students fence for touches thereby learning the competitive aspects of fencing.

FIT 122 Golf I (1:0:1.5)

This course provides instruction and practice in the basic strokes including driving, approaching (long and short), and putting. Sociocultural aspects of the sport, the rules, and etiquette are included. Golf course experience is included at nominal expense.

FIT 123 Volleyball I (1:0:1.5)

Students receive instruction in the basic fundamentals: overhand and underhand serve, overhand pass, underhand pass, spike and block. Basic offensive and defensive strategies and the rules of play governing the use of the basic skills are taught through single sex and co-ed teams of six, three, and two players.

FIT 124 Trampoline-Spaceball (1:0:1.5)

This course is designed to develop basic trampoline skills of bouncing, turning, and dropping. Upon the development of basic bounce technique, the student will explore the game of add-on and then the game of spaceball which is a combination of volleyball and basketball played on the trampoline.

FIT 125 Wallyball (1:0:1.5)

Students receive instruction and practice of the basic skills of wallyball: serve, overhead pass, set bump, dig, spike and block, wall rebounding skills, and net play. The rules, basic offensive and defensive strategy, and the sociocultural aspects of the sport are presented.

FIT 127 Slow Pitch Softball (1:0:1.5)

This course provides for the development and use of softball skills in the slow pitch version of softball. The use of the basic skills of catching, fielding, throwing, pitching, and hitting will be emphasized, especially within the context of the playing of the game.

FIT 128 Soccer (1:0:1.5)

This course is designed to provide development and use of basic skills of soccer such as passing, trapping, heading, and shooting. Those skills as well as rules of the game and actual game play will be emphasized.

FIT 130 Badminton (1:0:1.5)

This course provides instruction in the fundamental skills of the sport with emphasis on singles and doubles play, rules, and strategy. Serves, net shots, clears, drops, drives, and smashes are developed.

FIT 131 Racquetball I (1:0:1.5)

Students receive instruction in fundamental skills: forehand, backhand, and overhead techniques. The course includes the sociocultural aspects of the sport and the rules. The strategy involved in games of singles, cut throat, and doubles is presented.

FIT 132 Tennis I (1:0:1.5)

Students receive instruction and practice in the basic skills: the service, service return, groundstrokes, approach shot, and net play. The course includes the sociocultural aspects of the sport and the rules and strategy of the games of singles and doubles. Student must furnish own racket.

FIT 140 Dance I (1:0:1.5)

In this survey course, students receive practice in the fundamentals of rhythm and dance. Students experience basic axial and locomotor movement and explore the qualities of movement using varied space and time relationships and energy-release.

FIT 141 Folk and Square Dance (1:0:1.5)

This course presents a wide variety of international folk dances including the square and contra dances familiar to the United States. Theoretical considerations concern the characteristics, ethnic sources, and values of the social forms of dance.

FIT 142 Social and Ballroom Dancing (1:0:1.5)

This course is designed to introduce students to basic social and ballroom dances including foxtrot, waltz, jitterbug, swing, country-western, cha-cha, and tango. Students will become familiar with basic step patterns and variations and skills of leading and following effectively.

FIT 153 Swimming I (1:0:1.5)

This course is specifically designed for non-swimmers, those fearful of the water, and persons who possess very little swimming ability. The primary course objectives are to acquire self-confidence in the water and to become "water safe." Basic adjustment skills, rhythmic breathing, and basic survival strokes and skills are taught.

FIT 160 Bowling I (1:0:1.5)

Students receive instruction in the fundamentals of bowling. The course includes league competition.

FIT 161 Horseback Riding I (1:0:1.5)

This course includes the skills necessary in developing a safe and secure seat with effective use of the aids for the English style of riding. Students learn the fundamentals of handling a horse and tack safely and appropriately on and off the ground. Students must

have a tetanus shot and insurance to cover accidental injury. Tetanus shots may be obtained at the Health Center.

FIT 162 Ice Skating (1:0:1.5)

The Ice Skating course is designed to develop the fundamental skills of ice skating, including forward and backward skating, basic turns, and stops. Recognition and performance of proper edges and elementary school figures are included. Students are urged to furnish their own figure skates; rental skates are available.

FIT 163 Skiing I (1:0:1.5)

This basic course consists of eight lessons with instruction provided by the staff of local professional ski schools. Designed for students with various skill levels, this course is for students who have little or no skiing experience. Proper use of equipment, safety, use of lifts, and progressive development of the parallel ski technique are included.

FIT 164 Roller Skating (1:0:1.5)

Students receive instruction and practice in the basic skills: proper balance, best skating form, start, stop, forward and backward roll, proper stroking, mohawk turns, crosspulls, fundamental hops and jumps, etc. The course will cover the aerobic aspects as well, including the necessary warm-up stretching exercises for an effective workout. Skates will be furnished at the facility, unless students have their own.

FIT 170 Angling and Casting (1:0:1.5)

This course provides instruction in fly casting, spinning, and open face spinning. Field experience is normally included in the course.

FIT 210 Elementary Ballet (1:0:3)

This course will include techniques in elementary ballet including alignment, barre, center work, basic enchainements, and room and body directions, with emphasis on developing the physical and expressive potential of the human body. The class will enable students to understand and synthesize the kinesiological and anatomical, historical and theoretical, and aesthetic aspects of dance. Prerequisite: FIT 140 or MSES 110, or equivalent dance training.

FIT 212 Creative Experiences in Dance (1:0:1.5)

This course provides the student with opportunities for individual and group creative experiences in dance. Using a related arts approach, it examines the expressive quality of movement in the use of space, time, and energy factors. Spontaneous (improvised) and composed (choreographed) studies are included.

FIT 214 Yoga I (1:0:1.5)

Yoga is a system of exercise that improves the health of the entire body and physiological functioning. The course includes asanas (postures), relaxation techniques, and breathing techniques as a means of unifying body and mind.

FIT 215 Elementary Modern Dance (1:0:3)

This is an elementary level modern dance technique course. It explores a variety of axial and locomotor techniques and simple combinations characteristic of contemporary dance. The ability to apply skills in the art form is implied in any study of technique; this ability will be realized through improvisational and compositional experiences. Prerequisite: FIT 140 or MSES 110, or equivalent dance training.

FIT 232 Tennis II (1:0:1.5)

The course reviews the basic skills, introduces the approach shot, volley, overhead, the lob, and the half volley. The course includes strategy and competition in singles and doubles game-play. Student must furnish own racquet. Prerequisite: FIT 132 or equivalent.

FIT 240 Dance II (1:0:1.5)

Students explore movement as a form of artistic expression. The course includes timing in axial and locomotor movement, improvisation (exploring the space, time, and energy qualities for their expressive values), and the creation of original choreographic studies (students work

at a level commensurate with their prior experience). Theoretical considerations include historical development, characteristics, prominent artists, and present status of contemporary dance. Prerequisite: FIT 140 or equivalent.

FIT 256 Scuba Diving (1:0:3)

This program is designed to prepare students with essential knowledge and diving skills to participate in open water scuba diving activities. Upon completion of the course, students will be qualified to do an open water dive for certification. Prerequisites: Students must pass a water pretest to continue in the course: a) distance swim of 250 yards nonstop, b) survival swim for 10 minutes, c) underwater swim of 50 feet with no push off or dive, d) recovery of a 10 lb. diving brick from deep water (12 feet).

FIT 260 Bowling II (1:0:1.5)

This course is designed to meet the needs of the bowler who desires to pursue bowling as a lifetime competitive and recreational activity. Prerequisite: FIT 160 or equivalent.

FIT 261 Horseback Riding II (1:0:1.5)

Students receive further instruction in the English style of riding. The course includes more advanced rein effects and leg aids in the gaits which lead up to eventing and showing. Horse management and the care and fitting of saddlery are included. Students must have a tetanus shot and insurance to cover accidental injury. Tetanus shots may be obtained at the Health Center. Prerequisite: FIT 161 or equivalent.

FIT 263 Skiing II (1:0:1.5)

Skiing II is a continuation of Skiing I, with emphasis placed on higher skill development in doing linked turns downhill, using parallel or stem turns on intermediate terrain. Course content also includes parallel ski techniques, wedel turns, correct use of poles, checking, mogul skiing, and skiing on steep terrain under a variety of conditions. Instruction will be provided by local professional ski-school instructors. Prerequisite: FIT 163.

FIT 271 Adventure Activities (1:0:1.5)

Adventure activities involve nontraditional games and exercises, group initiative problems, and low and high ropes course elements. This course will provide the student with opportunities to meet new challenges, face risk, and overcome obstacles through individual and group effort. Students are invited to venture forth into the unknown, exercising choice and decision making in meeting physically demanding challenges. Extensive use will be made of the Stony Acres ropes course. Students must show evidence of health/accident insurance.

FIT 272 Backpacking (1:0:1.5)

Students are instructed in basic skills of backpacking, wilderness camping and cooking, navigation, and trip planning. Students will plan and carry out an overnight trip in the Stroudsburg area.

FIT 273 Basic Sailing (1:0:1.5)

Instruction will be given in the fundamentals of sailing and small craft safety. The students will make practical application of the skills in both solo and crew experiences. An introduction to sailboat racing is also featured. Swimming and deep water survival are essential.

FIT 274 Canoeing I (1:0:1.5)

This course focuses on the American Red Cross Basic Canoeing skills essential in handling a canoe safely and efficiently on land and in water. Students acquire paddling skills in pool, lake, and river environments. A student must have adequate swimming skills and be able to function in a deep water environment. Qualified students receive the American Red Cross Basic Canoeing Certification.

FIT 275 Cycling (1:0:1.5)

This course introduces the student to general knowledge of buying and maintaining a bicycle. The course also instructs in basic cycling skills such as the biomechanics of pedaling, hand positions, braking, group riding, touring, and safety. Students must provide their own bicycles. Actual riding is a major focus of the course.

FIT 276 Mountaineering I (1:0:1.5)

This course is designed for the beginning climber and will cover knots, rappels, belaying, elementary use of pitons, and the general rules of technical rock climbing.

FIT 290 Special Topics (1:0:1.5)

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

FIT 315 Dance Performance and Production (1:0:3)

This course consists of performance, choreography, and production work involved with dance as a performing art. Work in performance and technical areas is included, and participation in production is required. Prerequisite: FIT 140, or MSES 110, or equivalent dance instruction.

FIT 353 Lifeguard Training (1:0:3)

Successful completion of this course leads to acquisition of the American Red Cross Lifeguard Training Certificate. This course replaces the Advanced Lifesaving course. The Lifeguard Training course will provide participants with the skills and knowledge required to be a lifeguard at a swimming pool or protected (non-surf) open-water beach. Prerequisites: 500 yards continuous swim consisting of front crawl, breaststroke and sidestroke; retrieval of a 10 lb. brick from 8 feet of water and treading water for 2 minutes using the legs only.

FIT 363 Advanced Skiing—Racing (1:0:1.5)

Intended for those who have already developed a fundamental skill level. The advanced skiing student should be able to do the linked parallel turns in the fall line. Instruction is provided in techniques of racing, including slalom, giant slalom, and downhill. Instruction is provided by local professional ski-school instructors. Prerequisite: 60 semester hours or FIT 263.

FIT 453 Water Safety Instructor (1:0:3)

Satisfactory completion of this course leads to certification as a Red Cross Water Safety Instructor. The course focuses on the development of skill proficiency and teaching proficiency of swimming and lifesaving skills. The Red Cross Introduction to Health Services Education course (IHSE) is incorporated into the Water Safety course. Course is also listed as MSES 453. Prerequisites: Current lifeguard training card; successful completion of Red Cross swimming prerequisite.

FIT 454 Lifeguard Instructor (1:0:3)

Satisfactory completion of this course leads to certification as an American Red Cross Lifeguard Instructor. This course prepares instructor candidates to teach Lifeguard Training, Basic Water Safety, Emergency Water Safety, and the Lifeguard Review course. Prerequisites: Lifeguard Training Certificate (FIT/MSES 353); current CPR Certificate/standard First Aid Certificate.

FIT 463 Basic Alpine Ski Instructor (1:0:1.5)

This course is designed to provide the student with knowledge of the various approaches to ski instructing and teaching philosophies. It also enhances the student's development of the technical aspects for teaching skiing fundamentals to adults and children. Prerequisite: FIT 263.

Field of Study Theory Courses**MSES 100 Introduction to Movement Studies and Exercise Science (3:3:0)**

This course is designed to enable the student to understand Movement Studies and Exercise Science as fields of academic study, programs, and professional applications and to discriminate among these contexts and relate them by applying relevant knowledge and

appropriate theoretical perspectives.

MSES 200 Movement and the Learning Process (3:2:2)

This course is designed to acquaint the student with research findings, empirical evidence, and theoretical constructs regarding movement and learning; emphasis is placed upon the state of the learner, the learning process, and the conditions for learning.

MSES 202 Kinesiology—Applied Anatomy (3:2:2)

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

MSES 203 Kinesiology—Mechanical Analysis (3:2:2)

This course is designed to enhance the student's understanding of the fundamental laws of physics as they apply to human motion. Emphasis is placed on sport skill analysis. The student is prepared to identify the various phases of motion and explain the mechanical significance of each in producing the desired outcome.

MSES 301 Exercise Physiology I (3:2:2)

This course includes the study of human responses and adaptations to exercise of varying levels of stress and intensity. Concepts relating to neuromuscular, metabolic, circulatory, and respiratory physiology are treated in both lecture and laboratory experiences which include both theoretical and practical applications to exercise and training principles. Prerequisite: MSES 100.

MSES 302 Psychosocial Aspects of Activity (3:3:0)

This course analyzes movement activities as psychosocial phenomena, including consideration of the symbolic and cultural nature of movement forms within a framework of human personality, motivation, and social values and organization. Prerequisite: MSES 100.

Theory Courses

MSES 108 Athletic Coaching Education (1:1:0)

This survey course is designed to present the basic principles of coaching. The American Sport Education Program (ASEP) format will be followed. Upon successful completion of this course, the student will receive an ASEP leader level coaching diploma. This course is open to all students, regardless of major.

MSES 109 Sport Officiating Fundamentals (2:2:0)

This course is designed to provide the student with knowledge and understanding of the rules and procedures for officiating sport contests. Also included are the general and psychological aspects of the roles of sport officials in either the interscholastic and/or intercollegiate levels of competition.

MSES 140 PED I: Personal Awareness Concepts and the Teaching of Physical Education (2:1:2)

This is the first course in a sequence of four courses focusing on teaching physical education. This course emphasizes the positive intrapersonal and interpersonal skills necessary to become a professional in physical education. Prerequisite or concurrent: MSES 100

MSES 209 Principles of Coaching (3:3:0)

This course is designed to provide insight into the coaching profession. It will examine the many facets of the area and provide suggested guidelines for prospective coaches to use

in establishing their own style and method of coaching.

‡MSES 213 Ge: Modern Dance (3:2:2)

This course is a study of contemporary dance technique and composition, intermediate to advanced techniques, dance forms and the elements of choreography.

MSES 230 Care and Prevention of Athletic Injuries (3:2:2)

This course is an introduction to the principles and techniques for the prevention and follow-up care of athletic injuries with investigation of injury mechanics, injury recognition, and evaluation of information with the implications of appropriate and inappropriate injury management.

MSES 240 PED II: Descriptive Methods of Analyzing the Teaching of Physical Education (2:1:2)

This course emphasizes the study of the teacher and learner in physical education instructional settings. The student will learn and apply specific observational systems and will analyze the data to determine its relationship to existing concepts in teaching and learning. Early field experience is initiated in PED II and completed prior to registration for PED III. Prerequisite: MSES 140 with minimum of a C grade.

MSES 242 Movement Experiences in Early Childhood Education (3:2:2)

Course content covers growth characteristics, motor development, physical and perceptual motor abilities, self concept, and play behaviors of the early childhood population. The student will be expected to apply these concepts by using various assessment tools to determine children's developmental levels and by designing and teaching developmentally appropriate lessons to children. Prerequisite: ECED 162.

MSES 245 Adapted Physical Education (3:2:2)

This course provides the student with competencies necessary to screen and evaluate the needs of mentally and physically handicapped students. Writing goals and objectives in areas of physical and motor fitness and adapting activities based on needs are emphasized, as are opportunities for hands-on experience. Offered fall semester of odd numbered years.

MSES 286 Early Internship (1 to 3 credits)

This experience enables a student to explore the role of a professional in a sport fitness or rehabilitation setting under the close supervision of a work-site supervisor. Prerequisites: 30 semester hours; 2.0 QPA; department approval.

MSES 290 Special Topics (Semester hours arranged.)

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

MSES 304 Historical Concepts of Movement and Sport (3:3:0)

This course applies principles of historiography to the consideration of important themes, chronology, and biography in the study of the history of movement, sport, and physical education in the United States. Prerequisite: MSES 100.

MSES 306 Sport Nutrition (3:3:0)

This course is designed for students in exercise science or other students with an interest in the role of nutrition in supplying energy for various forms of physical activity. Topics include physiological role of macronutrients in aerobic and anaerobic energy supply, micronutrients, fluid intake, commercial supplements, body composition, and disordered eating problems of athletes. Prerequisites: MSES 301; HLTH 340 or NURS 202.

MSES 310 Movement for the Performing Artist (3:2:2)

This course examines experientially the special qualities of movement as a performing art and the application of movement in the delineation of situation, character, mood. The attainment of control, kinesthetic sensitivity, and the ability to move with clarity and expression are important goals of the course. Prerequisite: MSES 110 or equivalent.

MSES 320 Exercise Physiology II (3:2:2)

This course provides advanced applied biological treatment of adaptations necessary to sustain and/or develop exercise tolerance. Included for study are concepts of endocrine, pharmacological, disease, aging, sexual, body composition, and nutritional influences on exercise. Laboratory experiences illustrate theoretical material. This course is required of students declaring exercise physiology and adult fitness as a focus and serves as an elective for students successfully completing Exercise Physiology I. Offered fall semester only. Prerequisites: MSES 100, 301; BIOL 111. Recommended: BIOL 112.

MSES 327 Stress Management in Exercise and Sport (2:1:2)

This course concerns the occurrence of stress in relation to exercise and sport settings, the potential for movement forms to serve as stress reducers, and other factors involved in stress and stress management. In laboratory experiences attention will be given to learning relaxation skills and leading others in relaxation and other stress reduction activities. Offered Spring semester only.

MSES 340 Ped III: Prescriptive Models of Teaching Physical**Education (2:1:2)**

This course emphasizes the application of instructional theories to the teaching of physical education. The student will develop knowledge and skill in teaching styles, teaching strategies, and teaching skills. The student will attend information sessions, use the resource center, videotape his/her teaching, and teach a number of non-videotaped episodes to demonstrate competency in various teaching styles, strategies, and skills. Prerequisites: MSES 140, 240; completion of early field experience; admission to PH-CERT and/or PE-TEED.

MSES 342 Seminar in Dance Education: (2:2:0)

This course is designed to provide a cohesive overview of the field of dance education. Emphasis is placed on discussions of readings concerning the philosophical and practical approaches to teaching children and adults, aesthetic theory of the major genres of dance, and application of scientific theory of movement to the field of dance. Concepts and issues raised by students are reviewed and/or further discussed by the professor. Integration of courses in motor learning, kinesiology, and pedagogy is a major course objective of this seminar. This course is required for the dance focus. Prerequisites: MSES 200, 202, 203, 340.

MSES 345 Motor Development (2:1:2)

This course acquaints the student with the motor development of preschool through adolescent children. It prepares the student to derive implications for the teaching of physical education from motor development research in the psychomotor and affective domains and gives the student practical experiences in assessing motor development through laboratory experiences. Prerequisites: MSES 100, 140, 241.

MSES 346 Computer Applications in Movement Studies and Exercise Science (3:2:2)

This course is designed to acquaint the student with computer applications in Movement Studies and Exercise Science. Course content includes applications in exercise, sport, and dance. Applications are discussed in light of their use in movement-related areas such as performing, teaching, coaching, administration, psychology, sociology, journalism, exercise science, and athletic training. Prerequisites: MSES 100; 15 credits in MSES.

MSES 360 Gymnastics Certification (3:3:0)

An in-depth analysis of the major areas affecting mechanical analysis of gymnastic movement, trends and innovations of gymnastics, and teaching methodology for basic to advanced level skills. Additional emphasis centers around a critical review of the research relevant to safety and spotting in the gymnastics discipline. Prerequisites: MSES 160, or 161, or equivalent.

MSES 370 Basketball Officiating (1:0:2)

The rules and procedures for officiating basketball will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 170 or permission of instructor, MSES 109 or concurrent enrollment.

MSES 371 Field Hockey Officiating (1:0:2)

The rules and procedures for officiating field hockey will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 171 or 271 or permission of instructor, MSES 109 or concurrent enrollment.

MSES 374 Soccer Officiating (1:0:2)

The rules and procedures for officiating soccer will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 174 or 274 or permission of instructor, MSES 109 or concurrent enrollment.

MSES 377 Wrestling Officiating (1:0:2)

The rules and procedures for officiating wrestling will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 177 or 277 or permission of instructor, and MSES 109 or concurrent enrollment.

MSES 380 Baseball-Softball Officiating (1:0:2)

The rules and procedures for officiating baseball-softball will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 180, 181 or MSES 280, 281 or permission of instructor, MSES 109 or concurrent enrollment.

MSES 385 Volleyball Officiating (1:0:2)

The rules and procedures for officiating volleyball will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: MSES 185 or 285 or permission of instructor, MSES 109 or concurrent enrollment.

MSES 401 Contemporary Sport (3:3:0)

This course is designed to enable the student to recognize sport as a phenomenon and social institution and to analyze the theoretical implications of sport in the contemporary world in relation to actual contexts and existing structures as they have developed and been modified in the twentieth century. Prerequisites: MSES 100, 302. Offered spring semester.

MSES 402 Psychology of Sport and Exercise (3:3:0)

This course provides a broad overview for understanding the behavior of individuals in sport and exercise and focuses specific attention on the major sport and exercise concerns related to a psychological perspective. Content areas include personality and motivation factors, performance in groups, enhancing sport performance, and the psychological effects of participation in sport and exercise. Prerequisites: MSES 200, 302, or two psychology courses. Offered fall semester.

MSES 403WS: Women, Sport and the Body (3:3:0)

This course examines women's socialized attitudes toward movement and the body and their participation and roles in sport at diverse levels of competition and organization; reference is accorded psychophysiological data, legal provisions, and social factors as these are particularized for women. Prerequisites: 90 semester hours and/or MSES 100, 302.

MSES 404 Philosophical Concepts of Movement and Sport (3:3:0)

This course concerns the philosophical problems and questions central to movement and sport. The nature of sport and exercise, mind/body conceptions, phenomenological approaches to the movement experience, the comparison of Eastern and Western views relevant to movement, and ethical questions are considered. Attention is also directed to the implications of particular views for both performance and professional roles. Prerequisites: 90 semester hours, and/or MSES 100, 302, 304 or concurrent. Offered spring semester.

MSES 405 Comparative and International Issues in Sport and Physical Activity (3:3:0)

This course studies form, regularity, and explanation of physical activity and sport in

selected countries compared with the United States. It examines comparative strategies which can be used to answer questions or test hypotheses about international and intranational problems related to physical activity and sport. Prerequisites: MSES 100, 302.

MSES 406 Theory and Techniques of Coaching (3:3:0)

This course is designed to provide an overview of the theories and strategies necessary to become a successful coach. The welfare of the athlete will be the primary focus. Sport areas covered will be philosophy, psychology, pedagogy, physiology, medicine, and management. After successful completion of this course, the student will receive an American Sport Education program diploma. Prerequisite: 96 credits.

MSES 413 Analysis of Performance Skills (3:2:2)

Upon completion of this course the student will be able to quantify and analyze human motions utilizing modern techniques of analysis including cinematography, still or sequence photography, video analysis, electromyography, and other selected laboratory and field techniques. Offered Fall semester. Prerequisites: MSES 100, 202, 203.

MSES 415 Strength and Conditioning Theory (3:3:0)

This course is designed to provide the student with an understanding of basic conditioning principles and how to apply them to various groups or individuals. Prerequisites: MSES 202, 301, and advanced standing of 90 credits.

MSES 419 American College of Sports Medicine Health Fitness Instructor Workshop (2:1:2)

The Health Fitness Instructor Workshop will provide structured experiences in the classroom, laboratory and exercise arenas to improve knowledge and understanding of fitness assessment and exercise programming as outlined by the American College of Sports Medicine guidelines. Prerequisites: MSES 100, 301, and/or advanced standing of 90 credits.

MSES 420 Seminar in Adult Fitness Programs (3:3:0)

This course is designed to provide a cohesive overview of the entire field of adult fitness. The scientific basis of physiological changes in the adult population with their implications in recommending exercise and associated behavior modification are emphases. Techniques for evaluating fitness and program prescription are discussed and practiced by laboratory demonstration and participation. Development, organization, and administration of adult fitness programs in varying environments are explored along with possible on-site visits. Prerequisites: MSES 301, 320. This course is required in adult fitness focus.

MSES 421 Environmental Exercise Physiology (3:2:2)

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 the general and specific mechanisms of adjustment of circulation, respiration, fluid regulation, and metabolism. Both theoretical and laboratory experiences will be provided. Prerequisites: MSES 301, BIOL 111. Recommended: BIOL 112. Offered spring semester.

MSES 422 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, electrocardiography, respiration, and exercise tolerance testing as they relate to responses and adaptations of physical exercise. Prerequisites: MSES 301, 320. Offered spring semester.

MSES 423 Seminar in Exercise Physiology (3:3:0)

This seminar is designed to focus on the study and discussion of recent experimental and descriptive work in exercise physiology. Emphasis is placed on student oral presentations and class interaction. Concepts and issues raised by students are reviewed and/or further discussed by a professor. Integration of previous exercise physiology course material is a

major objective in this seminar. Prerequisites: MSES 301, 320. Offered fall semester.

MSES 424 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. The hazards and implications of being overweight will be studied. Techniques for evaluating energy balance and planning for weight loss programs are discussed in light of established scientific principles and procedures. Exercise along with its dietary counterpart are analyzed to determine their relative importance in the weight loss regime. Facts and fallacies are discussed, and opportunities for self evaluation of leanness and fitness provide practical as well as theoretical experience. Prerequisites: MSES 100, 301, and/or advanced standing of 90 credits.

MSES 425 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. Prerequisites: MSES 100, 301, and/or advanced standing of 90 credits. Offered spring semester.

MSES 426 Reducing Coronary Heart Disease Risk Workshop (2:1.5:1)

This workshop focuses on the theoretical and practical considerations of identifying and evaluating risks associated with this nation's major health problem—coronary artery disease. Epidemiological and experimental evidence are reviewed and evaluative tools are utilized to assess cardiovascular status, prognosis, and risk for developing CHD. Major risk factors of hypertension, smoking, elevated cholesterol, diabetes, and heredity are discussed along with the role of physical exercise in the prevention of heart disease. Prerequisites: MSES 100, 301, and/or advanced standing of 90 credits. Offered in summer.

MSES 427 Anaerobic Training Workshop (2:1.5:1)

This workshop provides a theoretical and practical framework for measurement and evaluation of anaerobic conditioning, flexibility, strength training, and plyometrics. Field and laboratory tests that can be administered by athletic coaches, teachers, and fitness professionals are practiced, analyzed, and discussed. Prerequisites: MSES 301, 415 and/or advanced standing of 90 credits.

MSES 430 Measurement and Evaluation in Athletic Training (3:2:1)

This course is required for students in athletic training. The content includes the basic concepts and skills necessary for the accurate evaluation of primarily musculoskeletal problems in athletics. Other evaluation knowledges and skills are also covered. Prerequisites: MSES 100, 200, 202 or 230. Offered fall semester.

MSES 431 Organization and Administration in Athletic Training (3:3:0)

This course is a requirement for students in athletic training. It deals primarily with the administrative competencies necessary to accomplish the successful day-to-day operation of an athletic training program and facility. Prerequisites: MSES 100, 200, 202, 230. Offered spring semester.

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

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

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

This course is a requirement for students in athletic training. The focus of the course is the application of neuromuscular re-education, movement, and exercise specifically to achieve

the detailed goals of rehabilitation and reconditioning for injured athletes. Prerequisites: MSES 100, 202, 230, 301. Offered fall semester.

MSES 434 Advanced Perspectives in Athletic Injury Recognition, Evaluation and Management (4:3:2)

This course is designed to explore the identification and treatment of athletic injuries. The information and skills are intended for those students with a relatively high level of sophistication in sports medicine. The course follows in sequence with MSES 230, 430, 431, 432, 433, and one 486 experience is required for students in athletic training. Prerequisites: MSES 100, 202, 230; BIOL 111, 112. Offered fall semester.

MSES 435 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. Prerequisites: MSES 230, 301, 432, 433, 434.

MSES 440 Ped IV: Student Teaching (6-12:0:3)

This phase integrates and applies all of the knowledges and skills previously developed. This is a full-time experience in teaching physical education in a school setting that also includes six seminars. Prerequisites: MSES 140, 240, 340; MCOM 262; PSED 161, 242; 96 credits; 2.5 QPA overall, 2.5 QPA in Movement Studies and Exercise Science.

MSES 445 Organization and Administration of Physical Education (2:2:0)

This course is designed to enable the student to demonstrate ability to utilize accepted practices of administering physical education programs as well as intramurals, clubs, and interscholastic sport. It includes in-depth analysis of administrative concepts as they relate to practice. Prerequisites: MSES 100; for teacher certification students: MSES 100 and 340.

MSES 446 Curriculum and Evaluation (2:2:0)

This course provides an opportunity for the student to demonstrate knowledge of the principles and procedures of O.B.E. curriculum construction, of the procedures whereby observable learned behavior can be evaluated, and of the techniques for organizing and treating data. Prerequisites: MSES 100, 140, 240, 340 (or concurrent registration in 340) and admission to teacher certification program.

MSES 460 Analysis of Gymnastics I Workshop (3:3:0)

A critical analysis of biomechanical principles as they apply to both gross and fine gymnastic movement patterns. Additional emphasis will center around 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. Prerequisites: MSES 160, 260 or equivalent. Offered summer.

MSES 461 Analysis of Gymnastics II Workshop (3:3:0)

A quantitative analysis of biomechanical principles as applied to both gross and fine gymnastic movement patterns. Additional emphasis centers around a critical review of the research relevant to the gymnastic discipline. Lecture-demonstration and seminar methods of instruction are employed. Prerequisites: MSES 160, 260, 360 or equivalent. Offered summer.

MSES 464 Medical & Surgical Aspects of Sport & Fitness Injuries (3:3:0)

This course examines the current medical practices used in the treatment and rehabilitation of physically active individuals. An emphasis is placed on orthopedic surgical techniques, pharmaceutical interventions, and the implications of treatment and rehabilitation. Students and certified athletic trainers are introduced to a variety of medical and allied medical personnel. Prerequisites: Current National Athletic Trainers' Association-Board of Certification certification as an athletic trainer or MSES 230 and MSES 430.

MSES 485 Independent Study (Semester hours arranged.)

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

MSES 486 Field Experiences and Internships (Semester hours arranged.)

Requirements for Approval:

All internship sites must be approved by the department faculty. Each application for an internship must be approved by the faculty member in charge of the experience, the director/supervisor of the site where the internship will be done, and the department chair. Before application is made, students must meet the following requirements:

1. Have faculty recommendation based on qualities essential for success in the assigned environment.
2. Have successfully completed at least 96 semester hours of credit (45 hours in ATSM).
3. Have no incomplete grades in required courses.
4. Have a minimum average of 2.0 GPA overall and in the major.
5. Application deadlines are:
 - a. October 15 for spring semester internships
 - b. March 15 for fall and summer internships

Activity Courses

These courses are designed for majors. For activity courses offered to satisfy the General Education requirements, [see page 51](#).

MSES 110 Concepts of Motion (1:0:3)

This course is designed to introduce the student to the study of motion in dance as the basis for all forms of activity. Through the course the student will explore fundamental motion concepts including energy flow, spatial organization, and rhythm and will explore application of process skills to creative activity (improvisation, composition). Three aspects of dance (kinesiological and anatomical, historical and theoretical, and aesthetic) will be emphasized.

MSES 111 The Social Forms of Dance (1:0:3)

This course is a study of the social forms of dance and their ethnic sources. Social mixers, couple, groups, contra, and quadrille dancers, widely different in types and geographic origin, are included as well as standard ballroom dance rhythms, step patterns, and variations.

MSES 120 Physical Conditioning (1:0:3)

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

MSES 121 Aerobic Fitness Activities (1:0:3)

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

MSES 122 Strength Training (1:0:3)

This course is designed to give the student a broad background in the area of strength training. Various strength training programs, techniques, and trends will be examined.

Students will have the opportunity to setup and become involved in various strength training methods. Recommended prerequisite: MSES 120.

MSES 123 Yoga (1:0:3)

Yoga is a system of exercise and mindful movement which improves the health and physiological function of the entire body. The major emphasis in this course is on the asanas (postures) of yoga. Minor emphasis is on techniques to quiet and focus the mind, breath control, and relaxation.

MSES 141 Movement Experiences for the Pre-School Child (1:0:3)

This course is an introduction to movement experiences appropriate for the pre-school child and his/her total integrated development; attention is focused upon the elements of movement, non-locomotor, and manipulative activities that promote development of perceptual-motor abilities, physical and motor fitness, and motor abilities. The proper selection and organization of activities that promote instructional objectives based upon student needs is stressed.

MSES 143 Educational Gymnastics (1:0:3)

This course provides for the integrated study of the bodily, dynamic, spatial, and action aspects of gymnastics. Students will be expected to increase and expand their skills and spotting abilities in the gymnastic environment by solving movement problems and performing tasks on the mats and single pieces, and combinations of equipment.

MSES 150 Backpacking, Orienteering, and Mountaineering (1:0:3)

This course includes basic skills of backpacking, land navigation, sport orienteering, and introductory experiences in rope handling, climbing, and rappelling. After successful completion of the course, the student will be able to plan and carry out a short backpacking trip, read a map and compass, follow a simple orienteering course, travel safely in the wilderness, and practice low impact camping skills.

MSES 151 New Games and Adventure Activities (1:0:3)

This course involves nontraditional games and exercises, group initiative problems, low and high ropes course elements. Spotting, belaying, and new games leadership skills will be developed. The student will have the opportunity to meet new challenges, take risks, and overcome obstacles through individual and group effort. The student is invited to venture forth into the unknown, exercising choice and decision-making in meeting physically demanding challenges. Extensive use will be made of the Stony Acres ropes course. All students must show evidence of health/accident insurance coverage.

MSES 152 Nordic and Alpine Skiing (1:0:3)

This course includes the basics of Alpine (downhill) and Nordic (cross country) skiing. Instruction will be given at a local ski area and at Stony Acres and other wilderness type areas if snow conditions permit. An extra fee is charged for equipment rental and lift tickets. This course is open to beginning through intermediate skiers. Terrain and instructional setting are not appropriate for advanced skiers. Offered spring semester.

MSES 153 Aquatics I (1:0:3)

This course includes development of skill proficiency and an increased understanding in basic aquatic adjustment skills, survival techniques, stroke mechanics, and elementary diving skills. Emphasis is placed on rhythmic breathing, drownproofing, treading, and the ability to perform elementary backstroke, sidestroke, front crawl, back crawl, and breaststroke in acceptable form. Principles of hydrodynamics are presented. Prerequisites: Deep water entry, 50 yard swim.

MSES 157 Outdoor Adventure Workshop (1:0:3)

This course provides an introduction to outdoor adventure activities including: group games or initiatives, high and low ropes course elements, camping, canoeing, backpacking, map and compass, angling and casting, and outdoor cooking. The course is offered in a concentrated time block. Students are housed at Stony Acres. An additional course fee is

assessed for meals and canoe rental. Offered fall semester.

MSES 160 Gymnastics I—Men's Events (1:0:3)

The course focuses on fundamental gymnastic skills on all pieces of apparatus for men's events including tumbling and trampoline. Concurrently, the student will demonstrate an awareness for safety and a positive attitude towards the activity of gymnastics.

MSES 161 Gymnastics I—Women's Events (1:0:3)

This course includes fundamental gymnastics skills, spotting techniques, safety procedures, and nomenclature for the women's events including trampoline and tumbling. Concurrently, the student will demonstrate an awareness for safety and a positive attitude towards the activity of gymnastics.

MSES 164 Archery I (1:0:3)

Archery I provides instruction in basic target archery techniques, including the low method of anchoring and utilization of the bowsight method of aiming. Also covered are the fundamentals of selection and care of equipment, basic safety procedures, archery films, novelty, and tournament shooting.

MSES 165 Golf I (1:0:3)

This course provides instruction in the basic strokes for the game: driving, approaching (long and short), and putting. It also covers the history of the sport, rules, courtesy, and fundamental strategy. Play on a golf course is required.

MSES 167 Track and Field Events I (1:0:3)

This course focuses upon the basic techniques involved in sprinting, hurdling, distance running, relays, and the throwing and jumping events. Instruction emphasizes skill acquisition through sequential learning steps.

MSES 170 Basketball I (1:0:3)

The course is designed to analyze the game of basketball, to develop the basic skills necessary to play the game, to develop an understanding and the use of basic offensive and defensive strategy, and to demonstrate a knowledge of the rules and their interpretation.

MSES 171 Field Hockey I (1:0:3)

Field Hockey I will acquaint the student with the fundamental nature of the sport, enable the student to understand offensive and defensive play, and provide the student with the basic performance skills necessary for play. Offered fall semester of even numbered years.

MSES 172 Football I (1:0:3)

This is a basic course designed to teach the fundamentals of football techniques including blocking, tackling, pass catching, throwing the ball, offensive and defensive line play, linebacker skills, defensive and offensive backfield play, and kicking the ball (punts, extra points and field goals). Offered fall semester.

MSES 173 Lacrosse I (1:0:3)

Emphasis on this course is placed on understanding, by performance and verbalization, the fundamental aspects of play—skills, basic offensive and defense strategy—and the relationships between these elements as they contribute to effective play. (USWLA Rules, 12 players, natural boundaries, and no contact.) Offered spring semester of even numbered years.

MSES 174 Soccer I (1:0:3)

This course is designed to acquaint the student with the fundamental skills of the game of soccer and to provide an understanding of the application of the skills for classroom situations.

MSES 175 Fencing (1:0:3)

This course provides instruction and practice in the foil, epee, and sabre. Emphasis is upon the development of hand and foot movements, basic offense and defense movements, and the study of competition and the rules of fencing. Offered spring semester.

MSES 176 Judo and Jujitsu I (1:0:3)

Instruction and practice in the skills involved in the various arts of judo and jujitsu are provided. Emphasis is upon judo and jujitsu from the Kodokan and Kodenkan systems, respectively. In addition to participation in the beginning class, opportunity is provided for students' advancement through belt ranking in accordance with regulations and standards of the American Judo and Jujitsu Federation and the United States Judo Association. Offered spring semester of even numbered years.

MSES 177 Wrestling I (1:0:3)

Wrestling I is designed to give the student knowledge and understanding of the basic rules, skills, and strategies involved in wrestling, so that the student can demonstrate these factors in both instructional and competitive situations.

MSES 180 Baseball I (1:0:3)

This is a basic course to develop an understanding of baseball techniques, the performance of its basic skills, and the methods used in the teaching of these skills. Offered fall semester of even numbered years.

MSES 181 Softball I (1:0:3)

Softball I is designed to enable the student to recognize the nature and scope of softball and to understand softball rules and apply these rules in softball games. The student will develop ability in the execution of basic softball skills and application of game strategy. Offered fall semester.

MSES 182 Badminton (1:0:3)

This course is designed to provide the student with experiences relevant to the execution and analysis of the basic skills of badminton (serves, clear, smash, drop, drive, and net shots). The student should be able to apply the rules and basic strategy of singles and doubles in a recreational tournament situation.

MSES 183 Racquetball (1:0:3)

Racquetball is designed to teach the fundamentals of the game. Included are stroking techniques, game tactics, and practice in singles, threes, and doubles play in competitive situations. Supplementary information concerning the history and rules of the game is also presented.

MSES 184 Tennis I (1:0:3)

The focus of this course is effectiveness in the performance of the serve, the serve return, and forehand and backhand drives, approaches, and volleys. The course includes knowledge of stroke production and selection in relation to placement and speed of the ball, knowledge of rules, scoring, terminology, as well as basic strategy for singles and doubles play and awareness of the social and cultural conduct and functions of tennis in the United States.

MSES 185 Volleyball I (1:0:3)

This course is designed to analyze the game of volleyball, to develop the basic skills necessary to play the game, to develop an understanding and use of basic offensive and defensive strategy, and to demonstrate a knowledge of the rules and their interpretations.

‡MSES 210 GE: Elementary Ballet (1:0:3)

This course will include technique in elementary ballet including alignment, barre, center work, basic enchainements, and room and body directions, with emphasis on developing the physical and expressive potential of the human body. The class will enable students to understand and synthesize the kinesiological and anatomical, historical and theoretical, and aesthetic aspects of dance. Prerequisites: FIT 140, or MSES 110, or equivalent dance training.

‡MSES 212 GE: Creative Experiences in Dance (1:0:3)

This course provides the student with opportunities for individual and group creative experiences in dance. Using a related arts approach, it examines the expressive quality of movement in the use of space, time, and energy factors. Spontaneous (improvised) and

composed (choreographed) studies are included.

***MSES 215 GE: Elementary Modern Dance (1:0:3)**

This is an elementary level modern dance technique course. It explores a variety of axial and locomotor techniques and simple combinations characteristic of contemporary dance. The ability to apply skills in the art form is implied in any study of technique; this ability will be realized through improvisational and compositional experiences. Prerequisite: FIT 140, or MSES 110, or equivalent dance training.

MSES 241 Movement Experiences for the Primary Grade Child (1:0:3)

This course is a study of movement experiences appropriate for the primary grade child. Attention is focused upon developmentally appropriate activities designed to integrate movement skill themes and concepts. Appropriate teaching practices are emphasized. Included is a practical teaching experience. Individual and small group movement activities and social skill development are stressed to primary grade students.

MSES 253 Aquatics II (1:0:3)

This course is a review of skills taught in Aquatics I. In addition, advanced strokes (i.e., trudgen series, butterfly, inverted breaststroke), competitive swimming skills, and basic diving skills are presented. Prerequisite: MSES 153 or equivalent.

MSES 254 Basic Sailing I (1:0:2)

This basic course is designed to acquaint the student with the fundamental skills and knowledge of sailing. No non-swimmers will be admitted. Prerequisite: Deep water survival skills.

MSES 255 Canoeing: Basic River Canoeing (1:0:3)

This course is designed to instruct the student in the basic river canoeing skills necessary to develop an intermediate recreational white water paddler. It includes instruction on Class II-III rivers. Also listed as FIT 274. Prerequisite: Deep water swimming and survival skills.

MSES 256 Scuba Diving (1:0:3)

This program is designed to provide the student with essential knowledge and diving skills necessary to participate in open water scuba diving activities. Upon completion of the course, the student will be qualified to do an open water dive for certification. Prerequisites: The student must pass a water pretest to continue in the course: a) distance swim of 250 yards nonstop, b) survival swim for 10 minutes, c) underwater swim of 50 feet with no push off or dive, d) recovery of a 10 lb. diving brick from deep water (12 feet).

MSES 260 Gymnastics II (1:0:3)

The course focuses on safe teaching progression and spotting techniques for men's and women's gymnastics. The student will be expected to peer teach and prepare lessons for selected skills. Also included will be various formats for teaching small and large groups as well as alternatives for children with various abilities.

MSES 265 Golf II (1:0:3)

This course provides additional instruction to help improve basic strokes, putting through driving, as well as instruction on execution of special shots. Advanced playing strategy is stressed, as well as appropriate teaching progressions. Competition and tournament play along with equipment design and fitting are discussed. Offered spring semester of even numbered years.

MSES 267 Track and Field Events II (1:0:3)

This course provides an analysis of the coaching principles regarding training systems in track and field and focuses upon development of the ability to teach proper technique. The administration and organization of track and field programs are also considered. Offered spring semester of odd numbered years.

MSES 270 Basketball II (1:0:3)

The course is geared to the coaching aspect which will provide an opportunity for the

student to develop and display an advanced level of skills and to demonstrate varied offensive and defensive systems of play.

MSES 272 Football II (1:0:3)

This course will emphasize the team aspect of play. Basic offensive sets, the various defenses, the punt and coverage, punt return, kick-off coverage, kick-off return, and extra point and field goal formations will be taught. Students will have the practical opportunity to organize and coach an offensive and defensive practice.

MSES 274 Soccer II (1:0:3)

This course is designed to acquaint the student with the game of soccer, to apply skills in game situations, and to provide an understanding of game strategy, rules, and officiating. Offered fall semester of odd numbered years.

MSES 277 Wrestling II (1:0:3)

This advanced course is designed to give the student greater understanding and more advanced wrestling skills that will allow them to participate more effectively. The emphasis on teaching progression and class organization should enable the student to organize and teach the sport to others effectively. Offered spring semester of odd numbered years.

MSES 280 Baseball II (1:0:3)

This course in baseball fundamentals is designed to provide a better understanding of advanced skills, teaching methods, and coaching techniques. Successful completion of this course will help prepare students to coach baseball. Offered fall semester of odd numbered years.

MSES 281 Softball II (1:0:3)

Students in Softball II will refine basic skills, acquire more advanced skills, and gain advanced insight into softball game strategy. They will also acquire ability in analysis of skills and application of their knowledge to coaching and teaching if such application is pertinent to their area of study. Offered spring semester of odd numbered years.

MSES 284 Tennis II (1:0:3)

The focus of this course is refinement of technique and control in utilizing the basic strokes of tennis (See Tennis I) under various conditions and the acquisition of skill in executing and employing the lob, overhead, drop shot, and half volley strokes. The course includes understanding and applying concepts for efficient stroke production, ball reception, imparting and receiving ball spin, analysis of skill performance, strategies for singles and doubles play, and awareness of significant events, players, and developments within tennis contexts. Prerequisite: MSES 184 or equivalent experience. Offered fall semester of odd numbered years.

MSES 285 Volleyball II (1:0:3)

This course is geared to the coaching aspect which will provide an opportunity for the student to develop and display an advanced level of skills and to demonstrate varied offensive and defensive systems of play. All aspects of program development, recruitment, budget, facilities, practice planning, scheduling, and player development are covered. Offered spring semester.

***MSES 315 GE: Dance Performance and Production (1:0:3)**

This course consists of performance, choreography, and production work involved with dance as a performing art. Work in performance and technical areas is included, and participation in production is required. This course may be elected more than once for credit (maximum of 3 times). Prerequisite: FIT 140, or MSES 110, or equivalent dance instruction.

MSES 341 Movement Experiences for the Intermediate Grade Child (1:0:3)

This course is a study of movement experiences appropriate for intermediate grade children. Attention is focused upon selecting and designing appropriate teaching practices.

Included is a practice teaching experience with emphasis on lead-up activities to team and individual sports, leisure time, and conditioning activities. Prerequisites: MSES 100, 241 or approval of instructor.

MSES 353 Lifeguard Training (1:0:3)

Successful completion of this course leads to acquisition of the American Red Cross Lifeguard Training Certificate. This course replaces the Advanced Lifesaving course. The Lifeguard Training course will provide participants with the skills and knowledge required to be a lifeguard at a swimming pool or a protected (non-surf) open-water beach. Prerequisites: 500 yards continuous swim consisting of front crawl, breaststroke and sidestroke; retrieval of a 10 lb. bring from 8 feet of water and treading water for 2 minutes using the legs only.

MSES 354 Recreational Aquatics (1:0:3)

This course is designed to present an overview of recreational aquatics activities with emphasis given to the student's ability to develop and present aquatic games for all age groups and swimming ability levels. Units presented are aquatics games (i.e. water polo and water basketball), basic synchronized swimming skills, and aquacises. Prerequisites: MSES 153 or equivalent; completion of swimming pre-test.

MSES 441 Movement Activities for Special Populations (1:0:3)

This course provides for development of skills and strategies for individualizing, adapting, and modifying movement activities for individuals with various physical and/or mental handicaps. Opportunities to work directly with special populations are provided. Prerequisites: MSES 241, 341 or approval of instructor.

MSES 453 Water Safety Instructor (1:0:3)

Satisfactory completion of this course leads to certification as a Red Cross Water Safety Instructor. The course focuses on the development of skill proficiency and teaching proficiency of swimming and lifesaving skills. The Red Cross Introduction to Health Services Education course (IHSE) is incorporated into the Water Safety course. Prerequisites: Current lifeguard training card and successful completion of Red Cross swimming prerequisite.

MSES 454 Lifeguard Instructor (1:0:3)

Satisfactory completion of this course leads to certification as an American Red Cross Lifeguard Instructor. This course prepares instructor candidates to teach Lifeguard Training, Basic Water Safety, Emergency Water Safety, and the Lifeguard Review course. Prerequisites: Lifeguard Training Certificate (FIT/MSES 353); Current CPR Certificate/standard First Aid Certificate.

Music

School of Arts and Sciences—The Faculty of Arts and Letters

Professors: Fisher, Miller

Associate Professors: Dorian, Flatt (chair), Schade

Bachelor of Arts with a Fine Arts major (core emphasis: Music) —54 semester hours

Required fine arts courses: ART 101 and either 201 or 202 and three additional semester hours; THTR 100 and either 302 or 304 and three additional semester hours.

Required core courses for Music emphasis: MUS 100, 120, 203, 204, 211, 220, 311, 411, 496; an additional 9 semester hours of music electives including appropriately approved applied music lessons and performing ensembles. Students must have a minimum 2.50 quality point average in music courses, a minimum of 12 credit hours in 300 or 400 level music courses, and a minimum of 18 credit hours in music must be completed at ESU. For university requirements see page 49.

Music minor—24 semester hours

Applied Music emphasis: Applied Music – 8 semester hours in one of piano, voice or band instrument (at least 4 credits at the 300-400 level); 8 or 9 semester hours selected from MUS 120, MUS 203, MUS, 204, MUS 211, MUS 220, MUS 245, MUS 303, MUS 306, MUS 311, MUS 370, MUS 400, MUS 411 (at least 3 credits at the 300-400 level); 7 or 8 semester hours of music electives (at least three credits at the 300-400 level), Minimum Piano Proficiency.

Jazz Studies emphasis: MUS 203; MUS 245; MUS 306; 6 semester hours of Applied Music (at least 4 credits at the 300-400 level); 6 semester hours in MUS 240 or 6 semester hours in MUS 242; 5 semester hours of music electives (at least 3 credits at the 300-400 level).

Music Theory emphasis: MUS 101; 120; 220; either MUS 306 or MUS 370; an additional 13 semester hours of music electives, no more that 4 credits from Performing Ensembles; Minimum Piano Proficiency.

Music History and Literature emphasis: MUS 100; 18 semester hours from MUS 203, MUS 204, MUS 211, MUS 303, MUS 311, MUS 400, MUS 411.

\$MUS 100 GE: Introduction to Music (3:3:0)

This course is a survey of western music from the Pre-Renaissance to the present; styles and musical periods are studied and correlated with other areas of learning; listening both in and out of class is stressed.

\$MUS 101 GE: Fundamentals of Music (3:3:0)

This course is designed to give students basic knowledge and skills in music reading, theory or harmony, and aural theory so that they can intelligently read, sing, and perform a simple musical score or diatonic melody. It is recommended that the course be taken during the semester prior to enrolling in Music Theory I.

***MUS 110 GE: Piano Class I (2:1:2)**

This course provides elementary class instruction in piano and keyboard harmony and harmonic materials applicable to the piano. An individual approach is used.

***MUS 111 GE: Piano Class II (2:1:2)**

This course is a continuation of the study of material in MUS 110. Since an individual approach is used, this course may be elected more than once for credit. Prerequisite: MUS 110.

***MUS 113 GE: Class Voice I (2:1:2)**

Group voice instruction for the beginning singer will include emphasis upon posture, breathing, voice building, and the appropriate vocal literature which will develop the full

\$Fine Arts

*Performing Arts

potential of each student.

***MUS 115 GE: Guitar I (2:1:2)**

This is a course that includes elementary class instruction in classic guitar technique and performance, fingerboard harmony, and applied music theory. An individual approach is used.

***MUS 116 GE: Guitar II(2:1:2)**

This course is a continuation of the material studied in Guitar I with an emphasis on sight reading and performance. Since an individual approach is used, this course may be elected more than once for credit. Prerequisite: MUS 115.

\$MUS 120 GE: Music Theory I (3:3:0)

This course begins with a review of basic music fundamentals and continues with the study of harmonic progressions in the major and minor mode, principles of voice leading, first inversion and second inversion chords, figured bass, function and structure of melody, non-harmonic tones, harmonization of a melody, and sight singing and dictation activities. Prerequisite: MUS 101 or equivalent experience. Offered every other year.

***MUS 130 GE: Concert Choir (1:0:3)**

The Concert Choir is the university's large mixed voice choral group. Rehearsals stress the preparation of high quality choral music from various periods of music history and in various musical styles. Musical skills such as reading musical notation, ensemble blend, tone quality, and proper interpretation are emphasized at rehearsals. Public performances may be scheduled by the group's director.

***MUS 135 GE: University/Community Concert Band (1:0:3)**

The University/Community Concert Band is open to all university and community instrumentalists with previous experience in high school and/or college band. This group will be exposed to standard concert band literature, marches, musical show selections, and pop music. Emphasis will be on developing musicianship, especially tone, blend, balance, intonation, rhythmic accuracy, and sight reading. Public performances may be scheduled by the group's director.

***MUS 160, 161, 260, 261, 360, 361, 460, 461 GE: Applied Music: Piano (2:Arr)**

This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.

***MUS 162, 163, 262, 263, 362, 363, 462, 463 GE: Applied Music: Voice (2:Arr)**

This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.

***MUS 164, 165, 264, 265, 364, 365, 464, 465 GE: Applied Music: Band Instruments (2:Arr)**

This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.

\$MUS 203 GE: Jazz and Popular Music (3:3:0)

This course traces the evolution of jazz from roots in African, European, and American folk music to its emergence as a new art music that is indigenous to the U.S.A. The stylistic genres of jazz history are studied including Dixieland, Blues, Ragtime, Bebop, Free Jazz, and Jazz Rock Fusion. These styles are also discussed in their relationship to popular music. Recordings are studied to exemplify the skills of major jazz artists and the styles with which they are associated.

\$Fine Arts

*Performing Arts

\$MUS 204 GE: Musical Theatre (3:3:0)

This course is a broad study of the various elements and repertoire that constitute musical theatre. This study will examine the music, characters, plots of specific works relating them to the music, and artistic achievement, characters, historical significance, social relevance, and performance practices. Material will cover various aspects of musical comedy, operetta, cabaret, and opera. This is a general course for all students interested in broadening their awareness of the form.

\$MUS 211 GE: Music of the Renaissance and Baroque Era(3:3:0)

This course is a survey of the development of musical art form from ancient times to around 1750. Music listening is an integral part of the course. Prerequisite: MUS 100. Offered biennially.

MUS 220 Music Theory II (3:3:0)

This course is a continuation of MUS 120. Further aspects of music theory to be explored include cadence types, harmonic rhythm, dominant seventh chords, secondary dominants, modulation, and more complex sight singing and dictation activities. Prerequisite: MUS 120. Offered biennially.

‡MUS 240 GE: Pop Singers (1:0:3)

The Pop Singers are a medium-sized select ensemble of mixed voices that focus on popular, folk, and Broadway show music. Rehearsals stress all the usual vocal musical skills and, in addition, those special musical and show business techniques that are needed for the successful rendering of music in these styles. Prerequisite: Permission of the instructor. Public performances may be scheduled by the group's director.

MUS 241 Instrumental Chamber Ensemble (1:0:2)

Special ensembles are formed to perform instrumental chamber music works. Ensembles may include a variety of combinations, i.e. strings, woodwinds, brass, percussion, piano, etc. Participants must be prepared to perform works either in recital or for a faculty jury at the conclusion of the semester. Prerequisite: Permission of instructor.

‡MUS 242 GE: University Jazz Ensemble (1:0:3)

This group will consist of the following instrumental sections: saxophone, trumpet, trombone, and rhythm. The music rehearsed will reflect a wide variety of jazz styles with emphasis on the development of good ensemble techniques, rhythmic accuracy, tonal balance, intonation, improvisation, and sight reading skills. Prerequisite: Permission of instructor. Public performances may be scheduled by the group's director.

‡MUS 245 GE: Jazz Improvisation I (2:1:2)

This course explores jazz scales and modes so that instrumentalists and vocalists develop fluency in various jazz styles. By using practice patterns in all keys, transcribed solos, recordings of the jazz masters, and play-along records, students will approach the goal of playing what they hear in their minds. Prerequisite: Permission of instructor.

MUS 290 Special Topics (Semester hours arranged.)

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

\$MUS 303 GE: American Music (3:3:0)

This course is a survey of the music of the United States, including its folk music, music associated with specific areas, and its classical music. Musical characteristics are studied, personalities associated with each (composers and/or performers) are introduced, and historical data is presented. Prerequisite: MUS 100. Offered biennially.

\$MUS 304 GE: Opera for Everyone (3:3:0)

Through the use of videos, popular operas will be studied in complete and abridged versions with English subtitles. Emphasis will be placed on characters, plot social historical

significance, and vocal performance styles. A research project will be required. Prerequisite: MUS 100 and/or MUS 204.

‡MUS 306 GE: Jazz Improvisation II (2:1:2)

This course is a continuation of Jazz Improvisation I (MUS 245) and explores advanced rhythms, harmonic structures, minor modes, whole-tone scales, and chord substitutions. Transcribed solos of the jazz masters are analyzed while participants improvise using the above elements. Prerequisite: MUS 245.

§MUS 311 GE: Music of the Classical and Romantic Era (3:3:0)

This course consists of discussion and study of the background of classicism and romanticism as it applies to music: forms, content, types of music and their application to the Classic and Romantic periods including correlations with various economic, political, and social phases of the periods. Prerequisite: MUS 100. Offered biennially.

‡MUS 343 GE: Brass Ensemble (1:0:2)

This course consists of a select instrument ensemble composed of instruments of the brass family. The course is offered as proper instrumentation warrants. Prerequisite: MUS 135 or permission of instructor. Public performances may be scheduled by the group's director.

‡MUS 344 GE: Woodwind Ensemble (1:0:2)

This course consists of a select instrumental ensemble composed of instruments of the woodwind family. The course is offered as proper instrumentation warrants. Prerequisite: MUS 135 or permission of instructor. Public performances may be scheduled by the group's director.

§MUS 370 Keyboard Harmony (2:1:2)

This course is designed to develop the musician's ability to invent and organize musical ideas at the piano. Emphasis is placed on harmonizing and transposing melodies with appropriate easy accompaniment, working with harmonic progressions, reading figured bass accurately, reducing easy choral and instrumental scores at the piano, and improvisation. Prerequisite: MUS 101 or equivalent experience, permission of instructor.

MUS 400 Keyboard Literature (3:3:0)

This course is a historical survey of music for harpsichord and piano from the Renaissance to the Twentieth Century. The course emphasizes keyboard composers, style, forms, and performance. Prerequisite: MUS 100, one of MUS 211, 311, 411, or Applied Music: Piano.

MUS 403 Jazz Keyboard Chords (2:1:2)

Students will learn to perform standard jazz chords with extensions in major and minor keys on a keyboard. Standard chord voicings for two hands and left hand only will assist auditory training, knowledge of music theory, and some jazz improvisation. Students will accompany pre-existing melodies with jazz chords. Prerequisite: MUS 245; MUS 306.

MUS 404 Jazz Masters Seminar (1-3:3:0)

Students will study the lives, music, and careers of several accomplished, active jazz professionals. Each artist will then be a guest speaker, interacting with the class. Writing assignments will make this the culminating academic jazz experience. Prerequisite: Any two: MUS 100, 203, 242, 245, 303, 306, 403, 411, 492, 496.

MUS 411 Twentieth Century Music (3:3:0)

This course is designed to acquaint the student with important musical compositions of the 20th Century beginning with the Impressionistic style of Claude Debussy. A country by country approach is taken to introduce the major composers of Europe, and North and South America. A strong emphasis is placed on the development of mature listening skills. Prerequisite: MUS 100, one of MUS 203, 204, 211, 303, 311. Offered biennially.

MUS 485 Independent Study (Semester hours arranged.)

Directed research and study is provided on an individual basis in order to deepen a specific interest in the discipline.

MUS 491 Choral Music Symposium (1:1:0)

§Fine Arts

‡Performing Arts

This course will be a comprehensive choral training symposium for church choral directors and directors of school choirs. Clinicians, including composers, will direct sessions in choral rehearsal techniques and performance practices and conduct studies on curriculum materials.

MUS 492 Instrumental Music Master Class (1:1:0)

This course is a master class taught by a renowned professional instrumental performer. Topics stressed will include instrumental techniques, phrasing, expressive nuances, and practice/performance strategies. Student performance will be evaluated, and constructive suggestions will be provided. Prerequisite: Permission of instructor.

MUS 496 Fine Arts Seminar (3:3:0)

This is a team taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisite: Advanced standing of 90 credits and permission of the instructor.

Nursing

School of Health Sciences and Human Performance—The Faculty of Health Sciences

The Nursing degree program is accredited by the National League for Nursing Accrediting Commission (61 Broadway, New York, NY 10006; 1-800-669-1656) a specialized accrediting agency recognized by the U.S. Secretary of Education. In addition, the program is approved by the Pennsylvania State Board of Nursing.

Professors: Karner (chair)

Associate Professors: Champagne, Heinrich, Kilker

Assistant Professors: Gray, Hannon, Johnston, Primrose, Selenski, Shannon

Instructor: Klein

Bachelor of Science with a Nursing major—62 semester hours

Required major courses: NURS 101, 301, 302, 303, 304, 305, 306, 307, 308, 320, 321,

322, 400, 421, 422, 423, 424, 481.

Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; PSY 100, 225; SOC 111.

For university requirements see page 49.

Graduates of this degree program are eligible to write the National Council of State Boards of Nursing examination for licensure to practice as Registered Nurses.

Licensed Practical Nurse to Bachelor of Science in Nursing with a Nursing major—67 semester hours

Required major courses: NURS 300, 301, 302, 303, 304, 305, 306, 307, 308, 320*, 321*, 322*, 400, 421*, 422*, 423, 424, 481.

Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; PSY 100, 225; SOC 111.

For university requirements see page 49.

*Eligible students can validate through testing.

Graduates of this degree program are eligible to write the National Council of State Boards of Nursing examination for licensure to practice as Registered Nurses.

Registered Nurse to Bachelor of Science in Nursing with a Nursing major—61 semester hours

Required major courses: NURS 301, 302, 304, 305, 306, 307, 308, 309, 320*, 321*, 322*, 400, 421*, 422*, 423*, 424, 481.

Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; PSY 100, 225; SOC 111.

For university requirements see page 49.

This program is designed to provide the opportunity for Registered Nurses to matriculate for the degree of Bachelor of Science in Nursing.

* Courses acceptable for transfer by eligible RN students. Additional courses in the major may be considered for transfer on a case by case basis.

School Nurse Certification

Registered nurses with the baccalaureate degree in nursing are eligible to apply for admission into the School Nurse Certification program. For program requirements, please contact the Nursing Department 570-422-3474.

Nursing major—3 semester hours

Required major courses: NURS 486

Corequisite courses: HLTH 360 or 539; MCOM 262 or 520; PSED 161 or 510, 242 or 516.

Time Limit for Completing the Program of Study

All requirements for the degree in the nursing program must be completed within seven years from the date students begin their studies. Exceptions to this requirement may be approved by the department if extenuating circumstances exist.

Core Performance Standards for Admission and Progression

Applicants and students enrolled in the Department of Nursing must have the necessary

intellectual, physical, emotional, social and communication skills to provide safe and effective nursing care. Students must meet core performance standards to qualify and remain in the Nursing Program. Where possible, reasonable accommodations will be provided for those individuals with disabilities to enable them to meet these standards and ensure that students are not denied the benefits of, excluded from participation in, or otherwise subjected to discrimination in this program.

Core performance standards for admission and progression are listed below. These examples are not inclusive of all expected abilities.

1. Critical thinking ability sufficient for clinical judgment.
2. Interpersonal abilities sufficient to interact with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds.
3. Communication abilities sufficient for interaction with others in verbal and written form.
4. Physical abilities sufficient to move from room to room, and maneuver in small or confined spaces.
5. Gross and fine motor abilities sufficient to provide safe and effective nursing care.
6. Tactile dexterity sufficient for physical assessment.
7. Visual ability sufficient for observation and assessment necessary in nursing care.
8. Auditory ability sufficient to monitor and assess health needs.

Adapted from Core Performance Standards Required for Nursing, Board of Directors of the Southern Council on College Education for Nursing (SCCEN), 1993. Accepted by Nursing Faculty, December 1998.

Freshman Admission Criteria

Consideration for admission is based on the following guidelines:

1. High school rank in the top 1/3rd.
2. Combined SAT of 1000 or above.
3. High school QPA of 3.0 or better.
4. Completion of work equal to a standard high school course with a minimum of 16 units, including 4 units of English, 3 units of social Studies, 2 units of Mathematics (1 of which is Algebra) and 2 units of Science with a related laboratory or the equivalent.

Transfer Admission Criteria

Consideration for admission is based on the following guidelines:

1. Cumulative point average of 2.5 or better.
2. Registered and Licensed Practical Nurses:
 - a. Graduation from an NLNAC (National League for Nursing Accrediting Commission) Program; Current PA License.
 - b. Eligibility for advanced placement for Licensed Practical Nurses is reviewed using the following criteria:
 - Nurses graduating less than 3 years from the time they apply are eligible for advanced placement.
 - Nurses who graduated 3 or more years prior to application must have 1000 hours of nursing practice within the last 12 months.
 - Completion of the NLN Mobility Profile I & II standardized tests with a passing score on all tests.

Academic Progression Criteria

Minimum academic criteria have been established for all students in this degree program. Students are evaluated at the end of each semester based on the following criteria:

1. Cumulative quality point average below 2.0; Removal from the program
2. Cumulative quality point average between 2.0 and 2.49: Probation. A written request to continue in the program must be submitted to the department chair-person. Upon approval of the chair, continuous full-time enrollment in the program will be permitted on a probationary basis for one semester. If a cumulative point average of 2.50 has not been attained, dismissal from the program will occur.
3. A grade of C or above is required in all prerequisites to nursing courses.
4. A grade of C or above is required in all nursing courses.

Clinical Nursing Course Requirements

One month prior to beginning a clinical nursing course, students must submit evidence of current Act 34 clearance and Act 151 child abuse clearance, current CPR certification, professional liability insurance (\$1,000,000 per occurrence/\$3,000,000 aggregate minimum coverage), appropriate immunizations and titers, and verification of good health, including a negative Mantoux Test, or chest x-ray. Immunizations and titers include DT, measles, mumps, Hepatitis B, Rubella vaccine or titer showing immunity and a serology test (VDRL, RPR or STS). University Health Services offers health examinations and the Mantoux Test as a service to students who are enrolled in classes at the university and have a health form on file at the Health Center. The Mantoux test is required annually, and a health examination is required every other year. The basic nursing student will pay for malpractice insurance, which can be processed by the Nursing Department office. LPN and RN students must purchase their own insurance and present evidence prior to enrolling in a clinical nursing course. LPN and RN students are also required to present evidence of current licensure in PA. Act 34 and Act 151 clearance forms can be obtained in the Nursing Department office.

Additional Expenses

Additional expenses required of students as they progress through the Nursing Program are: uniform costs, travel expenses to clinical sites and application fees for licensure.

Credit By Examination

Credit for some of the nursing courses may be earned through credit by examination. Other methods of earning credit are explained in the Advanced Placement section of this catalog.

Eligibility for Licensure Examination

Graduates of the BSN program are eligible to write the National Council of State Boards of Nursing Examination for licensure to practice as Registered Nurses. Prospective students should note that there are restrictions on licensure due to felony convictions related to controlled substances. For additional information, please contact the Nursing Department at 570-422-3474.

Student Organizations

Students are encouraged to join their professional organization, the Student Nurses' Association. This is the local chapter of the National Student Nurses' Association.

Grievance Procedure

The university's grievance procedure can be found in the university's *Student Handbook*.

Nursing Honor Society

Junior and senior students who have achieved a 3.0 cumulative grade point average and who rank in the highest 35% of their class are eligible to apply for induction into the Xi Beta Chapter of Sigma Theta Tau International, the nursing honor society.

NURS 101 Nursing Seminar (1:1:0)

This seminar is designed to enable the beginning student in nursing to identify knowledge from support courses relevant to the practice of professional nursing. The functions of caring, communication, critical thinking, therapeutic intervention, and leadership/management are explored from a professional nursing practice perspective. Systems theory is introduced as the integrating mechanism of the ESU Nursing curriculum. Corequisite: BIOL 111, PSY 100.

NURS 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum. Prerequisite: Permission of the chair and the faculty of the Department of Nursing.

NURS 300 Nursing Theory and Practicum in Transition (6:4:7.5)

This is a transition course for licensed practical nurses which covers the study and application of concepts integral to professional nursing practice. Socialization into professional nursing, critical thinking, communication skills, group interaction, beginning leadership and management skills, and theoretical rationale for nursing interventions are explored. A clinical component is included. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 301; PSY 100, 225; SOC 111; successful completion of NLN Mobility Profile I & II.

NURS 301 Nutrition and Diet Therapy (3:3:0)

This course is designed to provide a comprehensive overview of nutrition and its crucial role in maintaining health and promoting rehabilitation. The course focuses on nutritional and public health; nutrients; metabolism; food sources; food selection for nutritional, psychological and cultural values; and on various therapies for disease conditions. Enrollment is not limited to nursing majors. Prerequisite: BIOL 111, BIOL 112; CHEM 115, 117.

NURS 302 Introduction to Community Health Nursing (3:3:0)

The Introduction to Community Health Nursing course is designed to provide students with a foundation for community health nursing practice. The evolution of public health and community health practice along with the health care delivery system will be explored. Health, health care, levels of prevention, family dynamics, culture, epidemiology, and community assessment will be addressed. Prerequisites: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101, 301; PSY 100, 225; SOC 111.

NURS 303 Concepts of Professional Nursing (3:3:0)

This course is an introduction to selected concepts that contribute to the foundation of the nursing profession and nursing practice. The individual, environment, health and nursing are the four primary phenomena of concern to the nursing profession. The historical and theoretical basis of nursing professional values and knowledge base are introduced in relationship to the changing health needs of society. The unique contribution of Nursing to health care delivery is explored with emphasis on personal, interpersonal and critical decision making skills inherent in the profession. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101, 301; PSY 100, 225; SOC 111.

NURS 304 Gerontological Nursing (3:3:0)

Unique health and nursing needs of older adult clients and their significant others will be explored as well as the political, social, economic, ethical and moral issues that have implications for an aging society. This course is designed to provide basic knowledge in gerontological nursing so that the student is better prepared to assist older adults in realizing their potential for continued growth and better health, regardless of setting or health status.

The emphasis is on healthy aging and wellness and for the student to develop a positive perspective on aging. Prerequisite: BIOL 111, 112; ENGL 103; PSY 100, 225; SOC 111.

NURS 305 Health Assessment for Nurses (2:2:0)

This course is designed to provide an overview of the skills necessary to perform comprehensive health assessments. The course focuses on the health history and physical assessment of the well adult client, although problems such as impairment of skin integrity and ineffective airway clearance are also discussed. Prerequisite: BIOL 111, 112; ENGL 103. Corequisite: NURS 306.

NURS 306 Health Assessment for Nurses Laboratory (1:0:2.5)

This course is taken with NURS 305 and consists of laboratory experiences designed to enhance the Student's ability to apply cognitive and psychomotor skills related to health assessment. Prerequisite: BIOL 111, 112; ENGL 103. Corequisite: NURS 305

NURS 307 Introduction to Research in Nursing (3:3:0)

This course is designed to develop an understanding of the fundamental principles of scientific investigation. The basis of study design, methods of data collection and analysis, interpretation of data, and the significance of conclusions to nursing theory and nursing practice are considered. Students will have guided experience in the evaluation and utilization of nursing research. Prerequisites: ENGL 103; MATH 110; NURS 320

NURS 308 Pharmacology: Implications for Nursing Practice (3:3:0)

This course is a study of the use of drugs/medications with respect to mechanism of action, therapeutic uses, side effects, contraindications, interactions, expected outcomes, toxicity/ management of overdose, and safe, effective dosages. Emphasis is placed on lifespan considerations, community-based care, drug prototypes, client teaching, health promotion, economics, and ethical and legal aspects of drug administration. This course may be taken by non nursing majors. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; ENGL 103.

NURS 309 Dynamics of Nursing Practice (3:3:0)

In this course the Registered Nurse student will examine various nursing themes and concepts; nursing education; adult education; nursing process; leadership, management, systems theory; and components of the U.S. health care system. Emphasis is placed on effective oral and written communication. Students are expected to refine critical thinking skills and express views in class discussion from readings and material presented. Prerequisite: RN status. (This course replaces NURS 101 Nursing Seminar and NURS 303 Concepts of Professional Nursing for Registered Nurse students.)

NURS 320 Introduction to Nursing Practice (5:3:7.5)

This course introduces the student to therapeutic interventions utilized in the helping relationship. Acquisition and application of therapeutic communication and psychomotor skills to the nursing care of individuals is the focus of this course. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101, 301; PSY 100, 225; SOC 111. Corequisite: NURS 302, 303, 304, 305, 306.

NURS 321 Nursing Care of the Childbearing Family (5:3:7.5)

The student is introduced to crisis theory with particular focus on growth and loss, birth and death in the family unit. The course is designed to develop and sharpen the student's assessment skills of expectant and new families and of neonates; to further develop the student's formulation of nursing diagnoses; and to give the student practice in planning, implementing and evaluating holistic care. Principles of care which are fundamental to "Maternity Nursing" are developed throughout the course. Opportunities in an acute-care facility as well as in community settings will be provided, for application of principles. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 320; PSY 100, 225; SOC 111. Corequisite: NURS 307, 308.

NURS 322 Nursing Care of Children, Adolescents, and Families (5:3:7.5)

The focus of this course is to provide an opportunity for the student to learn about the developmental health needs of children and their families. Current trends and nursing skills are stressed regarding the physical and emotional needs of infants, toddlers, and preschoolers, school-age children, adolescents, and the families. Growth and development of the child and the family are discussed. Nursing care of relevant pathological conditions is derived through the application of critical thinking and the nursing process. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 307, 308; 320; PSY 100, 225; SOC 111. Corequisite: NURS 307, 308.

NURS 400 Senior Seminar (1:1:0)

This is a seminar course which focuses on developing personal roles as professional practitioners through an examination of contemporary issues and career opportunities. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; ENGL 103; MATH 110; NURS 101 (Basic students only), 300 (LPN's only), 301, 302, 304, 305, 306, 307, 308, 309 (RN's only), 320, 321, 322, 421, 422; PSY 100, 225; SOC 111.

NURS 420 Analysis of Aging (3:3:0)

This course is designed to analyze the aging process with a multidisciplinary approach. Physiological, psychological, and sociological factors which influence the individual's response to aging are studied. This course is geared for students preparing for health disciplines. Enrollment is not limited to nursing majors. Prerequisites: BIOL 111, 112; PSY 100, or permission of the instructor.

NURS 421 Adult Health Nursing I (6:3:11.25)

This course focuses on maximizing the health of adults and older adults and their families experiencing responses to altered nutrition, skin integrity, immune function, endocrine function, gastrointestinal function, urinary elimination, and sexual and reproductive function. Emphasis is placed on the development of clinical decision making skills, utilization of nursing research, leadership skills, health promotion, treatment of illness, and rehabilitation. This course builds upon knowledge gained from nursing and other disciplines pertaining to the holistic care of adults and older adults. The clinical component of this course allows the direct application of theory to practice. Clinical laboratory experiences will be provided in acute and community based settings. Prerequisite: BIOL 111, 112, 424, 461; CPSC 100; CHEM 115, 117; CMST 111, 210; ENGL 103; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 307, 308, 320; PSY 100, 225; SOC 111.

NURS 422 Adult Health Nursing II (6:3:11.25)

This course focuses on maximizing the health of adults and older adults experiencing responses to altered cardiac function, peripheral tissue perfusion, respiratory function, neurologic function, and visual and auditory function. Emphasis is placed on the development of clinical decision making skills, health promotion, leadership skills, utilization of nursing research, treatment of illness, and rehabilitation. This course builds upon knowledge gained from nursing and other disciplines pertaining to the holistic care of adults and older adults. The clinical component of this course allows the direct application of theory to practice. Clinical laboratory experiences will be provided in both acute care and community based settings. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 307, 308, 320, 421; PSY 100, 225; SOC 111.

NURS 423 Psychiatric/Mental Health Nursing (5:3:7.5)

The course is based on selected theories of normal and abnormal behavior, psychiatric disorders, treatment modalities and the therapeutic use of self with growing knowledge of self awareness and self acceptance. Critical thinking, as well as the nursing process are applied in caring for clients (individuals, families, groups) both in the acute care and community settings. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100;

MATH 110; PSY 100, 225; SOC 111; NURS 101 (Basic students only), 300 (LPN's only), 301, 302, 303, 304, 305, 306, 307, 308, 320, 321, 322, 421, 422.

NURS 424 Community Health Nursing in Practice (5:3:7:5)

The Community Health Nursing in Practice course provides opportunities for senior nursing students to holistically care for families, aggregates, and communities as clients. Concepts inherent to community health nursing practice build on prior and concomitant theory and clinical course content. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111, 210; CPSC 100; ENGL 103; MATH 110; NURS 101 (Basic students only), 300 (LPN's only), 301, 302, 303, 304, 305, 306, 307, 308, 309 (RN's only), 320, 421, 422; PSY 100, 225; SOC 111. Corequisite: NURS 423.

NURS 481 Senior Internship (Semester hours arranged; minimum 2 credit, 112.5 hours)

This course is designed to facilitate professional development and/or transition into practice. Experiences provide for continuous clinical exposure that will assist the student in further development of the nursing generalist role and/or build upon previously attained nursing knowledge and skills. Opportunities for leadership and management development, as well as decision making are encouraged through participation in the delivery of health services and nursing care. Prerequisite: BIOL 111, 112, 424; CHEM 115, 117; CMST 111, 210; CPSC 100; MATH 110; PSY 100, 225; SOC 111; NURS 101 (Basic students only), 300 (LPN's only), 301, 302, 303, 304, 305, 306, 307, 308, 309 (RN's only), 320, 321, 322, 421, 422, 423, 424.

NURS 485 Independent Study (Semester hours arranged.)

This course will provide the opportunity to identify and explore in depth a nursing area of special interest to the student. This study will be under the guidance of a faculty member. Prerequisites: NURS 210; approval by the chair and faculty of the Department of Nursing.

NURS 486 Field Experience and Internship—School Nursing (3:0:9)

This course is designed to serve as a field experience for students pursuing certification in school nursing. In addition to validating competencies learned in prerequisite courses, students will have an opportunity to become familiar with the role of the school nurse in various settings and to apply cognitive, affective, and psychomotor skills in an actual practice environment. Experience will be provided in preschool, K-8, and senior high school levels. Prerequisites: HLTH 360 or 539; MCOM 262 or 520; PSED 161 or 510, 242 or 516.

NURS 490 School Nursing (3:3:0)

This course is designed to provide an overview of the skills needed to function as a school nurse. Topics addressed include the well child and the child with special needs. Introduction to screening programs will be addressed.

Philosophy and Religious Studies

School of Arts and Sciences—The Faculty of Arts and Letters

Professors: Eshelman, Thompson

Associate Professor: Weatherston (chair)

Assistant Professor: Pruim

Bachelor of Arts with a Philosophy major—30 semester hours

Required courses: PHIL 251, 356, 357, 457, (315 or 417 or 418); an additional 15 semester hours. No more than one 100 level course in Philosophy or Religious Studies (or transferred course equivalent to a 100 level course) may count towards the major. No more than twelve (12) transferred credits may count towards the major.

For university requirements see page 49.

Suggested four-year schedule of required courses

Year 1: Fall PHIL 110

Year 2: Fall PHIL 251

Year 3: Fall PHIL 356, PHIL 357; Spring PHIL 457, 315

Year 4: Fall PHIL 417; Spring PHIL 418

PHIL 110, 221, 231, 251 and 353 are taught every year. All other courses are offered on a two-year rotation. Therefore, the order of years 3 and 4 above may be switched, depending on the year of entry. The students may start taking 200-level elective courses with prerequisites once PHIL 110 has been completed. 300- and 400-level courses should not be taken at least until the second year.

Philosophy minor—18 semester hours

Required courses: PHIL 110, two (2) of PHIL 221, 231 and 251, and 3 courses at the 300-level or above. A minimum of nine (9) of the credit hours used to complete the Minor in Philosophy must be completed at East Stroudsburg University.

PHIL 110 GE: Introduction to Philosophy (3:3:0)

This course is an introduction to the basic issues and critical techniques of philosophy. Philosophical issues such as ethics, the theory of knowledge, metaphysics and logic will be explored, as well as the social, political and religious aspects of human existence.

PHIL 171 GE: RELS: Introduction to Religious Studies (3:3:0)

This course provides an introduction to topics of general interest in religion, including the nature of man in the religious perspective, the many varieties of religious experience, the religious perspective on death, and the religious dimension of current social and moral issues; current trends in American religion will also be considered.

PHIL 172 GE: RELS: Introduction to World Religions (3:3:0)

In this course the basic components—beliefs and rituals—of Amerind, African tribal, Middle Eastern, and Asian religions are presented and their distinctive characters are examined in the light of dominant features such as animism, magic, shamanism, priesthood, credal affirmation, liturgy, and sacraments.

PHIL 212 Introduction to Eastern Philosophy (3:3:0)

This course analyzes certain basic philosophic concepts and attempts to elucidate them through an investigation of some chief themes in oriental philosophy, specifically, Hindu metaphysics, Buddhist ethics, humanistic and pragmatic elements in Chinese thought, and problems in the philosophy of religion in Islamic philosophy.

PHIL 213 GE: Black Humanism (3:3:0)

This course is a study of philosophical, literary, and artistic contributions of African-American and African writers. Though major emphasis will be given to contemporary black authors, some emphasis will be put on the historic DuBois controversy and Marcus Garvey and his “Back to Africa” movement.

PHIL 221 GE: Logic I (3:3:0)

Logic is the study of proper reasoning. This course explores the concepts of soundness, validity, implication, equivalence and consistency. Techniques are developed for evaluating arguments as they are encountered in ordinary language. Included are examinations of deductive inference, inductive inference, the use of observation to support theory, and a survey of commonly committed fallacies. Prerequisite: PHIL 110.

PHIL 231 GE: Ethics (3:3:0)

This course is a survey of major ethical theories in Western philosophy. The moral theories of Plato, Aristotle, Aquinas, Kant, J.S. Mill, and Nietzsche will be examined. Prerequisite: PHIL 110.

PHIL 235 Philosophy of Human Rights and Fundamental Freedoms (3:3:0)

This course examines evolving philosophies of human rights and fundamental freedoms in the context of their historical development.

PHIL 241 GE: Aesthetics (3:3:0)

This course will examine major philosophical attempts to treat issues such as the nature of art and the standards of beauty. Texts by Plato, Aristotle, Plotinus, Kant, Hegel, Nietzsche and Heidegger will be examined. Prerequisite: PHIL 110.

PHIL 251 GE: Ancient Philosophy (3:3:0)

This course investigates the foundation of Western philosophy from the pre-Socratics to Neo-Platonism; particular attention is given to Socrates, Plato, Aristotle, the Stoics, and Plotinus. Prerequisite: PHIL 110.

PHIL 260 WS: Women and Religion (3:3:0)

This class will explore women’s religious experience in a variety of religious traditions, including ancient and modern, eastern and western, with a view to illuminating the application of feminist methodologies to the examination of those experiences.

PHIL 265 GE: Philosophy of Religion (3:3:0)

This course comprises an examination of views on various aspects of religion postulated by thinkers both within and without the confines of orthodoxy. Among the topics to be discussed are: God’s nature and existence; The problem of evil; faith and unbelief; mysticism; faith and miracles; eschatology. Prerequisite: PHIL 110.

PHIL 273 GE: Religion and Black Consciousness (3:3:0)

This course is a study of the interrelationship of the substance of Black Religion and the thought forms of white folk religion on institutionalized and non-institutionalized forms of religion among blacks and the role of both in contributing to and dealing with heightening contemporary black consciousness.

PHIL 274 Religion and Technology (3:3:0)

The course begins with a survey of the various types of orientation to technological society (the “manipulative,” the “alienative,” and the “consensual”). These orientations are then assessed from the perspective of the religious philosophy of creativity, with a view to develop a basis of realizing the constructive potentialities of contemporary technological developments.

PHIL 281 GE: Philosophy of Mind (3:3:0)

Am I a material brain, an immaterial consciousness, or both? This course begins with modern criticisms of Descartes’ classic dualism and examines contemporary efforts to understand how purely physical objects such as human brains (and perhaps computers) may nevertheless be said to have mental traits, e.g., thoughts and beliefs. Explored are behaviorist, functionalist, and information-representation approaches. Despite the progress made by these, we will articulate what aspects of consciousness still elude our efforts to understand the mind in naturalistic, scientific terms. Prerequisite: PHIL 110.

PHIL 290 Special Topics (Semester hours arranged.)

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

PHIL 315 American Philosophy (3:3:0)

This course explores the American experience as expressed and developed in the words of the classic American philosophers; analysis of selections from Pierce, James, Dewey, Royce, Santayana, and Whitehead; the impact of American philosophy on education, religion, ethics, and social and legal theory. Prerequisite: PHIL 110.

PHIL 318 Schopenhauer, Kierkegaard, and Nietzsche (3:3:0)

This course will study the three major 19th century continental philosophers who rebelled against the exaltation of reason. Their thinking led to existentialism and to radical reappraisals of ethics, religion, aesthetics, epistemology, and metaphysics. Prerequisite: PHIL 110, or 231, or 251.

PHIL 321: Logic II (3:3:0)

This is a course on quantificational predicate logic. This twentieth century advancement unifies the methods presented in Logic I into a single system of greater power. The course focuses on techniques of symbolization and derivation and includes proving some meta-theoretical facts about logical systems in general. Prerequisite: PHIL 221.

PHIL 337 Contemporary Ethics (3:3:0)

This course is an in-depth study of contemporary theories of ethics—emotivism, prescriptivism, existentialism, pragmatism, etc.—as expressed by philosophers such as Ayer, Stevenson, Hare, DeBeauvoir, and Dewey. Prerequisites: PHIL 110, 231.

PHIL 340 GE: Social Philosophy (3:3:0)

This course will concentrate, from various philosophical perspectives, on current social issues such as society and the relation of the individual to it, social justice, social equality and affirmative action, health care, moral standards and the law, children and society, drugs, and problems in engineering a good society. Prerequisite: PHIL 110.

PHIL 341 GE: Political Philosophy (3:3:0)

This course offers a discussion, from various philosophical points of view, of such historical concepts as city-state, universal community, and of contemporary issues pertaining to national, state, and Third World political developments. Perspectives will be presented on these issues from the writings of both classical and contemporary philosophers. Prerequisite: PHIL 110.

PHIL 353 Medieval Philosophy (3:3:0)

This course presents the ideas of philosophers who lived between the third and the fifteenth centuries, e.g., Augustine, Abelard, Anselm, Aquinas, and William of Ockham.

Prerequisites: PHIL 110, 251.

PHIL 356 The Rationalists of the 17th and 18th Centuries (3:3:0)

This course undertakes a close examination of the three major Rationalist philosophers, Descartes, Spinoza, and Leibniz. Each of these thinkers made extravagant claims for reason and produced systems of metaphysics that claimed certainty on issues such as the existence of God, the concept of substance, the immortality of the soul, and the nature of the world. Prerequisite: PHIL 110.

PHIL 357 Empiricists of the 17th and 18th Centuries (3:3:0)

This course studies the epistemological and metaphysical theories of the major British Empiricists and other related thinkers. Included will be Hobbes, Locke, Berkeley, and Hume. Prerequisite: PHIL 110.

PHIL 417 Contemporary British Philosophy (3:3:0)

This course deals with the historical background: Hume, Comte, and Mach; Russell, Moore and the early Wittgenstein; the Vienna Circle, A.J. Ayer; the later Wittgenstein and the Oxford analysts; recent developments. Prerequisites: PHIL 110 and 221 or 357.

PHIL 418 Phenomenology and Existentialism (3:3:0)

This course is a study of European phenomenology and existentialism and will include philosophers such as Husserl, Heidegger, Buber, and Sartre. Prerequisites: PHIL 110, one other philosophy course.

PHIL 457 Kant and German Idealism (3:3:0)

This course is a study of Kant's major work on metaphysics and epistemology: the *Critique of Pure Reason*. The basis for Kant's justification of science and his rejection of speculative metaphysics will be examined. The course will also examine how the German Idealists attempted to surmount the limitations that Kant put on knowledge through their attempts to achieve absolute knowledge. This attempt to re-establish speculative metaphysics will be studied through a close reading of Hegel's works. Prerequisites: PHIL 110, 356, 357.

PHIL 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis.

Physical Science

School of Arts and Sciences—The Faculty of Sciences

Bachelor of Arts with a Physical Science major—38 semester hours

Required major courses: CHEM 121, 123, 124, 126, 8 semester hours of courses numbered 200 or higher; GEOG 120, 121; PHYS 131, 132, 8 semester hours of courses numbered 200 or higher.

Corequisite courses: MATH 140, 141.

For university requirements see page 49.

Coordinator: Professor Robert Cohen, Physics Department.

This is an interdisciplinary degree program which emphasizes a broad study of several disciplines rather than a study of a single discipline.

Physics

School of Arts and Sciences—The Faculty of Science

Professor: Buckley, Houle (chair)

Associate Professors: Cohen, Larrabee, Reed

Assistant Professors: Elwood, Moore

Bachelor of Arts with a Physics major—27 semester hours

Required major courses: PHYS 161, 162, 261, 262, 333, 334, 495; at least two of 311, 401, 404, 411, 421, 431, 432, 433, 471.

Corequisite courses: MATH 140, 141, 240.

Recommended courses: CHEM 121, 123, 124, 126.

Required quality point average: 2.00 in major courses.

For university requirements see page 49.

Bachelor of Science with a Physics major—41 semester hours

Required major courses: PHYS 161, 162, 261, 262, 311, 333, 401, 411, 431, 432, 433; 2 or more of 334, 404, 421, 471.

Corequisite courses: MATH 140, 141, 240, 341; either MATH 311 or PHYS 471;

Recommended courses: CHEM 121, 123, 124, 126.

Additional requirements: At least 9 credits of required courses (not co-requisites), 300-level or above, must be completed at ESU. A minimum of a C must be obtained in each of the required courses.

For university requirements see page 49.

Bachelor of Science with a Physics major (Secondary Education)—27 semester hours

Required major courses: PHYS 161, 162, 261, 262, 333, 495; and 9 additional credits in physics, 300 level or above.

Corequisite courses: BIOL 114; CHEM 121, 123, 124, 126; MATH 140, 141; also one CPSC course or its equivalent chosen with the consent of the adviser.

Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321, PHYS 499.

Recommended courses: MATH 240, 341; CMST 111; PHYS 405; and either GEOG 120 or 121.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section [The School of Professional Studies](#) in this catalog for specific requirements for admission into teacher education programs.

Additional requirements: At least 9 credits of required courses (not co-requisites), 300-level or above, must be completed at ESU. A minimum of a C must be obtained in each of the required courses.

For university requirements see page 49.

PHYS 101 GE: Physical Science—Force, Matter and Energy (3:3:0)

This course examines selected fundamental concepts necessary to the understanding of physical phenomena. Topics included are motion, atomic structure, waves, heat and thermodynamics, and nuclear science. Science as a process—its attributes, strengths, and limitations—is also examined. Demonstrations dealing with physical principles characterize much of the course.

PHYS 102 GE: Physics as a Liberal Art (3:3:0)

This course acquaints students with what physics is and how it is important. It provides an introduction to physics and its development, examines the physical world in which we live, and explores issues and technologies with which physicists and engineers are involved. This course does not involve problem solving and is available to non-science majors with a non-mathematical background.

PHYS 103 Science for Involvement (3:3:0)

This course is offered primarily for non-science majors, to help students attain the science literacy and science competencies which are the foundation for acceptable performance in their own chosen fields. The course is group interaction—and activity—oriented, based upon students' selections from a list of the suggested topics.

PHYS 105 GE: Physics for the Inquiring Mind (3:3:0)

This is a descriptive course designed to raise the level of scientific literacy, particularly in the basic tenets of physics. Topics include Newtonian mechanics, satellite trajectories, and several areas of current interest.

PHYS 106 GE: Modern Physics (3:3:0)

The course covers the developments in physics of the 20th century that have influenced human thought and values. The universal symmetries, relativity, and quantum mechanics will be examined in depth by exploring the process of reasoning and investigation that led to the discoveries and a connection sought between modern physical thinking and events of the current scene. Prerequisite: PHYS 102 or 105.

PHYS 110 GE: Sound, Waves, and Light (3:3:0)

This course is designed to inform the students of the wave nature of the physical world. It is a qualitative presentation of the phenomena of sound, light, electricity, and magnetism.

PHYS 111 Engineering Graphics (2:0:4)

This course includes multiview projections, pictorial drawings, dimensioning, engineering standards, working drawings. It involves an introduction to creative design, space analysis, graphs, graphical mathematics, vector analysis, and design implementation (CAD and manual). Prerequisite: MATH 120 or 121.

PHYS 116 Energy Conservation in the Home (3:3:0)

In order to provide a comfortable lifestyle for future generations as well as the present one, intelligent well-informed decisions are necessary. The material presented in this course will help the student understand the problems, options, and costs involved in such decisions so that the student may take informed actions in the use of energy.

PHYS 117 GE: Energy (3:3:0)

This course introduces the concept of energy in all its forms and discusses its role in modern society. Discussions include sources of energy, along with their social and environmental impact.

PHYS 118 GE: Solar Energy (3:3:0)

This is a course designed to inform the student of the source of solar energy, what's being done to harness this energy, and how the student may benefit from solar devices he may build himself. The course requires very simple calculations and includes the construction of one solar device. Also included are several detailed analyses of the economics of home solar systems.

PHYS 121 GE: Astronomy I: The Sky and Solar System (3:3:0)

This course in descriptive astronomy deals with the scientific principles essential to the understanding of astronomy. Topics covered include basic observational astronomy, the historical development of astronomy, spectroscopy and telescopes, planetary science, the origin and evolution of the solar system, and the sun as a star.

PHYS 122 GE: Astronomy II: Stars and Galaxies (3:3:0)

This course in descriptive astronomy is a continuation of Astronomy I. The topics covered include observational properties of stars, stellar life cycles, pulsars and black holes, the Milky

Way Galaxy, extragalactic astronomy, quasars, and cosmology. Prerequisite: PHYS 121.

PHYS 123 GE: Introduction to Physical Cosmology (3:3:0)

This is a descriptive course which introduces current theories on the origin and evolution of the universe. Particular emphasis is placed on how ideas from such diverse areas of study as extragalactic astronomy, relativity, and particle physics have combined to provide a reasonably coherent theory of the beginning of time and the cosmos. Prerequisite: Honors Program.

PHYS 124 Observational Astronomy Lab (1:0:3)

This course is intended to give the student experience in the observational techniques of modern astronomy. The course is designed to complement Physics 122 Astronomy 2, but may be taken with Physics 121 Astronomy I. Corequisites: Physics 121 or 133.

PHYS 131 GE: Fundamental Physics I (4:3:3)

Together with Fundamental Physics II, this course covers basic principles and methods of all branches of classical physics at an introductory level. Topics include Newtonian mechanics, gravitation, waves, optics, heat, electricity, and magnetism. Mathematical methods beyond high school level that are useful in basic physics are incorporated with the courses. Prerequisite: MATH 135.

PHYS 132 GE: Fundamental Physics II (4:3:3)

Physics 132 is a continuation of Physics 131. Topics covered include electricity, magnetism, electromagnetic radiation and optics. Some brief material on atomic and nuclear physics as well as quantum mechanics is introduced where possible. Prerequisites: PHYS 131; MATH 135.

PHYS 151 Physics of Flight (3:3:0)

This course is intended to give its student knowledge of the forces acting on aircraft in flight in maneuvers, the mechanisms of each flight and engine instrument, aircraft electronics, reference frames used in flight navigation, very high frequency omni range navigation techniques, non-directional beacon navigation techniques, the physical background for federal aviation regulations, and necessary weather consideration.

PHYS 152 Physics of Flight Lab (1:0:2)

This course is intended to give the student practical applications of the theoretical aspects of the topics covered in PHYS 151. Included in this lab are 10 hours of flight instruction with an FAA certified flight instructor or a student's solo license, whichever comes first. An additional fee is required. Contact the Department of Physics for details.

PHYS 161 GE: Physics I (4:3:3)

Together with Physics II, this course covers basic principles and methods of all branches of physics at an introductory level. Topics include Newtonian mechanics, gravitation, waves, optics, heat electricity and magnetism. Mathematical methods beyond high school level that are useful in basic physics are incorporated with the course. Prerequisite or corequisite: MATH 140.

PHYS 162 GE: Physics II (4:3:3)

Continuation of Physics I. Prerequisites: MATH 140; PHYS 161.

PHYS 201 Statics (3:3:0)

This course examines the composition and resolution of forces, equilibrium of particles and rigid bodies, centroids, moments and products of inertia, distributed forces, analysis of structures, analysis of beams, friction, and virtual work. Prerequisites: PHYS 161; MATH 140, 141 concurrently.

PHYS 202 Dynamics (3:3:0)

This course considers dynamics of particles and rigid bodies, relative motion, dynamic equilibrium, D'Alembert's principle, work, energy, impulse, and momentum. Prerequisites: PHYS 161, 201; MATH 141.

PHYS 240 Basic Electronics (4:3:3)

This course is an introduction to basic electronics and instrumentation for scientists.

The goal is to introduce the student to modern electronic circuit building blocks—integrated circuits and electronic sensors along with electronic instrumentation. Special emphasis will be placed on the application of the personal computer (PC) as a virtual electronic instrument. The students will receive hands on experience in the use of LabView software that provides a graphical programming environment to use the computer plug-in cards and a PC analysis and display. This new technology will be used in the study of basic electronic and dc circuits, semiconductor circuit devices (transistors) and analog and digital integrated circuits (Ics). Prerequisites: Completion of an introductory physics course and/or permission of the instructor.

PHYS 241 Linear and Digital Electronics (3:2:2)

This course is designed for students in the sciences or computer sciences who wish to review basic electricity and how electronic components are combined to form linear (e.g. amplifier) and digital functions.

PHYS 251 CJA: Traffic Accident Investigation (3:3:0)

The course considers the physical aspects of traffic accident investigation and reconstruction. Included are such topics as recording information, photography, dynamics of vehicles, and speed determination. It is offered in cooperation with the Institute of Criminal Justice Administration.

PHYS 252 CJA: Advanced Criminalistics (3:3:0)

This course considers forensic evidence and data disclosed in the laboratory and its reliability. An understanding of the scope of expert examinations is achieved. The nature of the results expected from laboratory inquiries conducted by trained specialists is realized.

PHYS 253 CJA: Fire and Arson Investigation (3:3:0)

This course considers the physical aspects of fire and arson investigation. Included are such topics as properties of materials, physical aspects of fires, physical examination of the fire scene to determine origin, ignition sources and their physical aspects, and characteristic physical features indicating incendiaryism.

PHYS 261 Physics III (3:3:0)

Together with PHYS 262 this course is a survey of modern physics. Topics usually covered the first semester are Theory of Relativity and the quantum nature of light. Topics usually covered second semester are wave mechanics, atomic structure, accelerators and particle detectors, nuclear structure, elementary particles, and solid state physics. Prerequisites: PHYS 161, 162; MATH 140.

PHYS 262 Physics IV (3:3:0)

A continuation of PHYS 261. Prerequisite: PHYS 261.

PHYS 290 Special Topics (Semester hours arranged.)

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

PHYS 301 Strength of Materials (3:3:0)

This course explores strength and elasticity of materials, theory of stresses and strains, deflection of beams and shafts, torsion, and buckling of structures. Prerequisites: PHYS 201; MATH 140.

PHYS 304 Modern Physical Astronomy (3:3:0)

This course is a quantitative treatment of modern astronomy stressing the application of basic physics for investigating the properties of celestial bodies and systems. Topics will include basic celestial mechanics, radiation and matter, stellar structure and evolution, the structure and motions of galaxies, cosmology. Prerequisites: PHYS 131 or 161, 121, 122; MATH 140. Corequisite: PHYS 132 or 162.

PHYS 305 Physics of the Atmosphere (3:3:0)

This course provides an introduction to the physical process of the atmosphere. Mechanisms affecting heat, moisture and air motion are investigated and related to atmospheric phenomena. Prerequisites: MATH 140; PHYS 131 or 161; GEOG 220; CHEM 121.

PHYS 311 Theoretical Mechanics (3:3:0)

This course discusses the application of Newtonian mechanics to more complicated systems than those studied in Fundamental Physics. Many typical mathematical tools which are essential to a science major are introduced and practiced in this course. Prerequisites: PHYS 261; MATH 240.

PHYS 333 Advanced Physics Lab I (3:0:0)

This course is an open-ended but directed laboratory activity in both classical and modern physics. Prerequisites: PHYS 161, 162. Prerequisite or corequisite: PHYS 261.

PHYS 334 Advanced Physics Lab II (3:0:0)

This course has the same description as PHYS 233, but different experiments are performed. These two courses can be taken in either order. Prerequisite or corequisite: PHYS 261.

PHYS 350 Cognitive Science (3:3:0)

This interdisciplinary course is a study of a topic of common interest in computer science, linguistics, physical science, neuroscience, philosophy and psychology, viz. the acquisition, organization, and expression of knowledge. Prerequisite: Honors Program.

PHYS 370 The Rise of Modern Science and Technology (3:3:0)

The Rise of Modern Science and Technology is an in-depth study of the development of modern physical science and its connection to technology. The models that are considered training points for scientific theory are examined in detail. The mutual interaction of science and technology is presented within the context of scientific development. Prerequisites: Introductory science course at the college level and junior standing; Honors Program.

PHYS 380 Radioisotopes (3:2:3)

This course is a study of the origin and characteristics of nuclear radiations emitted from radioisotopes and their attenuation in matter. Laboratory emphasis is placed upon detection and measurement of nuclear radiations and the use of radioisotopes in scientific studies and research. Prerequisite: PHYS 105 or 117 or 131 or 161.

PHYS 401 Quantum Physics (3:3:0)

This course introduces ideas of wave mechanics and matrix mechanics. Schrodinger's equation is applied to simple problems. Approximation techniques for the more difficult problems of nuclear and atomic physics are studied. Prerequisites: PHYS 262, MATH 341.

PHYS 402 Contemporary Topics in Science (3:3:0)

This course deals with the nature and theoretical basis of recent noteworthy advances in science. Interdisciplinary in design, the course draws its content from the various disciplines of the natural sciences. Emphasis is placed upon topics being reported upon in professional journals. This course also listed as BIOL 402, and CHEM 402. Prerequisite: PHYS 105 or 117 or 121 or 131 or 161.

PHYS 403 Optics (4:3:3)

This lecture/laboratory course will cover both geometrical and wave optics. Geometrical optics will include a study of the property lenses and mirrors and ray tracing techniques used to design optical components. Wave optics will include superposition and interference of single and multiple light beams. The lab will focus on hands-on applications such as optical instrument design and analysis, fiber optics and laser technology. Prerequisite: PHYS 161 and 162 or PHYS 131 and 132; MATH 141 and 141.

PHYS 404 Introductory Astrophysics (3:3:0)

This is a course in modern astrophysics stressing the application of physical concepts to the study of the heavens. Topics will include radiative transfer, astrophysical radiative

processes, stellar structure and evolution, compact stars and black holes, galactic and extragalactic astrophysics, and cosmology. Prerequisites: PHYS 121, 262; MATH 141.

PHYS 405 The Development of Modern Physical Science (3:3:0)

This course examines past works and philosophical thought of noted physical scientists. Emphasis is placed on the nature of scientific discovery and the processes of science. This course is also listed as CHEM 405. Prerequisite: PHYS 105 or 117 or 121 or 131 or 161.

PHYS 411 Thermal Physics (3:3:0)

This course deals with heat and thermodynamics and application to special systems, kinetic theory of gases, and statistical mechanics. Prerequisites: PHYS 162; MATH 141.

PHYS 421 Statistical Physics (3:3:0)

Students study large-scale systems consisting of many atoms or molecules. Subjects of statistical mechanics, kinetic theory, thermodynamics, and heat are introduced. Prerequisites: PHYS 162; MATH 240.

PHYS 431 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. Prerequisites: PHYS 161, 162; MATH 341 (may be taken concurrently).

PHYS 432 Electromagnetic Theory II (3:3:0)

Students study the propagation of electromagnetic waves, wave guides, antenna theory, and physical optics. Prerequisite: PHYS 431.

PHYS 433 Atomic and Nuclear Physics (3:3:0)

This course examines the quantum-mechanical basis of atomic and nuclear structure and studies the phenomena of atomic and nuclear transitions. Prerequisite: PHYS 262.

PHYS 471 Special Problems in Physics (3:3:0)

This course introduces the student to detailed and complete treatments of problems which require expertise from several areas. Prerequisites: PHYS 161, 162, 261, 262.

PHYS 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is related to a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student. Prerequisite: PHYS 105 or 131 or 161.

PHYS 486 Field Experience and Internships (Semester hours arranged.)

Prerequisite: PHYS 105 or 110 or 117 or 121 or 131 or 161.

PHYS 495 Seminar (1:1:0)

Participants perform self-guided, in-depth examinations of relatively common phenomena, contemporary issues and/or recent research in physical and related fields. Supporting evidence and theory is documented in formal written and/or oral reports by participants. Attendance in departmental colloquia is required. Prerequisites: PHYS 131 and 132, or 161 and 162.

PHYS 499 Student Teaching Internship (1:0:TBA)

Political Science

School of Arts and Sciences—The Faculty of Social Sciences

Professors: Crotty

Associate Professor: Clarke (chair)

Assistant Professor: Mash, Quainoo, Van Belle

Bachelor of Arts with a Political Science Major

Students may choose between four major tracks. The Politics and Government track is the traditional liberal arts political science major. The Public Advocacy and Policy Analysis track is a cross-disciplinary program which focuses on political communication.

For university requirements see page 49.

Note: Students majoring in Political Science may not accumulate more than 15 credit hours, total, of internship credit toward graduation. The department does not accept transfer credit in upper division coursework (i.e., 300 or 400 level courses) for POLS courses completed at community colleges, junior colleges, trade schools, etc.

Track I—Politics and Government (27 to 48 semester hours). Students must maintain a 2.00 QPA for courses in this track.

Required courses: POLS 111, 211, 495; one or more courses from each of the following groups:

American Government and Public Administration:

POLS 293, 295, 312 413, 435, 454, 466, 467, 486, 487.

International Relations and World Affairs:

POLS 222, 322, 331, 422, 438, 441, 442, 445, 450.

Comparative Government and Area Studies:

POLS 223, 230, 231, 233, 263, 332, 333, 343, 355, 424, 426, 470, 471.

Political Theory

POLS 225, 243, 352, 452, 453, 462, 465, 468.

For university requirements see page 49.

Track II—Public Advocacy and Policy Analysis (45 to 51 semester hours). Students must maintain a 2.50 QPA for courses in this track.

Required POLS courses: POLS 111, 211, 454, 468 (12 credits); choose two: POLS 293, 312, 314, 322 (6 credits); choose one: POLS 413, 435, 466 (3 credits); POLS 486 (6-12 credits). Total POLS credits 27-33.

Corequisites: Choose one: ENGL 205, 215 (3 credits); choose one: ENGL 305, 306 (3 credits); MCOM 160 (3 credits); choose one: MCOM 255, 440 (3 credits); choose: CMST 126 and 367, or CMST 253 and 333 (6 credits). Total corequisite credits: 18.
For university requirements see page 49.

Track III—Pre-Law (48 semester hours). Students must maintain a 2.50 QPA for courses in this track.

Required POLS courses: POLS 111, 211, 495 (9 credits); choose one: POLS 222, 352, 452, 453, 468 (3 credits); choose two: POLS 313, 315, 413, 416, 445 (6 credits); twelve additional POLS credits at the 300 or 400 level (12 credits). Total POLS credits 30.

Corequisites: ENGL 162 (3 credits); choose one: PHIL 221, MATH 100, MATH 101, MATH 110, EMGT 211 (3 credits); choose one: FLFR 116, FLGR 116, FLLN 116, FLSP 116 (3 credits); choose one: CMST 253 or THTR 102 (3 credits); choose one: PHIL 110, PHIL 235, EMGT 225, EMGT 226 (3 credits); choose one: HIST 141, HIST 142, HIST 143, HIST 144 (3 credits). Total corequisite credits: 18.

For university requirements see page 49.

Track IV—Accelerated Law Program with Widener University (27-48 semester hours). Students must complete all the requirements for Track I - Politics and Government.

This is a six-year cooperative program with Widener University School of Law in Harrisburg, which allows students to complete their Undergraduate and Law School Degrees in six years. Students who successfully complete the program will spend three academic years at East Stroudsburg University leading to a bachelor's degree in Political Science. Before or during the first semester of their Junior year students must take the Law School Admission Test (LSAT). Students must score at or above the 50th percentile on the LSAT and have attained a cumulative GPA of 3.3 or higher by their first semester Junior year. Students must also submit a completed application and meet all other Widener University School of Law admission requirements. The first year at Widener will fulfill students' remaining requirements to earn the appropriate bachelor's degree. Students must also meet the following requirements:

Declare Participation

Students wishing to participate in this program must have the approval of their adviser and declare their intention to participate in the program with the Pre-Law Adviser prior to the start of their Sophomore year. Students must complete a plan of study in conjunction with their academic adviser and the University Pre-Law Adviser.

University Requirements

Students must complete all university requirements, except for the following:

a) Students will reach the 128-credit requirement by transferring credits earned during the first year at Widener University School of Law. However, students must obtain prior approval for the transfer of these credits.

b) Students must apply for a waiver of the university requirement that their last 32 credits be taken at East Stroudsburg University.

Summer at Widener

Students must complete some pre-law summer courses at Widener University School of Law in Harrisburg. Students should plan to enroll in these courses in the summer preceding their Junior year. Students may be responsible for paying tuition for the summer courses and the costs of room and board to Widener University.

First year at Widener: Students must attend on a full-time basis for the first year

or until they receive their bachelor's degree.

Political Science Minor

Politics and Government Concentration—18 semester hours.

Required courses: POLS 111, 211. Twelve additional credits of POLS 200 level and above classes. At least six of these credits must be 300 and/or 400 level courses.

Pre-Law Concentration—18 semester hours.

Required courses: POLS 111, 211; Choose two: POLS 313, 413, 416, 445; Six additional credits of POLS 200 level or above.

Corequisites: ENGL 162 (3 credits); Choose one: PHIL 221, MATH 100, MATH 101, MATH 110, MATH 130, EMGT 211 (3 credits); Choose one: CMST 253 or THTR 102 (3 credits).

Pre-Law Advising

In conjunction with the student's academic adviser, ESU's Pre-Law Adviser helps students in all majors to develop a personalized program. The Pre-Law Adviser helps students select courses that will cultivate the skills that the American Bar Association recommends for students interested in attending law school. Students are provided with up-to-date information about law school requirements, the Law School Admissions Test (LSAT), and the Express Admissions Program with Widener University School of Law in Harrisburg. The Pre-Law Adviser also explains how to choose an appropriate law school and how to prepare a successful application. For information call the Pre-Law Adviser, Professor Kenneth Mash, in the Political Science Department at 570-422-3273.

POLS 101 GE: Basic Issues of Politics (3:3:0)

This course explores the major social and political questions which confront the American people. It discusses the conflict which every voter in the nation faces as American democracy strives to bridge the gap between promise and performance, between the ideal and the real in the American political experience.

POLS 111 GE: Principles of Political Science (3:3:0)

This course is an inquiry into such fundamental concepts as state, sovereignty, law, rights, citizenship, liberty, and constitution; included are a study of the functions of government and an identification of the standard institutions for implementing those functions.

POLS 211 GE: American Government (3:3:0)

This course analyzes the basic principles of our federal, state, and local governments with emphasis on the Constitution of the United States and its interpretation as well as the machinery through which it is implemented. Students examine the structure, organization, power, procedures, methods, and functions of executive, legislative, and judicial branches.

POLS 222 GE: Contemporary Political Ideologies (3:3:0)

This course will give the student an understanding and appreciation of important contemporary ideologies such as Conservatism, Liberalism, Marxism, Fascism, Nationalism, and such movements as Feminism, Environmentalism, and Fundamentalism.

POLS 223 GE: Developing Countries (3:3:0)

This course examines the features common to all developing countries of Africa, Asia, and the Middle East, assesses the efforts to raise the levels of social, economic, and political development of these areas, and includes a detailed study of the goals and capabilities of the political systems of a few selected countries.

POLS 225 GE: Politics through Literature (3:3:0)

This course is an examination of selected fictional works which deal with basic political themes and concepts, e.g., sovereignty, nationalism, revolution, citizenship, etc. It is an analysis of literature and the writer as instruments of political action and change. Prerequisite:

One of POLS 101, 111, 211, 222.

POLS 230 GE: Asia (3:3:0)

The course will deal with India, Pakistan, Bangladesh, Sri Lanka, and the Himalayan Kingdoms. Emphasis will be on political developments, economic and social problems, and modernization. Foreign policies also will be surveyed. This course is also listed as HIST 230. Prerequisite: Any One of POLS 111, 211, 223 or 231.

POLS 231 Problems of World Regions (3:3:0)

This course is a study of several countries in each of the selected regions, to include their government, political groups, culture, ideology, political process, and leadership. The relation of the United States with these countries is examined, including recent trends and future expectations.

POLS 243 GE: Women and Politics (3:3:0)

The course will analyze the role and status of women in past and contemporary societies. Students examine the meaning and significance of current feminist movements and their impact on politics and society. The lives of outstanding women are also examined. Prerequisite: Any One of POLS 101, 111, 211, 222.

POLS 263 Latin America: National Period (3:3:0)

This course is a study of the development of the Latin American republics since independence and an examination of their present-day social, economic, and political problems as well as their relations with the United States.

POLS 290 Special Topics (Semester hours arranged.)

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

POLS 293 GE: Public Policy and Administration (3:3:0)

This course examines the role and scope of public administrators and the challenges that confront them. It also analyzes the stages of the public policy process and internal and external factors that impact public policy. Administration and public policy making both within and outside America will be surveyed. Prerequisite: POLS 211.

POLS 312 GE: Political Parties and Politics (3:3:0)

This course traces the development of political parties, their functions, organization and effectiveness, with a view toward establishing greater party responsibility in the body politic. Prerequisite: Either POLS 111 or 211.

POLS 313 GE: Courts and the Judicial Process (3:3:0)

This course examines the various connections between politics and courts. Attention is focused on the role of law in American society and how courts and the people affiliated with courts both implement and make public policy. Prerequisite: One of POLS 101, 111, 211.

POLS 314 GE: State and Local Government (3:3:0)

This course is an introduction to state and local governmental organizations and processes, and the way they are organized and interrelated with the federal system, with special emphasis on the contemporary needs of the local community. Prerequisite: One of POLS 101, 111, 211, 222.

POLS 315 Introduction to Legal Research (3:3:0)

This course introduces the primary skills necessary for legal research and writing. Emphasis will be placed on the essential steps necessary for proper legal research and on the use of various legal resources. Prerequisite: One of POLS 101, 111, 211.

POLS 322 GE: International Relations (3:3:0)

This course examines the major theories, processes, and units which comprise the study of politics and the international system. Areas of particular emphasis include sovereignty,

nationalism, and warfare. Prerequisite: POLS 101 or 222.

POLS 331 Minorities in World Affairs (3:3:0)

This course is a study of the problems of minority groups and the struggle for political and economic equality. Special attention is given to legal and constitutional arrangements made for the protection of the rights and privileges of minority groups; selective case studies are examined. Prerequisite: One of POLS 101, 111, 211, 222.

POLS 332 GE: Comparative European Government (3:3:0)

This course is a study of major types of government with emphasis on European democracies; comparison is used as a detector of problems and as a method for developing better solutions; differences in character, traditions, and conditions are examined to develop an understanding of problems facing people of the respective countries. Prerequisite: Any one of POLS 111, 211, 223 or 231

POLS 333 GE: Africa (3:3:0)

This course aims at a general understanding of the main historical and political developments that led to independence. Emphasis will be on the growth of nationalism, the end of colonialism, and the search for African identity, unity, and development. Prerequisite: POLS 101, 211, 223.

POLS 343 The Middle East (3:3:0)

This course surveys the history and politics of the Near East, background studies in the revolutionary nationalism of the modern period, analyses of contemporary problems and events, and prognoses within the framework of international diplomacy. Prerequisite: One of POLS 101, 111, 211, 222.

POLS 352 GE: History of Political Thought (3:3:0)

This course traces the evolution of major political concepts in Western Civilization from the ancient Greeks to the 17th century. The focus is on the origins of democracy and authoritarianism. Prerequisite: Any One of POLS 111, 211, or 222.

POLS 355 China: History and Politics (3:3:0)

This course is a study of China since traditional times, examining political, cultural, and economic aspects of her society up to the present and her influence on East Asia and the world. Prerequisite: Advanced standing of 60 credits.

POLS 413 American Constitutional Law (3:3:0)

This course is a study of the context within which our Constitution emerged, the major themes implicit in its development, and its significance in the contemporary political setting. Attention is focused upon the interplay of political forces which have shaped the development of constitutional law with special emphasis upon the Supreme Court as a political and judicial institution. Prerequisites: Advanced standing of 90 credits, any one of POLS 111, 211, 222.

POLS 416 Administrative Law (3:3:0)

This course is a study of the law of public administration including administrative powers and limitations, adjudication and rule-making, discretion, checks on administrators, notice and hearing, administrative penalties, judicial control and administrative liability. Prerequisites: Any Two of POLS 111, 211, 222; ECON 111, 112; HLTH 220, 230.

POLS 422 United Nations (3:3:0)

This course examines the historic background of the establishment of the United Nations and the purposes and principles of the United Nations as well as its basic structure. The strength and weaknesses of the Charter are analyzed with special stress on the veto power and on accomplishments of this world body since its conception. Particular emphasis is placed on the role of the United States in the United Nations. Prerequisites: Advanced standing of 90 credits, Any One of POLS 111, 211, or 222.

POLS 424 Russia and Eurasia (3:3:0)

This course focuses on the emerging political units created as a result of the break up

of the Soviet Union. Students will examine the causes, nature, and course of the Soviet collapse, the challenges of the successor states, and the consequences of this major historical development for the post-cold war world. Prerequisites: Advanced standing of 90 credits, Any One of POLS 111, 211, or 222.

POLS 426 Modern Germany (3:3:0)

This course is a study of the Napoleonic impact, the Prussian Reform Movement, romanticism, liberalism, and nationalism in Germany, the Revolutions of 1848, the age of Bismark, Wilhelmian period, World War I, the Weimer Republic, the Nazi revolution, World War II, and the post-war era. Emphasis is on political, cultural, and economic changes, 1806-1890. Prerequisites: Advanced standing of 90 credits, one of POLS 101, 111, 211, 222.

POLS 435 The Presidency (3:3:0)

This course is an analysis of the presidency, its nature and growth of the office, and the politics and problems of seeking the office of the presidency. It includes a functional analysis of the President's roles as chief executive, party leader, and leader in the international political system. Since this course is also listed at the graduate level, a differentiation of course requirements may be made. Prerequisites: Advanced standing of 90 credits, one of POLS 101, 111, 211, 222.

POLS 438 United States Foreign Policy (3:3:0)

This course examines the constitutional basis of U.S. foreign affairs: foreign policy, separation of powers, the mechanics of foreign relations, significant principles, tenets and trends as revealed in United States diplomatic history, treaties and executive agreement, traditional and new diplomatic practice, foreign policy and international organization, and the extent of democratic control of foreign affairs. Since this course is also listed at the graduate level, a differentiation of course requirements may be made. Prerequisite: Advanced standing of 90 credits.

POLS 441 Diplomatic History of the United States I (3:3:0)

This course examines American diplomacy and foreign policies from the Revolution to the end of the Spanish-American War. Particular attention is given to the evolution of basic concepts such as isolation, neutrality, and manifest destiny. Prerequisite: Advanced standing of 90 credits.

POLS 442 Diplomatic History of the United States II (3:3:0)

This course emphasizes the United States' emergence from a tradition of isolationism into a position of international responsibility by examining its progressively deeper involvement in the world's diplomatic and military arenas. Prerequisites: Advanced standing of 90 credits, one of POLS 101, 111, 211, 222.

POLS 445 International Law and Organization (3:3:0)

This course examines the historic development and current status of the law of nations; key cases are studied to illustrate rules. It includes a survey of the development of international institutions from the nineteenth century public unions to more recent international agencies and organizations. Since this course is also offered at the graduate level, a differentiation of requirements may be made. Prerequisites: Advanced standing of 90 credits, one of POLS 101, 111, 211, 222.

POLS 450 Seminar in International Studies (3:3:0)

This course deals with the international dimensions of human experience and 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. (Graduate students are required to fulfill additional requirements.) Prerequisites: Advanced standing of 90 credits, one of POLS 101, 111, 211, 222.

POLS 452 American Political Ideas (3:3:0)

The course will examine and analyze the theoretical foundations and evolution of the American political tradition from the colonial, revolutionary and constitutional periods

to the end of the 20th century. Students will read and discuss the writings and thinking of political leaders and important commentators on American politics. Prerequisite: Advanced standing of 90 credits.

POLS 453 European Political Ideas (3:3:0)

This course examines the origins and development of the major intellectual traditions of the Western world and their role in shaping the course of history. Emphasis is placed on the scientific and intellectual revolutions of the 17th and 18th centuries and the rise of ideologies in the 19th and 20th centuries. Prerequisites: Advanced standing of 90 credits, and one of POLS 101, 111, 211, 222.

POLS 454 The Legislative Process (3:3:0)

This course concentrates on the United States Congress: its role in the evolution of the American political process, the internal workings of the Congress, the environment in which Congress functions, and an assessment of Congressional effectiveness. Prerequisite: 9 semester hours in Political Science.

POLS 462 Political Behavior (3:3:0)

This course examines citizen behavior in the American polity. Voting behavior, political activism, and partisanship are examined within the framework of socialization theory, stratification theory, and the psychology of politics. (Graduate students are required to fulfill extra requirements.)

POLS 465 Revolutionary Governments (3:3:0)

The course in Revolutionary Governments will examine the forces contributing to revolutionary overthrow of traditional governments and their replacement by radical reformism. Various contemporary case studies together with the more important theoretical literature on the nature of revolutionary movements will be analyzed. Prerequisite: 9 semester hours in Political Science.

POLS 466 Public Budgeting and Finance (3:3:0)

This course treats the budget as a policy instrument that sets priorities for government. Students study the politics of the budget process as well as its procedures. Attention is also given to fiscal and monetary policies and to using computer simulations in budgeting. Prerequisites: Two of POLS 101, 111, 211, 322, 332.

POLS 467 Public Personnel Administration (3:3:0)

Students in this class examine career systems, classification and salary administration, staffing, training, evaluation, rights and duties of employees, equal employment, and labor relations. Prerequisites: Two of POLS 101, 111, 211, 222; ECON 111, 112; HLTH 220, 230.

POLS 468 Strategies for Policy Analysis (3:3:0)

Public Policy Analysis is designed to acquaint students with the background, content, purposes, and impacts of public policy decisions. It introduces the qualitative and quantitative techniques that are used to analyze these governmental outputs. Students in the class will be taught to use computerized statistical packages to analyze data relating to one specific policy area. Prerequisites: Advanced standing of 60 credits, one of POLS 101, 111, 211, 222.

POLS 470 and 471 Contemporary Europe I and II (3:3:0), (3:3:0)

This course consists of a study trip to observe at first hand the metamorphosis of post-war Europe and a study of the history and governmental systems of Western European countries and their economic growth and integration through the Common Market. It investigates the social environment on a formal and informal basis and is a general study of Western Europe in the post-war world. This is a 6 week summer course. Prerequisites: Advanced standing of 90 credits, consent of the Department chair.

POLS 485 Independent Study (Semester hours arranged.)

A student wishing to take independent study on either the undergraduate or graduate level (other than under 571) should discuss the plan with a member of the department. If the faculty member agrees to sponsor the project, the proposal should be submitted to the chair

of the department. The chair, after approving the independent study project, shall bring it to a departmental meeting for confirmation. The dean of the school gives final approval after receiving the minutes of the departmental meetings which identify the students who were approved by the department to do independent study.

POLS 486 Field Experiences And Internships (Semester hours arranged.)

The course is designed to provide the student with practical experience in a governmental agency or other organization with local, state, or national/international governmental or political concerns. Prerequisite: Completion of General Education requirements; at least one course in American government or international relations or their equivalent.

POLS 487 Problems and Projects in Political Science (Semester hours arranged.)

Investigation of a specific problem or project in Political Science which requires individualized study and treatment. The process includes compilation of data relevant to the topic. The student will report his/her findings to the instructor who supervises the project. The student is expected to write a formal report which deals with the subject comprehensively and offers conclusions. Periodic conferences are arranged. Prerequisites: Any three courses in Political Science or advanced standing in the department.

POLS 495 Seminar (3:3:0)

This course examines major theories and problems in the study of politics. A paper will also be written on the basis of independent political research. Prerequisite: Advanced standing of 90 credits.

Pre-Pharmacy Program

School of Arts and Sciences—The Faculty of Sciences

See Chemistry

Professional and Secondary Education

School of Professional Studies—The Faculty of Education

Professors: Waters (chair)

Associate Professors: Piatt, Smeaton

Assistant Professors: Foster, Lare, Sheely

Secondary Education Certification Program Requirements

All students are required to maintain a cumulative and major average as specified in PA law, Chapter 354, to remain in the program and/or to take teacher education classes.

Additional PSED Admissions Requirements (speech, writing, Praxis I)

Departmental Faculty Interview and Screening

Praxis Exams - Principles of Learning 7-12 and Content Area(s)

Criminal Records Check, Act 34 and Act 151, FBI if an out-of-state student

PSED 161 Foundations of Education

PSED 242 Educational Psychology

MCOM 262 Educational Communications

REED 321 Teaching of Reading in the Secondary School

PSED 420 Seminar in Secondary Education I

PSED 421 Seminar in Secondary Education II

The appropriate 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 the methods class and a seminar class the same semester.

PSED 306 Teaching of English in Secondary Schools

PSED 316 Teaching of Foreign Languages in Secondary Schools

PSED 336 Teaching of Mathematics in Secondary Schools

PSED 346 Teaching of Science in Secondary Schools

PSED 356 Teaching of Social Studies in Secondary Schools

PSED 376 Teaching of Communication in Secondary Schools

The secondary education preparation culminates in the capstone experience of:

PSED 430 Student Teaching in Secondary Education/Middle School/Junior High School

PSED 431 Student Teaching in Secondary Education/Senior High School

XXX 499 Student Teaching Internship (This course must be taken while student teaching. It is taken with the appropriate rubric related to the content area of the certification program: BIOL, CHEM, MATH, PHYS, FLNG, ENGL, HIST).

Graduates who complete the required courses in one of the following majors, 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 located in the Office of the Dean of Professional Studies.

The programs for certification in secondary education are planned and supervised by the Department of Professional and Secondary Education and by the department responsible for the academic major. Students must achieve and maintain the minimum requirements for admission to and retention in the certification programs as specified by the departments

and the Teacher Education Council. Specific requirements are listed in the academic subject areas.

Certification areas:

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

Dual Certification

Consult with your adviser if you are interested in obtaining dual certification (certification in any two of the above areas).

Teacher Education Program Requirements

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs.

PSED 161 Foundations of Education (3:3:0)

This course presents education as a unique field of academic study and also as a professional vocation with varied career opportunities. Consideration is given to the American educational enterprise in terms of the social, historical, and philosophical context, with the persistent issues being treated as they relate to the contemporary scene.

PSED 242 Educational Psychology (3:3:0)

This course is a study of the nature of the learning process particularly in the areas of growth and development, attitudes and values, personality perception, motivation, and cognition, diagnoses of pupil progress through the use of measurement and evaluation, and development of the abilities to obtain, use, and evaluate research in the areas of psychology and education. A ten-hour tutoring experience is required. Suggested prerequisite: PSED 161.

PSED 244 Adolescent Psychology (3:3:0)

This course examines cognitive, social, and personality development in adolescence, the biological, environmental, and cultural factors which contribute to adolescent behavior, and problems in adolescence—identity, vocation, education, the family, the peer group, and delinquent behavior.

PSED 290 Special Topics (Semester hours arranged.)

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

PSED 306 Teaching of English in Secondary Schools (3:3:0)

This course deals with teaching methods and techniques and the organization and presentation of material through the various media of communication by planning units, evaluating instruction, collecting materials, and observing teaching. Prerequisites: PSED 161, 242.

PSED 316 Teaching of Foreign Languages (3:3:0)

This course is designed for persons who wish to teach or are teaching foreign languages

in the schools, grades K-12. Students are provided a theoretical foundation for the teaching techniques later developed in the course. Considerable opportunity is provided to present lessons, prepare teaching materials, plan units, evaluate instruction, and observe teaching. Prerequisites: PSED 161, 242, Junior Standing, 9 hours of 300-400 level courses in the target language. Offered once a year.

PSED 332 Measurement and Evaluation of Education (3:3:0)

This course deals with problems in the construction, use, and interpretation of test items, the development of objective standardized tests of achievement, aptitude, and personality, the development of norms, and the problems of validity and reliability. Prerequisite: PSED 242.

PSED 336 Teaching of Mathematics in 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 teaching techniques applied to selected topics in mathematics. Prerequisites: PSED 161, 242; 12 credits of mathematics courses required for the B.S. in Mathematics. Offered spring semester only.

PSED 346 Teaching of Science in Secondary Schools (3:3:0)

This course includes the study and appraisal of objectives, programs, materials, and techniques; emphasis is upon those aspects that are aimed toward development of confidence as well as competence on the part of the teacher, relevancy, and student-involvement in the science program. Prerequisites: PSED 161, 242, 12 hours of work in major field.

PSED 356 Teaching of Social Studies in Secondary Schools (3:3:0)

This course deals with the analysis and evaluation of current trends in curriculum, teaching methods, techniques, resources, and materials in teaching social studies in secondary schools. Stress is placed on new developments in the field and on experience in applying concepts and methods learned. Prerequisites: PSED 161, 242.

PSED 364 Middle School Organization (3:3:0)

This course is an introduction to the educational ideas, concepts, and possibilities inherent in both the junior high and the middle school. A thorough study of the organization and operation of each type of school is the major concept of the course. Prerequisites: PSED 161, 242.

PSED 376 Teaching of Communication in Secondary Schools (3:3:0)

This course deals with the presentation of methods and materials in the planning, teaching, and evaluation of learning activities in the cognitive, affective, and psychomotor realms of communication behavior, and observation of teaching in the secondary schools. Prerequisites: PSED 161, 242. Offered with PSED 306.

PSED 405 Classroom Management and Discipline (3:3:0)

The course will emphasize classroom management from the viewpoint of effective teaching. Specific discipline models will be analyzed and evaluated. Students will assess their philosophies in regard to classroom management practices and discipline models. Prerequisites: PSED 161, 242.

PSED 412 Teaching of Writing in the Secondary Schools (3:3:0)

This course will briefly survey the history of the teaching of writing in American secondary schools, intensively review writing process theory and research of the past two decades, and critically consider the implications of writing process theory and research for classroom practice. Prerequisites: ENGL 103; PSED 306.

PSED 420 Seminar in Secondary Education I (3:2:2)

The seminar includes the study and application of lesson planning, teaching strategies and styles, assessment, and questioning skills. Seminar I includes a required field experience of 30 hours. Students must sign up one semester in advance. Prerequisites: PSED 161, 242, and permission of instructor.

PSED 421 Seminar in Secondary Education II (2:2:0)

This course includes the study and application of effective strategies using technology, communication techniques, classroom management theories, and the elements of an inclusive classroom. Seminar II includes a required 30-hour field experience in a multicultural setting. Students taking this course must sign up one semester in advance. Prerequisites: Seminar in Secondary Education I and permission of instructor.

PSED 430 Student Teaching in Secondary Education/Middle School/Junior High School (6:0:15)

This course is part of a guided teaching experience in the secondary schools which typically consists of PSED 430 and 431 for a full semester. This field experience is designed to provide the opportunity to demonstrate the competencies and understandings of the teaching/learning process in the middle/junior high school. Prerequisites: 1) students must meet all requirements described under the Student Teaching section, 2) students must have approval of the adviser and department chair in the major field, 3) students must have the approval of the Department of Professional and Secondary Education, and 4) students must have completed at least 24 semester hours of credit in the major field.

PSED 431 Student Teaching in Secondary Education/Senior High School (6:0:15)

This course is part of a guided teaching experience in the secondary schools which typically consists of PSED 430 and 431 for a full semester. This field experience is designed to provide the opportunity to demonstrate the competencies and understandings of the teaching/learning process in the senior high school. Prerequisites: 1) students must meet all requirements described under the Student Teaching section, 2) students must have approval of the adviser and department chair in the major field, 3) students must have the approval of the Department of Professional and Secondary Education, and, 4) students must have completed at least 24 semester hours of credit in the major field.

***PSED 441 Introduction to Schools without Failure (Semester hours arranged.)**

This program is built on involvement, relevance, and thinking. Much time is devoted to attitudinal change, communication skills, group processes, and problem solving. The focus is on meeting the needs of the individual school. Its purpose is to assist principals and teachers to develop a positive, personal philosophy of education, to present a process for developing classroom skills, and procedures, to implement a success-oriented curriculum, and to provide ways for building constructive communication within school and between the school and the community. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 161, 242.

***PSED 442 Discipline in the Classroom (Semester hours arranged.)**

This program is designed for participants to take part in learning activities that will enable them to develop positive techniques for handling student behavior problems. This course is aimed at training teachers to use Reality Therapy as a tool in the classroom. It addresses one of the major concerns of the public school's classroom control and behavior change. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 161, 242.

***PSED 443 Theory and Practice of Schools without Failure I (Excellence in Teaching) (Semester hours arranged.)**

This course offers participants an opportunity to investigate the effects of school success and failure on the life of a child. Study of these concepts will be taken from the points of view of William Glasser, M.D., in his books *Schools Without Failure*, *Identity Society*, and *Reality Therapy*. Participants will be introduced to a hybrid teaching style designed to elevate teaching to maximize learning in the classroom. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 441, 442.

*Workshop courses

***PSED 444 Theory and Practice of Schools without Failure II (Perception Psychology) (Semester hours arranged.)**

Educators will gain experience in conducting diagnostic class meetings and in providing the educational climate necessary for self-discipline. Curriculum planning related to self-directed learning will be explored. Recent advancements in brain research, psychology, and learning theory will be presented. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 441, 442.

***PSED 445 Planning for Change (Semester hours arranged.)**

The goals of quality education will be analyzed as a basis for curriculum change. The relationship between affective education and cognition will be reviewed, and assessment statements will be produced through a group process. Systems for change will be developed. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 161, 242.

***PSED 447 Success-Oriented Reading: Ideas into Action (Semester hours arranged.)**

The 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. Since this course is also offered for graduate credit, a differentiation in requirements may be made. Prerequisites: PSED 161, 242.

***PSED 448 Reality Therapy in the Classroom (Semester hours arranged.)**

This workshop is designed as an advanced course for educators who desire to become increasingly proficient in the use of Reality Therapy in the classroom. It presumes an understanding of the philosophy and basic steps of Reality Therapy and some experience in trying to use it in the schools. Emphasis will be placed on acquiring additional skill in the implementation of the Reality Therapy approach in the educational environment. Since this course is also offered for graduate credit, a differentiation in requirements may be made. Prerequisites: PSED 242, 441, 442.

***PSED 449 Reducing Classroom Conflict (Semester hours arranged.)**

This workshop is designed to provide participants with skills in developing pathways to build strength and success in themselves and their students. It focuses on specific classroom activities that will help develop a climate for effective self-discipline and positive classroom interaction. Since this course is also offered for graduate credit, a differentiation of requirements may be made. Prerequisites: PSED 242, 442.

***PSED 452 Together: Mainstreaming in the Schools (3:3:0)**

The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction will enable them to review and to develop positive models for their particular schools that allow exceptional and non-exceptional students to learn together and respect and know each other. A major emphasis will be devising through group interaction, a plan for implementation of mainstreaming in the particular schools. Since this course is also offered for graduate credit, a differentiation of requirements may be made. The course is crosslisted with ELED 452 and SPED 452. Prerequisites: PSED 161, 242, upper division standing or permission of instructor.

***PSED 453 Teaching and Motivating (3:3:0)**

The course provides educators with the theory and skills to motivate students to learn and to accelerate their academic achievement. Brain function and dominance will be reviewed in light of how these processes result in different student learning styles. Participants will build teaching strategies to deal with varied learning styles. Prerequisites: PSED 242; ELED 232.

PSED 456 Cooperative Learning—Learning Teams in Action (3:3:0)

*Workshop courses

The course is designed to provide skills to implement learning teams in the classroom. The course content develops a basic understanding of control theory as it applies to co-operative learning. Class experiences produce new teaching plans based on control theory and demonstrate that learning teams can provide top achievement and methodology for critical thinking and problem solving.

PSED 457 Reducing Stress in the Classroom (3:3:0)

This course explores ways to manage stress, establish realistic goals, and develop relaxation techniques so that stress is minimized in creative thinking and effective classroom management. The course will identify symptoms of job stress and worker burnout in the educational setting and present ways to effectively manage stress, establish realistic goals, and understand effective teaching styles.

PSED 459 Enhancing Self-Esteem (3:3:0)

This course will introduce educators to elements of self-esteem and how those elements can be used to establish an atmosphere where high self-esteem and motivation can flourish. This course takes a theory of self-esteem and translates it into practice. It also emphasizes basic human relations and interpersonal skills necessary to create a classroom environment conducive to the teaching/learning process.

PSED 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis.

Psychology

School of Arts and Letters—Faculty of Sciences

Professors: Gumpper, Hodge, Tancredi
Associate Professors: Drago (chair), Miele
Assistant Professors: Eshun, Wesp

Bachelor of Arts with a Psychology major—35 semester hours

Required major courses: PSY 101, 201, 202, (203 or 302 or 401), 311, 321, 410, nine additional semester hours.

Corequisite course: BIOL 111.

For university requirements see page 49.

Note: In order to receive a degree in Psychology, a student must receive a grade of A, B, or C in all Psychology courses which count as part of the major.

*Workshop courses

The department will accept a maximum of 15 transfer credits in the major only if the credits were earned within eight years prior to admission to ESU. No credits can be transferred into the major as equivalents of junior/senior-level ESU courses.

This degree program is generalized and flexible. In addition to providing a good foundation of basic knowledge about psychological processes, it allows students the flexibility to explore several of the diverse topics in Psychology or concentrate several courses in one specific area.

Bachelor of Science with a Psychology major—40-41 semester hours

Concentration: Mental Health Worker.

Required major courses: PSY 101, 201, 202, 241, 321, 351, 441, 451, 452, 484, (three semester hours), one of 291 or 294 or 320 and one of 302, or 311, or 401.

Corequisite course: BIOL 111.

For university requirements see page 49.

The department will accept a maximum of 15 transfer credits in the major only if the credits were earned within eight years prior to admission to ESU. No credits can be transferred into the major as equivalents of senior-level ESU courses.

This degree program prepares paraprofessionals in psychometric, case work, co-therapy, or administrative assistance occupations that are under the supervision of clinical psychologists, psychiatrists, psychiatric social workers, or administrators of mental health facilities.

Application into the B.S. program may be submitted to the Mental Health Worker committee of the Department of Psychology after the completion of PSY 101, 201, 202, and one additional course.

Note: In order to receive a degree (B.S. or B.A.) in Psychology, a student must receive a grade of A, B, or C in all Psychology courses which count as part of the major.

Psychology Minor—18 semester hours

Required courses - PSY 101 or 100, 321, either 222 or 351. one of 302, 311, 402, two of 203, 220, 225, 271, 291, 294, 320.

This program is designed for majors in related disciplines who desire to complement their academic studies and/or career preparation with extended study of psychology. Course selections shall be made in conjunction with a psychology faculty member's consultation and approval.

At least one half of the credit hours required for this program must be completed at East Stroudsburg University. In order to receive a minor in psychology, a student must receive a grade of A, B, or C in all courses which count as part of the minor.

PSY 100 GE: General Psychology (3:3:0)

This course includes an introduction to the science of behavior and mental life, a bio-social view of man and other animals, and a survey of its methods, theories, history, and knowledge of the role of organismic, environmental, and social factors in behavioral and psychological processes.

PSY 101 GE: Introduction to Psychology (3:3:0)

This course provides the student with an understanding of contemporary psychological concepts, theories, methods, issues, and problems in the context of the classic questions of psychology. This course is designed primarily for students majoring in Psychology and closely related fields of study.

PSY 201 Experimental Design in Psychology (3:3:0)

This course is an introduction to commonly used procedures of analysis, interpretation, and application in the Behavioral Sciences. Prerequisite: PSY 101.

PSY 202 Experimental Psychology (3:2:2)

This course is an introduction to the philosophy and research methods of behavioral science with particular emphasis upon the experimental method, experimental analysis, and research of traditional and contemporary issues. Prerequisites: PSY 101, 201.

PSY 203 Psychology of Motivation (3:3:0)

This course is an introduction to the psychological literature concerning motivation as viewed through major theoretical systems. There will be an examination of the motivational forces underlying human and animal behavior. Basic motivational concepts will be surveyed with an attempt to represent various areas of motivational research. Prerequisite: PSY 100 or 101.

PSY 204 Empirical Foundations of Learning (4:3:2)

The course offers analysis, discussion, and laboratory experiences concerning classical and contemporary issues and topics in learning and behavior control. Operant vs. respondent conditioning biofeedback, verbal learning, motor skills learning, learning vs. performances, trial and error vs. insight, reinforcement vs. feedback, punishment and aversive control, memory, and knowledge are considered. Prerequisite: PSY 101.

PSY 212 Comparative Psychology (4:3:2)

Comparative psychology attempts to place the behavior of humans in phylogenetic perspective; the behavior of various organisms is studied with emphasis on the behavioral similarities and differences among animals and with respect to humans to gain a fuller appreciation of human behavioral roots and capacities. A series of laboratory exercises is employed to aid the student in developing a more thorough understanding of the field. Prerequisite: PSY 101.

PSY 220 GE: Social Psychology I: Interpersonal Relationships (3:3:0)

This is the first half of a 2-course sequence (220 and 320), an introductory survey of the field of social psychology, but either course can stand alone. PSY 220 focuses on scientific principles about the initiation, maintenance, and dissolution of close interpersonal relationships. Learning theory, role theory, and exchange theory are emphasized. Prerequisites: PSY 100 or 101.

PSY 222 GE: Psychology of Adjustment (3:3:0)

This course is a functional approach to the problem of how humans acquire their distinctive ways of adjusting, favorably or unfavorably, to the total environment. It includes adjustment as a biosocial process, varieties of adjustive behavior, personality, and types of therapy and applications. Prerequisite: PSY 100 or 101.

PSY 225 GE: Lifespan Developmental Psychology (3:3:0)

Lifespan developmental psychology is the study of how and why people change over time as well as how and why they remain the same from conception through old age. More specifically this course takes an interdisciplinary look at development from the social science fields of anthropology, sociology, and psychology and from the natural science discipline of biology. This broader approach provides insights into three areas of development: the physical domain, the cognitive domain, and the psychosocial domain. Prerequisite: PSY 100 or 101.

PSY 231 Industrial Psychology (3:3:0)

This course deals with psychological information and theories applied to business and industrial settings. Focus is upon leadership, motivation, training, and personnel selection and placement. Prerequisite: PSY 100 or 101 and PSY 201.

PSY 241 Measurement and Evaluation in Psychology (3:3:0)

This course covers a brief history of testing and assessment. The focus is on basic procedures necessary for the quantification of measured characteristics and includes a study

of norms reliability and validity in the development of standardized tests. Prerequisites: PSY 101, 201.

PSY 271 CJA: Forensic Psychology (3:3:0)

This course introduces the student to the relationship between the field of psychology and the criminal justice system in the U.S. The approach is interdisciplinary in nature and intended for those interested in social science, behavioral science, law, and criminal justice, as well as practitioners in the criminal justice system. Prerequisite: PSY 100 or 101.

PSY 290 Special Topics (Semester hours arranged.)

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

PSY 291 Human Sexual Behavior (3:3:0)

This course examines the role of sexual behavior and attitudes in interpersonal relations, and individual psychodynamics in the attainment of full human potential. It includes an analysis of atypical sexual behavior from psychoanalytic, humanistic, social, cognitive and behavioristic view points; Psychotherapy of/and human sexual dysfunction. Prerequisite: PSY 100 or 101.

PSY 292 Psychology of Women (3:3:0)

This course will focus on critical research issues concerning the female experience from birth to old age. It will examine the changing roles of women in contemporary society in addition to myths and stereotypes concerning women. Prerequisite: PSY 100 or 101.

PSY 293 Assertiveness Training (3:3:0)

This course emphasizes the acquisition of skills involved in assertive behaviors. It helps students to understand the differences among aggressive, assertive, and non-assertive behaviors through active methods of group participation. It enables students to identify their own rights and the rights of others and assists students in discovering ways to implement these skills in daily situations. Theories of assertiveness training will be discussed. Prerequisite: PSY 100 or 101.

PSY 294 Psychology of Minority Groups (3:3:0)

A study of the historical, developmental, cultural, and environmental influences on the attitudes, behavior and psychological processes of major minority groups in America. Specific groups to be highlighted in this course include: Native Americans, African Americans, Asian Americans, Latin Americans, Women, and Individuals With Disabilities. Specific topics to be discussed are: sexual preferences, the nature of prejudice, discrimination, and oppression. Prerequisite: PSY 100 or 101.

PSY 301 Sensation and Perception (3:3:0)

This course is a study of the structure and function of receptor systems, their role in phenomenological experience and perception, and how such systems contribute to human's orientation in and knowledge of the environment. Prerequisite: PSY 101.

PSY 302 Theories of Learning (3:3:0)

This course is a survey and critical analysis of theoretical formulations of learning processes, and their implications in child rearing, education and the mental health setting. Prerequisite: PSY 101.

PSY 311 Physiological Psychology (4:3:2)

This course is a study of the relations of behavior of organisms to their physiological processes. In addition to the characteristic modes of functioning and the complexity of the human nervous system, it includes a study of how such diverse events as ontogenetic development, brain lesions, stress, and sensory deprivation or enrichment affect behavior. A series of laboratory exercises is employed in order to aid the student in developing a more thorough understanding of the field. Prerequisite: PSY 101.

PSY 312 Clinical Psychopharmacology (3:3:0)

This course is designed to provide fundamental knowledge of how medications are used to treat a variety of psychological disorders and some neurodegenerative diseases. Emphasis is placed on how therapeutic drugs act within the nervous system, clinical studies examining the efficacy of these drugs, how these drugs are used in combination with psychotherapy, and the potential side effects of these drugs. Prerequisites: PSY 100 or 101, 321, 351; BIOL 111.

PSY 320 Social Psychology II: Group Dynamics and Attitudes (3:3:0)

This is the second half of a 2-course sequence (220 and 320), an introductory survey of the field of social psychology, but either course can stand alone. PSY 320 focuses on scientific principles about the effects of social leadership, prejudice, and intergroup conflict. Attitude change via persuasion and propaganda, and human responses to population stress are also covered. Prerequisite: PSY 100 or 101 or 220 or SOC 111.

PSY 321 Theories of Personality (3:3:0)

This course focuses on a discussion of theories that have contributed significantly to current concepts of personality with emphasis on the diversity of views and techniques (from psychoanalysis to cognitive behaviorism) that characterize the field. The relationship of personality theory to assumptions about the nature of man will be noted. Prerequisite: PSY 100 or 101.

PSY 326 Health Psychology and Behavioral Medicine (3:3:0)

This course focuses on the relationship between psychology and the field of Behavioral Medicine. It involves an in-depth study of how psychological factors influence physical illness, and how to prevent these illnesses from a psychological perspective. Specifically, the course considers the process of lessening the course of certain physical illnesses by applying behavioral, cognitive, and social psychological principles. Seeking health care and adhering to medical advice will also be discussed. Prerequisites: PSY 100 or 101, and PSY 321.

PSY 350 Cognitive Science (3:3:0)

This interdisciplinary course is a study of a topic of common interest in computer science, linguistics, physical science, neuroscience, philosophy and psychology, viz. the acquisition, organization, and expression of knowledge. Prerequisite: Honors Program.

PSY 351 Abnormal Psychology (3:3:0)

This course reviews basic principles of motivation, learning, and development as they are related to disorganized behavior, physiological, sociological, and psychological factors in the development of disorganized personalities, the etiology and symptomatology of the major categories of neurosis, psychosis, personality disorders, and organic brain disorders, and methods of treatment and prevention. Prerequisites: PSY 101, 321.

PSY 401 History of Psychology (3:3:0)

This course considers the trends and controversial issues in psychology related to forces in a general culture and examines the philosophical and theoretical views of eminent psychologists and the influence of physical science on methodology in behavioral science. Prerequisites: PSY 101, 9 additional major credits.

PSY 402 Cognitive Processes (3:3:0)

This course is a study of complex mental processes and explanatory models of these processes, the relation between affective and associative processes, thinking, problem solving, decision-making, and creativity. Prerequisites: PSY 101, 201, 202.

PSY 409 Research in Psychology (Semester hours arranged.)

This course is designed to broaden a student's background in psychological topics through in-depth reading or research in a particular area. It is open to qualified students who wish to contribute an individual research project or theoretical paper under the supervision of a staff member. Subject matter varies depending upon student and faculty interest. May be repeated to a total maximum of six credits. Prerequisites: PSY 101, 201, 202, 9 additional credits in psychology (18 total).

PSY 410 Perspectives in Psychology (3:3:0)

This course presents the Psychology major with an opportunity to synthesize the knowledge acquired during the undergraduate course of study. Prerequisites: PSY 100 or 101, 201, 202, permission of instructor.

PSY 441 Individual Testing (3:3:0)

This is an advanced course in psychological testing. It includes learning the administration and interpretation of individual intelligence tests (e.g. Wechsler Tests), objective personality tests (e.g., Minnesota Multiphasic Personality Inventory, Sixteen Personality Factors), vocational tests (e.g., Strong-Campbell Interest Inventory), introduction to projective techniques, and other clinical tests. Prerequisites: PSY 101, 241, 321, 351, 451. Advanced standing of 90 credits required.

PSY 451 Introduction to Counseling (3:3:0)

An overview of the field of counseling; counseling theory, techniques, and issues are discussed. Emphasis is placed on individuals and groups whose problems of choice, decision, and adjustment fall within the normal range. Educational and emotional and social counseling are examined in relation to the role of the counselor in the community. Prerequisites: PSY 101, 321, 351.

PSY 452 Group Processes in Counseling (3:3:0)

This course presents the principles and techniques of groups used in counseling. The student will survey the various group models applicable to a variety of populations and settings as well as the most recent, relevant research on group processes. The course includes didactic and experiential components. Prerequisites: Advanced standing of 90 credits, PSY 451.

PSY 484 Mental Health Worker Practice & Skills (3:0:6)

This course is required of, and restricted to, students who are enrolled in the Mental Health Worker concentration (BS in psychology). Students are assigned to an agency appropriate to the program and their specific interests and spend a minimum of 120 hours of supervised experience in addition to meeting in a group seminar. The seminar will concentrate on day-to-day problems with which students deal in their placement and current issues and ethics in the mental health professions. (May be repeated for maximum of 12 credits.) Prerequisites: PSY 451, 452.

PSY 485 Independent Study (Semester hours arranged.)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with the student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student. Prerequisites: PSY 101, 60 credits, permission of instructor.

PSY 486 Field Experiences and Internship (Semester hours arranged.)

This course consists of field experience and working knowledge developed in one-to-one relationships with clients under direct professional supervision. Placement will be in agencies involved in the delivery of services related to mental health or mental retardation. A maximum of twelve credits over two years' time may be earned through the program. Prerequisites: PSY 101, 321, permission of instructor.

PSY 498WS: Seminar in Women's Studies (3:3:0)

This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. This course is not accepted for major credit. Prerequisites: Completion of 9 credits of Women's Studies credit, including CMST/ENGL 150.

Public Health Administration

School of Health Sciences and Human Performance—The Faculty of Health Sciences

Concentration—Public Health Administration—21 semester hours

See Health.

Reading

School of Professional Studies—The Faculty of Education

Professors: Fedorko, McLaughlin, Moore (chair)

Assistant Professor: Allen

All students are required to maintain a cumulative and major average as specified in PA law, Chapter 354, to take teacher education classes.

REED 090 Reading Skills (3:3:0)

This course will diagnose and correct student deficiencies in the basic reading and study skills which are essential for successful completion of academic course work. Student deficiencies will be diagnosed through standardized and informal testing and will be corrected by using a variety of group and individualized teaching techniques.

REED 191 Developmental Reading (3:3:0)

The needs and progress of college students are evaluated in the development of their reading ability. Comprehension skills, especially understanding reasoning processes expressed in written language and study skills, are emphasized. Open to all students.

REED 211 Teaching of Reading in the Elementary School (3:3:0)

This course is a study of principles and procedures underlying the teaching of fundamental skills basic to a developmental reading program in the elementary school. It includes a survey of reading materials and techniques and demonstrations of classroom teaching. Not open to Elementary Education majors.

REED 212 Emergent Literacy (3:3:0)

The development of the reading and writing behaviors of young children is observed

and examined. The emphasis of this course reflects the current knowledge base for children's emerging literacy development into conventional literacy, from birth through the early primary school years.

REED 290 Special Topics (Semester hours arranged.)

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

REED 313 Foundations of Reading Instruction (6:6:0)

A basic course to develop the competency of Elementary Education students to teach reading. The major approaches to reading instruction, with an emphasis on skill instructional techniques, are stressed. Lectures, videotapes, films, and demonstrations cover classroom teaching and appraisal of reading achievement. Student participation in discussion of selected topics, in small groups under the guidance of one of the professors, is an important aspect of the course. Prerequisite: ELED 264. Required course for Elementary Education Majors.

REED 315 Teaching Reading to Students with Special Needs (3:3:0)

This course will prepare prospective teachers to provide effective reading instruction to students with special needs which are categorized into four broad areas. The areas are 1) the needs of handicapped readers including the learning disabled, mentally retarded, visually and hearing impaired, speech and language impaired, physically handicapped, and emotionally disturbed, 2) the needs associated with cultural differences, 3) the needs represented by language differences, and 4) the needs of gifted readers. The emphasis of this course will be on instructional procedures which reflect the current knowledge base for helping students acquire literacy. Prerequisites: REED 211 or SPPA 101. Required for Special Education and Speech Pathology majors.

REED 321 Teaching of Reading in the Secondary School (3:3:0)

Students demonstrate competency in utilizing secondary content area reading material to assist young people in developing comprehension and study skills. Prerequisite: PSED 161.

REED 331 The Selection and Evaluation of Reading Materials (3:3:0)

This course focuses on the examination and rationale for current techniques and materials for teaching reading to students capable of utilizing different modalities. Both developmental and corrective classroom reading programs for the elementary and middle school will be considered. Prerequisites: REED 211, or 313, or 321.

REED 332 Content Reading in the Elementary School (3:3:0)

Students learn and practice the teaching of those reading skills which elementary school children need for successful reading in subject matter areas. Prerequisites: REED 211, or 313, or 321.

REED 430 Teaching Reading through Young Adult Literature (3:3:0)

Participants in the course will examine the engagement of young adults in the reading process. Among the literature-based topics to be addressed will be teaching reading through thematic units, the shared stages of reading and writing, literature-response methods, and developing reading strategies through a variety of literary genres. Prerequisites: REED 211, or 313 or 321; ELED 232.

REED 433 Literacy: Techniques for Assessment (3:3:0)

The emphasis of this course reflects the current knowledge base for the ongoing process of formative and summative evaluations. Data gathering, data analysis, and data display are surveyed and demonstrated. Prerequisites: REED 211, or 313 or 321; ELED 232.

REED 434 Field Experience in Reading (3:1:4)

This course is a three week field experience under the guidance of a Reading Specialist in the public schools. The student will 1) observe him/her in all phases of his/her work, 2) following observation, assist the Reading Specialist, and 3) gradually assume teaching

responsibilities for the various instructional groups as the Reading Specialist may deem feasible. The program will be supervised by a member of the Reading Department. The course is accepted to fulfill an area of concentration (Reading) requirement. Prerequisites: REED 211 or 313; ELED 232.

REED 447 Success-Oriented Reading: Ideas into Action
(Semester hours arranged.)

The course provides opportunities for teachers to explore the reading process from a variety of current viewpoints and to help the participants develop their own personal classroom teaching programs to put these ideas into practice. The course is designed to stimulate new thinking, to have participants experience activities that can be used with students, and to give participants confidence in creating personalized reading activities and materials for their own students. Prerequisites: ELED/PSED 490 or ELED/PSED 491. Since this course is also offered for graduate credit, a differentiation of requirements may be made. This course is also listed as ELED/PSED 447.

REED 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis.

REED 486 Field Experiences and Internship (Semester hours arranged.)

Recreation and Leisure Services Management

School of Professional Studies—The Faculty of Hospitality and Leisure Management

Professors: Rogers (chair), Seid

Associate Professor: Vauter

Bachelor of Science with a Recreation and Leisure Services Management major—48 semester hours

Required major courses: RECR 150, 250, 260, 270, 281, 350, 351, 450, 452, 486; 3 of the 4 practicum courses—390, 391, 392, 393; 6 additional semester hours in recreation.

Corequisite courses: CMST 253; ENGL 205; HLTH 240; CPSC 100.

Required quality point average: 2.25 or greater for juniors and seniors.

Note: The required internship (RECR 486) is usually completed during the summer sessions following the junior or senior year of study.

For university requirements see page 49.

The Recreation degree program is accredited by the National Recreation and Park Association/American Association for Leisure and Recreation (NRPA/AALR), a specialized accrediting agency recognized by the Commission on Recognition of Postsecondary Accreditation.

Students graduating from this program are immediately eligible to sit for the examination to become a Certified Park and Recreation Professional (CPRP).

RECR 150 Introduction to Recreation and Leisure Services (3:3:0)

This course provides an introduction to the study of recreation and leisure as a phenomenon of human social experience. The course presents an overview of the delivery of recreation and leisure services in a variety of settings for all populations.

RECR 241 WS: Leisure and Gender (3:3:0)

This course is an introduction to issues and questions about women and men and their leisure. The student will examine the differences and similarities between women and men concerning their leisure interests, needs, and perceptions. Topics will include a comparison of women's and men's leisure historically, gender-role socialization during lifespan development, participation in leisure pursuits by gender, gender-based constraints on leisure, and problems and issues faced by leisure professionals because of gender. Prerequisite: Sophomore standing.

RECR 250 Recreation Leadership (3:2:2)

This course analyzes the leadership role in group settings, group process, group dynamics, leadership styles, and interpersonal communication. Incorporated into this course is a lab which enables students to gain practical experience leading group activities for different age groups and skill levels.

RECR 260 Introduction to Therapeutic Recreation (3:3:0)

This course is an introduction to the delivery of therapeutic recreation services in both community and clinical settings. Societal attitudes, history of therapeutic recreation, legislation, and models of service are analyzed. Specific disabilities are evaluated.

RECR 261 Leisure and Aging (3:3:0)

This course analyzes the delivery of leisure services to individuals over 60. Psychosocial, physical, and cognitive changes as they relate to the aging process and one's leisure are investigated. The implications of changes in demographics, lifespan, healthcare delivery, and public policy are explored. Therapeutic recreation practice in long term care is examined.

RECR 270 Recreation in Commercial Settings (3:2:2)

This course is an analysis of tourist-related industries with particular attention focused on managerial tasks and business skills required in delivering commercial leisure services to the consumer. This course will also focus upon different types of commercial recreation enterprises such as health clubs, ski areas, and theme parks. Trends and issues pertinent to the operation and management of these firms will also be examined.

RECR 280 Outdoor/Environmental Education (3:1:4)

This course provides practical experience in the basic outdoor teaching and administrative skills necessary in the operation of a resident outdoor education center or a school environmental education program.

RECR 281 Outdoor Recreation and Park Management (3:3:0)

This course surveys the history, current status, and management of outdoor recreation opportunities and resources. It examines the relationship of outdoor recreation and natural resources, especially the environmental impact of recreational pursuits on the resource base.

RECR 290 Special Topics (Semester hours arranged.)

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

RECR 350 Leisure Services Programming (3:3:0)

This course is a critical analysis of program development strategy, including program design, planning techniques, staff development, methods of financing, facility scheduling, and evaluative processes related to a comprehensive offering of community leisure services. Prerequisites: RECR 150, and 250.

RECR 351 Leisure Services Management (3:3:0)

This is a survey course of organizational theories and concepts, procedures, and practices

utilized in the delivery of leisure services. Emphasis is on the management role, legal issues, human resources, supervision, and fiscal responsibility. Prerequisites: RECR 150 and 250 and Junior standing.

RECR 352 Customer Service for Leisure Service Organizations (1:1:0)

This course will provide discussion and study of issues relating to the provision of quality service for leisure service organizations. The value of customer service will be discussed along with key factors that govern service quality. The development of a customer relations program will also be addressed. Prerequisite: Advanced standing of 60 credits.

RECR 361 Clinical Aspects of Therapeutic Recreation (3:2:2)

The focus of this course is to prepare future practitioners to deliver therapeutic recreation services in clinical settings. Medical terminology, assessment, documentation, the helping relationship, and the process of therapy are systematically analyzed. The lab experience incorporated into this course is to emphasize activity skill development. This course is for majors only. Prerequisite: RECR 260.

RECR 371 Marketing for Commercial Recreation Enterprises (3:3:0)

This course is designed to acquaint the student with the importance of marketing to the commercial recreation industry. Particular attention will be placed upon the implementation of the marketing concept as well as an in-depth look into the development and implementation of a marketing plan. Consumer decision processes with their marketing implications will also be considered. Prerequisite: RECR 270.

RECR 380 Coastal and Marine Recreation (3:3:0)

This course will provide an overview of the types and extent of recreational pursuits in coastal and marine environments. Historical aspects and trends in participation will be surveyed. Emphasis is on management of coastal and marine resources and issues associated with the use of these resources for recreation. Pre-requisite: RECR 281.

RECR 381 Issues in Outdoor Recreation Management (3:3:0)

This course provides advanced study in the area of outdoor recreation and natural resources management. Students will explore current issues faced by federal, state, and local government agencies and private and commercial enterprises responsible for resource management. Students will learn a problem-solving approach to the resolution of issues. Prerequisite: RECR 281.

RECR 390 Therapeutic Practicum (1:0:2)

This course involves analysis of the administration of a local agency offering therapeutic recreation services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

RECR 391 Outdoor Practicum (1:0:2)

This course involves analysis of the administration of a local agency offering outdoor recreation or environmental education services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

RECR 392 Commercial Practicum (1:0:2)

This course involves analysis of the administration of a local agency offering commercial recreation services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency and critique of field experience are required assignments. Prerequisite: RECR 150.

RECR 393 Community Practicum (1:0:2)

This course analyzes the administration of a local agency offering community recreation

services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

RECR 450 Planning and Designing Recreation Areas and Facilities (3:2:2)

This course will enable students to develop an understanding of the planning, design, operation, and maintenance of indoor and outdoor recreation areas and facilities. Students will study existing facilities and be required to complete projects related to facility development. Prerequisites: RECR 150, 351, senior standing, approval of instructor; recreation majors only.

RECR 451 Seminar (3:3:0)

This course involves discussion and intensive study of selected issues, problems, and topics with which seniors should be familiar as they prepare to enter the world of work/graduate school. Prerequisite: Senior status, approval of instructor, recreation majors only.

RECR 452 Research Methods (3:3:0)

This course is designed to develop an understanding of the principles of scientific investigation and analysis. Methods of data collection, sampling, research designs, qualitative and quantitative paradigms are reviewed. Students will interpret and apply research principles to leisure services. Prerequisites: RECR 150, 351, senior status, approval of instructor, recreation majors only.

RECR 453 Playground Safety and Supervision (3:2:2)

This course will examine the role of play in child development and the history and current status of playground facilities in schools, parks, and other public settings. The course will focus on current planning and design principles and current acceptable practices in the management and maintenance of playgrounds and supervision of children on playground equipment. Field trips will be taken to area playgrounds for safety inspections of existing equipment. Prerequisite: Advanced standing of 90 credits, permission of instructor.

RECR 460 Concepts and Issues in Therapeutic Recreation (3:3:0)

This course is a continuation of RECR 361, which concentrates on the preparation of Recreation Therapy practitioners. Human development, leisure education, therapeutic techniques and approaches, treatment protocols, and the inter-disciplinary approach to treatment are examined. Other contemporary issues and trends are analyzed. Prerequisite: RECR 361. Recreation majors only.

RECR 470 Ski Area Management (3:2:2)

This course is designed to give the student an overview of ski area management with emphasis on design principles, financial practices, and operating procedures necessary for the successful operation of a ski area. Prerequisites: RECR 150, 270, senior standing.

RECR 471 Seminar in Commercial Recreation (3:3:0)

This course will provide discussion and intensive study of issues, topics, trends, and problems within the field of commercial recreation. Prerequisites: RECR 150, 270; EMGT 211.

RECR 480 Environmental Interpretation (3:1:4)

This course prepares the student to develop and to supervise interpretive services and public outdoor education programs. The lab concentrates on interpretive skills including displays and exhibits, interpretive walks, slide presentations, and interpretive trails. Prerequisites: RECR 280.

RECR 485 Independent Study (Semester hours arranged.)

This course is available for one, two, or three credits with five hours faculty involvement per credit on topics approved by the department and not regularly listed in the catalog.

RECR 486 Internship (Semester hours arranged.)

Prerequisite: Recreation majors only.

Rehabilitative Services

School of Professional Studies—The Faculty of Education

Bachelor of Science with a Rehabilitative Services major—62 semester hours

Rehabilitative Services core requirements for all areas of concentration: SPRE 100, 200, 201, 214, 300, 301, 315, 486; SPED 105, 311; SOC 111, 441; PSY 100, 222; HLTH 240, 432. Plus area of concentration: 9 credits—adviser approved electives. A minimum overall QPA of 2.5 is required for entry into and continuation in the program.

The undergraduate Rehabilitative Services program prepares students to work in a broad range of rehabilitation settings with people exhibiting different disabling conditions. These settings include day service or employment settings, supported living and residential settings, and rehabilitation facilities. Although students may obtain employment in such settings upon completion of their degree, many students elect to pursue graduate study in fields such as occupational therapy, physical therapy, and vocational rehabilitation counseling. The Rehabilitative Services program provides an excellent foundation for graduate study in these areas. The Rehabilitative Services program is part of the Department of Special Education and Rehabilitation.

SPRE 100 Foundations of Human Services (3:3:0)

This course is an orientation to the rehabilitation and normalization process, including a survey of historical development, principles, philosophy, disability, needs of people with disabilities, legal aspects of rehabilitation, and related programs of services to individuals with disabilities.

SPRE 200 Individuals with Exceptionalities in Community Life (3:3:0)

This course places an emphasis on the role of individuals with disabilities in society.

SPRE 201 Community Rehabilitative Services (3:3:0)

This course covers the traditional, current, and emerging roles of the community in the rehabilitative process. Emphasis is placed on shared responsibilities of federal, state, regional, and local agencies. Students explore pertinent legislation and implications for integrated and cooperative services. Prerequisite: SPRE 100.

SPRE 214 Behavior Management with Exceptional Individuals (3:3:0)

This course is designed to develop the student's working knowledge of principles of developing socially desirable behaviors of persons with exceptionalities, changing harmful and undesirable behaviors, and helping the person that is exceptional to establish appropriate

patterns of behaviors. Prerequisite: SPRE 100.

SPRE 300 Developing Integrated Employment Opportunities (3:3:0)

This course is designed to help students majoring in rehabilitative services to become knowledgeable of modern designs of vocational education and career planning for individuals with disabilities, and knowledgeable of federal, state, and local regulations concerning vocational training and to develop an awareness of problems of integrating persons with disabling conditions into the general work force. Prerequisite: SPRE 100.

SPRE 301 The Vocational Rehabilitation Process (3:3:0)

This course assists students in Rehabilitative Services to develop an understanding of the vocational rehabilitative process. The roles and duties of rehabilitation counselors will be discussed, including case management, assessment and interviewing functions. Prerequisites: SPRE 100, 200, 201; SPED 105.

SPRE 315 Transition from School to Adulthood (3:3:0)

This course provides students with a proactive approach to transition planning for the provision of services that result in positive adult outcomes for students leaving the school system. Prerequisites: SPRE 100, 200, 201; SPED 105.

SPRE 486 Field Experience and Internship (14 credits)

This course consists of at least one field experience placement with populations having physical or mental disabilities in various agencies, developmental centers, rehabilitation facilities, and the like that serve the needs of that population throughout the tri-county area. Assignments in other geographical areas will be utilized by the department when deemed appropriate. Supervision will be provided by the faculty of Special Education and Rehabilitation.

Social Studies

School of Arts and Sciences—The Faculty of Social Studies

Bachelor of Science with a Social Studies major (Secondary Education)

37 semester hours

HIST 499 and one of the following options:

Geography Emphasis: ECON 111, GEOG 110, 120, 130, and 12 additional credits in GEOG; HIST 111 or 112 or 113 and HIST 141 or 142 or 143 or 144; POLS 211; and 3 credits in SOC.

History Emphasis: ECON 111, GEOG 120; HIST 111 or 112 or 113 and HIST 141 or 142 or 143 or 144 and 15 additional credits in HIST; POLS 211; and 3 credits in SOC; 3 credits in any social science department.

History and Government Emphasis: ECON 111; GEOG 120; HIST 111 or 112 or 113 and HIST 141 or 142 or 143 or 144 and 6 additional credits in HIST; POLS 211 and 9 additional credits distributed among International Relations, Comparative Government, and Political Theory; 3 credits in SOC; 3 credits in any social science department.

Social Studies Emphasis: ECON 111 and 3 additional credits in ECON; GEOG 120; HIST 111 or 112 or 113 and HIST 141 or 142 or 143 or 144 and 3 additional HIST credits in non-Western studies; POLS 211; and 3 additional credits in POLS; 6 credits in SOC; 6 credits in any social science department.

Corequisites: PSY 100.

Required quality point average: Students must have a minimum quality point average of 2.5 in social science courses as a condition for approval for student teaching.

Required credits: Students must complete 18 credits in either Economics, Geography, History, Political Science or Sociology. Students must also complete at least 9 credits in upper division social science (Economic, Geography, History, Political Science and Sociology) courses with numbers 300 or higher.

Required professional education courses: MCOM 262, PSED 161, 242, 356, 420, 421, 430, 431; REED 321.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs. For university requirements see page 49.

Social Work

Social Work Concentration—24 semester hours

See Sociology-Anthropology.

Sociology-Anthropology

School of Arts and Letters—The Faculty of Social Sciences

Professors: Collins, Leiding (chair), Roche de Coppens

Associate Professors: Ross, Zinkler

Instructor: Temprow, Bachert

Bachelor of Arts with a Sociology major—30 semester hours

Required major courses: SOC 102 or 201, 111, 412, 472, and 495; 15 additional semester hours (a minimum of 21 semester credits must be earned at ESU including SOC 412 and 472).

For university requirements see page 49.

Concentration in Criminal Justice—24 credits

See Criminal Justice.

Concentration: Social Work—24 semester hours

Required prerequisite courses: SOC 111, 310, 311.

Required concentration courses: SOSW 483, 484;

Electives: 12 semester hours from SOC 342, 343, 377, 442, 486; SOSW 321, 322, 325, 326.

Transfer Policy:

1. 21 credits in the SOC major (including SOC Theory & BSR) must be taken at ESU. No upper level (300 or 400 level) courses will be accepted from junior and community colleges for the major or the CJA and SW concentrations.
2. for CJA and SW concentrations—a minimum of 15 credits must be taken at ESU and 300 and 400 level courses from 4 year colleges accepted only with permission of the department.

SOC 102 GE: Introduction to Anthropology: Cultural (3:3:0)

This course is a study of man in relation to the animals and to culture, the development of symbolic communication and culture, an analysis of religion and social organization, primitive life, and cognitive systems, and methods by which anthropologists work.

SOC 111 GE: Introduction to Sociology (3:3:0)

This course examines the nature of social phenomena, fields and methods of sociology, and social processes involved in the evolution of human society.

SOC 201 GE: Introduction to Anthropology: Physical (3:3:0)

This is an introductory course in anthropology, presenting the basic concepts and ideas of the discipline. At the heart of the course will be the study of man, his physical structure and nature as well as his culture and works, since his earliest beginnings to modern-day civilization. Prerequisite: SOC 102.

SOC 231 GE: Marriage and Family (3:3:0)

This course is designed to present information and principles of conduct of practical value to young people seeking guidance in the choice of a marriage partner and in preparation for family living.

SOC 241 GE: Contemporary Social Problems (3:3:0)

This course is a study of problems challenging contemporary American society, an analysis of complex human relationships which have aggravated these problems, and an evaluation of legislation enacted and special agencies created by our government to solve them. Prerequisite: SOC 111.

SOC 290 Special Topics (Semester hours arranged.)

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

SOC 301 GE: The American, British, French, Italian, and German Cultures: Comparison (3:3:0)

The central aim of this course is to introduce students to the basic sociological concepts of personality system, social system, cultural system, and the formation of a national character. This analysis will help students to better understand themselves, the sociocultural environment in which they live, and the sociocultural differences that exist between people coming from different societies. After having developed a theoretical framework and a practical paradigm to understand the notion of “national character” these will be applied to define the national character of Americans, British, French, Italians, and Germans. Prerequisite: SOC 111.

SOC 310 GE: Introduction to Social Welfare (3:3:0)

This course is intended for sociology majors, future social workers, lawyers, nurses, law enforcement officers, therapists, and other persons engaged in various helping professions. It is designed to help the student understand social welfare as a social institution, gain a practical knowledge of the working of various programs, and achieve some insight into the meaning of social welfare to the human beings involved. The student is encouraged to develop critical judgment about the adequacy of social welfare programs. Prerequisite: SOC 111.

SOC 311 Introduction to Social Work (3:3:2)

This course is intended for students interested in social work and other helping

professions to become familiar with theory and practice in the three major social work fields (casework, group work, and community organizations), to gain some insight into social work research, supervision, and social policy making, to study the generic principles common to the major fields of practice (i.e., suitable for a variety of situations calling for intervention with individuals, groups, and communities), and to explore employment opportunities. Prerequisite: SOC 111.

SOC 335 GE: The Family in Various Cultures (3:3:0)

The course is a study of the sociological and anthropological aspects of the family in several different groups and societies. An investigation of mate selection, child-rearing, family dissolution, and recognition of relatives among these families will be conducted. Prerequisite: SOC 111.

SOC 341 GE: Criminology (3:3:0)

This course is an examination of theories of crime causation, demographic characteristics of criminals, the history of theories of punishment, and modern reformative and rehabilitative methods. Prerequisite: SOC 111.

SOC 342 GE: Juvenile Delinquency (3:3:0)

This course is a study of the delinquent as a person and juvenile delinquency as a social problem and theories of delinquent causation, methods of correctional treatment and community preventive projects will be systematically studied. Prerequisite: SOC 111.

SOC 343 GE: Racial and Cultural Minorities (3:3:0)

This course is an analysis of dominant-minority-relations in the United States 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 discussed. Prerequisite: SOC 111.

SOC 372 Sociology of Religion (3:3:0)

The course is an introduction to the basic concepts and methodology of the discipline of the sociology of religion. While numerous approaches in the discipline will be outlined, the functionalist approach will be stressed throughout the course. Special emphasis will be placed upon the works of Berger, Durkheim, Lenski, Malinowski, and Weber. Prerequisite: SOC 201, or 102 or 111.

SOC 374 Political Sociology (3:3:0)

This course is the study of the social causes and consequences of given power distributions within or between societies and of the conflicts that lead to changes in the allocation of this power. The social backgrounds of extremist movements and of the "True Believers" that join them will be analyzed. Prerequisite: SOC 111.

SOC 376 Industrial Sociology (3:3:0)

This course is a sociological analysis of the development and organization of modern industrial capitalism. Special emphasis will be placed upon the role of the executive, the specialist, and the white- and blue-collar worker. The structure and function of trade unions will be examined as will the place of industry in the community. This course is offered in cooperation with the Institute of Industrial and Energy Technology. Prerequisite: SOC 111.

SOC 377 GE: WS: Sociology of Women (3:3:0)

This course is specially designed to afford the student and/or professional person an open and non-threatening opportunity to examine both societal and personal sex role stereotyping and the attendant societal mechanisms by which these roles are mandated and enforced. A brief survey of women in society will be followed by an in-depth look at the women's movement and institutional change. Prerequisite: SOC 111.

SOC 378 GE: American Community (3:3:0)

This course examines the nature, structure, and functions of the community. It includes a study of the inter- relations of major institutions in the community; attention is directed to the city, the small town, and the rural community. Prerequisite: SOC 111.

SOC 390 Field Work and Observation (3:3:0)

This course is designed to provide the student with the opportunity to obtain practical experience with an agency in the community. Supervision will be given by both the community agency and the instructor. Periodic meetings will be held to discuss the experience. Prerequisites: SOC 111, consent of instructor.

SOC 412 Behavioral Science Research (3:3:0)

Procedures for planning, organizing, and conducting research projects are analyzed. The class will formulate and implement a research design with emphasis upon methodology and application of statistical analysis. Prerequisites: SOC 111, one other SOC course.

SOC 441 Social Deviance (3:3:0)

A study of how "social deviance" is defined and by whom. Special attention will be given to the pros and cons of the "labeling school" of deviance and the concept of "crimes without victims." Specific deviances such as homosexuality, alcoholism, and mental illness will be examined. Prerequisites: SOC 111, one other SOC course.

SOC 442 The Sociology of Aging (3:3:0)

This course is a study of the sociological aspects of the aging process, from birth to death. Special focus will be placed upon role expectations at the various time periods of an individual's life, namely, childhood, adolescence, early-adulthood, mid-adulthood, retirement, and old age. Prerequisites: SOC 111, one other SOC course.

SOC 472 Social Theory (3:3:0)

This course is a history and analysis of social theory from early modern times to the contemporary period. Prerequisites: SOC 111, one other SOC course.

SOC 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis. The student wishing independent study must contact a member of the Department of Sociology who is willing to supervise the study. The student's request for independent study must then be approved by the members of the Department. A minimum of five (5) hours per credit of exclusive time with the supervising faculty member will be made available to the student. Prerequisite: Advanced standing of 90 credits.

SOC 486 Field Work and Observation (Semester hours arranged.)

This course is designed to provide the student with the opportunity to obtain practical experience with an agency in the community. Supervision will be given by both the community agency and the instructor. Periodic meetings will be held to discuss the experience. Prerequisites: Advanced standing of 90 credits, arrangements with and consent of instructor before registration.

SOC 487 & 488 Foreign Travel I & II (3:3:0), (3:3:0)

This course consists of a study trip to observe at first hand the metamorphosis of postwar Europe, a study of the history and governmental systems of Western European countries, their economic growth and integration through the common market, investigation of the social environment on a formal and informal basis, and a general study of Western Europe in the post-war world. Prerequisites: Advanced standing of 90 credits, consent of the chair of the department.

SOC 490 Social Implications of Computers (3:3:0)

This course presents concepts on how computers impact our lives and our society. It provides a framework for professional activity that involves explicit consideration of the social impacts of computers and presents tools and techniques which are applicable to the problems posed by the social implications of computers. Prerequisites: CPSC 111, 112, 231, 251.

SOC 495 Seminar (3:3:0)

This course consists of discussion and intensive study of selected topics, issues, problems, sociological writings, and investigations. Prerequisites: Advanced standing in Sociology,

consent of instructor, SOC 111, 9 additional SOC credits including SOC 412 and 472.

SOC 498 WS: Seminar in Women's Studies (3:3:0)

This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including SOC 377.

Sociology—Criminal Justice Courses

SOCJ 150 Introduction to Criminal Justice (3:3:0)

This course is an overview of the role of police, prosecution, court, and correctional processes in the administration of criminal justice in the United States. This course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

SOCJ 151 Introduction to Security (3:3:0)

This course discusses the history, nature, and scope of private security in modern society, the basic principles of physical security, internal loss prevention, defensive systems, fire prevention and safety, and the security function in the corporate structure. This course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

SOCJ 250 Corrections (3:3:0)

The correctional process (sentencing, incarceration, and release) will be examined. Prison classification, treatment systems, life "inside," discipline, inmates' rights, and parole prediction are studied. The course is offered in cooperation with the Criminal Justice Administration program. It will not count toward the Sociology major.

SOCJ 251 Police Organization and Administration (3:3:0)

This course is an examination of the historical development and present organization and administration of police departments and a consideration of the principles of organization best adapted to ensure effective service to the community. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major.

SOCJ 252 Organized Crime (3:3:0)

The history, growth, structure, philosophy, and scope of Organized Crime will be studied. Effective methods of prosecuting this type of crime will be reviewed. The course is offered in cooperation with the Criminal Justice Administration program. It will not count toward the Sociology major.

SOCJ 253 Violence in Society (3:3:0)

This course is an in-depth study of violence, with topics such as riots, campus and civil disorders, violent crime, terrorism, and assassinations discussed in detail to give the student an insight into this deviant behavior. The course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

SOCJ 350 The Criminal Process (3:3:0)

This course provides an overview of the criminal process from arrest through trial and sentencing. It includes discussions of the law and procedures applicable at each stage, including classification of crimes, warrants, searches and seizures, confessions, evidence, preservation, preliminary hearings, motions, pleas, and trials. Particular crimes are treated substantively as necessary to supply examples. Practical exercises are contemplated. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 150.

SOCJ 351 Police Investigation (3:3:0)

This course considers appropriate conduct at the crime scene, techniques of interview, interrogation of witnesses and suspects, the uses of informants, studies of specific investigative methods for particular kinds of cases, and the presentation of police cases in court. The course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major. Prerequisite: SOC 150.

SOCJ 352 Police and Community Relations (3:3:0)

This course is a review of the problems confronting the police and the community, a study of minorities to gain an understanding of their particular problems, an in-depth look at ways of achieving trust, understanding, respect, and cooperation from the public that the police serve. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 150.

SOCJ 353 Crisis Management in Law Enforcement (3:3:0)

This course will introduce students to the current issues of managing critical incidents and hostage situations that occur in law enforcement and corrections. It will focus on those activities necessary to stabilize life and property threatening incidents. It will provide an understanding of commanding high-risk incidents, pre-incident planning, and critical incident stress reactions. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 111 or SOCJ 150.

SOCJ 354 Drug Use and Abuse in Society (3:3:0)

This course will focus on drug use and abuse as it pertains to today's society. It will offer an in-depth look into the various types of drugs and how they affect the body along with the implications that arise through the abuse of these substances. It will explore the concept of addiction to the various controlled substances that are available pharmaceutically and on the black market. Stimulants, depressants, and hallucinogens will be discussed in-depth, along with the various State and Federal Laws that apply to the Controlled Substance Acts. Lastly it will look at alcohol use and abuse, over the counter medications, and the emerging trends of drug use that are ever changing in our society. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology Major. Prerequisite: SOC 111 or SOCJ 150.

SOCJ 460 Schools, Gangs, Violence and Society (3:3:0)

This course will examine the various aspects of violence as they relate to the school setting. It will take an in-depth look at gangs, weapons, and drugs in the school environment. This course will discuss some of the more recent approaches from law enforcement perspective that have worked in combating school violence. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 111 or SOCJ 150, and a second course in Sociology.

Sociology—Social Work Offerings**SOSW 321 Helping Philosophies and Methods for Social Workers (3:3:0)**

This course provides an introduction to the main modern therapies that professional social workers can use with their clients or take into consideration in making referrals. The main assumptions, concepts, and methods of dynamic psychotherapy, behavior therapy, and humanistic psychotherapy will be analyzed and illustrated. Prerequisite: SOC 111. Not for the Sociology major.

SOSW 322 Theory and Practice in Groups (3:3:0)

The focus of this course is small group theory and practice as applicable to social work practice. Social work intervention with family groups, problem-centered groups, and social action focused groups will each be examined. Focus will be both on developing understanding

of group dynamics and group process, and developing skills in group work practice. This course will not count for the Sociology major. Prerequisite: SOC 311.

SOSW 325 Crisis Intervention in Sexual Assault and Familial Violence (3:3:0)

This course is designed to enable students to develop theoretical knowledge and practice skills necessary to intervene as crisis counselors in selected crisis situations. The primary crisis situations focused upon will be familial violence and sexual abuse/assault of children and adults. Satisfactory completion of the course will result in Pennsylvania State Certification as a rape crisis counselor. This course does not count for the Sociology major. Prerequisite: SOC 311.

SOSW 326 Child Welfare Services (3:3:0)

This is a social welfare policy course providing a comprehensive study of principal child welfare policy and services. Supportive, supplementary, protective, substitute services will be covered with a special focus on the problem of child abuse and neglect. Emphasis will be on child welfare services as a field of social work practice. This course will not count toward the Sociology major. Prerequisite: SOC 111.

SOSW 483 Social Work Practice and Skills I (6:2:arranged)

This course is designed to provide in-depth knowledge and skills in the professional practice of social work through an integrated class and agency-based learning experience. Major theories related to professional practice will be examined and skills in assessment, planning change, and evaluation will be developed. Emphasis is placed on the development of an increased understanding of the use of self in the professional social work role. This course will not count toward the sociology major. Prerequisites: SOC 111, 310, 311.

SOSW 484 Social Work Practice & Skills II (6:2:arranged)

This course concentrates on the advanced study of social work knowledge, method, and skills through the integration of class and field involvement in a social agency. Students will be assigned, prior to class, to a specific social service agency where they will spend approximately 12 hours per week in addition to a two hour class. Only students enrolled in the Social Work concentration may enroll. This course will not count toward the Sociology major. Prerequisites: Completion of all requirements of the Social Work Concentration including SOC 310, 311, 483.

Sociology and Spanish

School of Arts and Sciences

Bachelor of Arts with Sociology and Spanish majors—54 semester hours

Required Sociology courses: SOC 101, 111, 412, 472, 15 additional semester hours (minimum of 27 semester hours).

Required Spanish courses: FLSP 315, 336, 344, 18 additional semester hours (minimum of 27 semester hours).

For university requirements see page 49.

Coordinating departments: Foreign Languages and Sociology-Anthropology.

This degree program prepares students for careers in social work and related fields in urban areas with large Spanish-speaking populations.

Spanish

School of Arts and Sciences—The Faculty of Arts and Letters

Bachelor of Arts with a Spanish major—30 semester hours

See Foreign Languages.

Bachelor of Science with a Spanish major (Secondary Education)—31 semester hours

See Foreign Languages.

Special Education and Rehabilitation

School of Professional Studies—The Faculty of Education

Professor: Kruger

Associate Professors: Cavanagh (chair), Burcroff, Scala, Steere

Assistant Professors: Cavaiuolo, McClanahan

Bachelor of Science with a Special Education major—Instructional I certificate (85 professional and major hours).

Required major courses: SPED 105, 201, 210, 214, 215, 313, 314, 351, 420, 421, 430, 431, an additional 13 elective hours by advisement.

Corequisite courses: REED 211, 315.

Required professional education courses: MCOM 262; ELED 232; PSSED 161, 242.

For university requirements see page 49.

All students are required to maintain a cumulative and major average as specified in PA law, Chapter 354, to remain in the program and/or to take teacher education classes. The Commonwealth of PA has established new requirements for all candidates in teacher

preparation programs, Refer to the section The School of Professional Studies in this catalog for specific requirements for admission into teacher education programs. See also Department requirements. Additional requirements of admission, retention and procedures for Instructional I certification majors are found in the Department Student Handbook, available from the Department secretary.

This degree program prepares students for teaching students with mental and/or physical disabilities. A comprehensive teaching certificate to teach in the preschool through high school age groups may be obtained upon successful completion of this program. This program has met National CEC standards.

An Integrated Certification (Special Education and Elementary Education) program of study is available. Candidacy for an Integrated Certificate in Special Education and Elementary Education is determined following the first semester of studies (12-18 credits). Application is made in either of the department offices. Specific information for matriculation in the Integrated Certification Program is available from those offices.

SPED 105 Foundations of Special Education (3:3:0)

The purpose of this course is to develop a foundation of knowledge about the nature and needs of learners with exceptionalities and their families, and a recognition of the existing and emerging models of service to these individuals. Emphasis will be placed upon Commonwealth classifications and services options, general administrative operational standards, and the nature and needs of identified individuals and their families. All students are required to complete a 30-hour field project.

SPED 201 Assessment & Evaluation in Special Education (3:3:0)

This course emphasizes the assessment and diagnostic process used in special education. Basic measurement and assessment concepts, the referral to placement process, and the evaluation and administration of formal and informal measures used in Special Education will be addressed. Prerequisite: SPED 105.

SPED 210 Learning Disabilities: Theory into Practice (3:3:0)

This course considers the theory, practice, and problems in diagnosis and remediation of specific learning disabilities with the intent of developing the understanding, attitudes, and skill needed to recognize and work with children with learning disabilities. Prerequisites: SPED 105.

SPED 214 Behavior Management with Exceptional Individuals (3:3:0)

This course is designed to develop student awareness and skills in developing appropriate behaviors of the students, change harmful and undesirable behaviors in the classroom and the community, and establish patterns of school-task and job-oriented behaviors. (Cross listed with SPED 214.) Prerequisite: SPED 105.

SPED 215 Instructional Strategies for the Exceptional Student (3:3:0)

The purpose of this course is to develop skills in the management of classes for individuals with disabilities. Emphasis is on management options, diagnostic-prescriptive teaching methods, developing micro-teaching units of study, the use of learning centers, and how to use task analysis in the instructional process. Prerequisite: SPED 105.

SPED 271 Recreation for Exceptional Individuals (3:3:0)

This course is intended to enlighten the student as to the need for special recreation services as well as to assist in the development, supervision, and administration of recreation programs for all types of exceptionalities.

SPED 290 Special Topics (Semester hours arranged.)

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

SPED 311 Etiology and Diagnosis of Exceptionalities (3:3:0)

This course emphasizes the etiologic and diagnostic areas of special students, on all levels, from a variety of interdisciplinary fields. Theoretical and practical procedures for amelioration are discussed as are appropriate implementation techniques. Prerequisite: SPED 105.

SPED 313 Curriculum and Materials for Individuals with Mild Disabilities (3:3:0)

An introduction to curriculum planning and the development of materials appropriate to the needs of individuals with mild disabilities. Prerequisites: SPED 105, 215.

SPED 314 Curriculum and Materials for Individuals with Severe Disabilities (3:3:0)

An introduction to curriculum planning and the development of materials appropriate to the needs of individuals with severe disabilities. Prerequisite: SPED 105.

SPED 315 Methods and Materials of Reading Instruction for Exceptional Individuals (3:3:0)

This course is designed to provide the student with a theoretical background for teaching functional reading to persons with severe and mild disabling conditions. Emphasis is on identifying appropriate sight vocabulary words and understanding the implications for using alphabet, phonic, whole-word, whole-sentence, and linguistic methods with individuals with less severe disabilities. Prerequisite: SPED 105.

SPED 328 Teaching in the Resource Room (3:3:0)

The purpose of this course is to provide the prospective special education teacher with a knowledge of the problems of scheduling and placement, organization of materials and facilities, curriculum inclusion, and adapted methods of individualized instruction in the resource room. Prerequisites: SPED 105; ELED 232.

SPED 351 Inclusionary Practices (3:3:0)

This course is intended for administrators, counselors, psychologists, curriculum supervisors, teachers (regular, special, resource, itinerant), and school nurses concerned with the proper placement of students, preschool to career level, who can benefit from assignment to their age group while requiring special assistance for a portion of the day.

SPED 403 Problems in Special Education (3:3:0)

The course introduces the student to significant points of view and trends in the total adjustment of individuals with exceptionalities in the human, natural, technical, and aesthetic realms of living. This course is offered primarily to non-majors and others in the field of special education. Prerequisite: SPED 105.

SPED 420 Student Teaching in Special Education—Part I (12:0:30)

This course entails fifteen weeks of guided teaching of individuals with exceptionalities. Prerequisite: Departmental approval which is obtained when all requirements described under the Student Teaching section in this catalog have been completed, a minimum of 2.5 cumulative average in the major.

SPED 421 Professional Practicum (2:2:0)

The Professional Practicum meets on a regularly scheduled basis. On-site seminars may be conducted by the university supervisor, including the presence of all on-site or neighboring-site student teachers. The topics governing the content of each Practicum session are representative of immediate student teacher needs regarding his/her professional growth and development. Corequisite: SPED 420.

SPED 430 Student Teaching in Special Education—Part II (12:0:30)

This course entails fifteen weeks of guided teaching of individuals with exceptionalities. Prerequisite: Departmental approval which is obtained when all requirements described under the Student Teaching section in this catalog have been completed, a minimum of 2.5 cumulative average in the major.

SPED 431 Professional Practicum (1:1:0)

The Professional Practicum meets on a regularly needs basis. On-site seminars may be conducted by the university supervisor, including the presence of all on-site or neighboring-site student teachers. The topics governing the content of each Practicum session are representative of immediate student teacher needs regarding his/her professional growth and development. Corequisite: SPED 430.

SPED 452 Together: Mainstreaming in the Schools (3:3:0)

The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction will enable them to review and to develop positive models for their particular schools that allow for exceptional and non-exceptional children to learn together, to respect each other, to know each other. A major emphasis will be devising through group interaction, a plan for implementation of mainstreaming in the particular schools. Since this course is also offered for graduate credit, a differentiation in requirements may be made. The course is cross listed with ELED 452 or PSED 452. Prerequisites: Upper division standing, SPED 105.

SPED 453 Creative Materials and Methods with Exceptional Individuals (3:3:0)

This course is offered for graduate or undergraduate credit. At the undergraduate level this course is designed for pre-professionals and paraprofessionals training to work with individuals with severe and multiple disabilities in the classroom or in a rehabilitative setting. Emphasis is on the construction and use of free and inexpensive household, institutional, and classroom resources for use with regular teaching materials.

SPED 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis.

SPED 486 Field Experience and Internship (Semester hours arranged.)

Speech Pathology and Audiology

School of Health Sciences and Human Performance—The Faculty of Health Sciences

Professors: Ackerman, Shuey, Simpson, Page (chair)

Assistant Professors: Millett, Smith

Bachelor of Science with a Speech Pathology and Audiology major—30 semester hours

This is a preprofessional degree. Upon its completion, students must pursue a master's degree before gaining employment as a certified speech-language pathologist.

Required major courses: SPPA 101, 113, 121, 214, 231, 241, 312, 342, 343, 357, 358.

Corequisites: BIOL 111 or 114; CPSC 100 or 101; FLNG 361; MATH 100 or 101; PHYS 110; ELED 132 or PSY 225; PSY 301 or 311.

For university requirements see page 49.

To enroll in SPPA 358, students must present evidence that they carry professional liability insurance and have passed the Communication Skills and General Knowledge sections of the core battery of the National Teacher's Examination (NTE). They must also have a current (within a year) TB test, and Acts 34 (criminal record) and 151 (child abuse) clearances.

Academic Criteria:

1. All incoming students (freshmen, transfers, etc.) must meet with the department chair to plan for formal admission into the SPPA program.
2. All transfer students, both ESU and other institutions, must have a 2.80 cumulative quality point average to declare SPPA as their major.
3. A 2.85 quality point average in the major and a 2.80 cumulative quality point average are required for approval to enroll in SPPA 357 and 358.
4. An information booklet describing specific program requirements can be obtained from the department chair.
5. At least 24 of the required 30 credits in SPPA must taken at ESU, including all courses above the 100 level.

SPPA 101 Speech and Language Development (3:3:0)

This course is a study of normal development of speech and language in the child, the structure of language as it pertains to expression and content, and the psychological and physiological bases of language.

SPPA 113 Phonetics (3:3:0)

This course is an analytic study of speech sounds, the normal production of speech sounds and the symbols of the International Phonetic Alphabet, and analysis of defective speech sounds and study of articulation testing.

SPPA 121 Introduction to Communication Disorders (3:3:0)

This course is a survey of etiology, methods of evaluation, and treatment of speech disorders, with emphasis on the understanding of the individual client and remedial procedures for articulation cases.

SPPA 131 Introduction to Sign Language (3:3:0)

This course is designed to introduce the student to sign language and total communication. Its purpose is to provide practice in learning a core sign language vocabulary and basic sentence structure. This course will cover topics including the history of sign language and how it relates to communication for the hearing impaired, the mentally retarded, and other individuals needing alternate modes of communication. This course does not satisfy any SPPA major or elective requirements.

SPPA 214 Anatomic and Physiologic Bases of Speech and Hearing (3:3:0)

This course is a study of the anatomy and physiology of the head, neck, and trunk as it relates to speech and hearing; the process of respiration, phonation, resonance, articulation, and feedback are examined.

SPPA 231 Introduction to Audiology (3:3:0)

This course is a survey of the etiology, symptomatology, and management of peripheral hearing problems in children and adults, a study of audiometric testing, and an investigation of the role of the parent, educator, and specialists in the total rehabilitative effort.

SPPA 241 Introduction to Language Disorders (3:3:0)

This course is a study of neurophysiological bases upon which oral language is built, exploration of learning theories related to language acquisition, analysis of type of language disorders, study of diagnostic procedures, and plans for remediation. Prerequisites: SPPA 101, 113, 121.

SPPA 290 Special Topics (Semester hours arranged.)

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

SPPA 312 Speech Science (3:3:0)

This course will provide an understanding of the principles of speech production and reception. Students will be introduced to the basic principles of sound as they related to theories of voice production, the acoustic theory of speech production, linguistic organization, acoustic characteristics of the speech signal, basic instrumentation and basic research issues. Prerequisites: SPPA 101, 113 or FLNG 361.

SPPA 321 Communication and Aging

This course is an introduction to the communication characteristics of older adults. Emphasis is placed on the changes in speech, language, voice, fluency, and hearing that are expected with normal aging, as well as the common disorders encountered in this age group. Students are expected to demonstrate a basic understanding of these characteristics, practical techniques to compensate for resulting communication problems, and when and to whom to make referrals if further testing/therapy is needed. Prerequisites: completion of an SPPA course, or a course in the Gerontology Concentration.

SPPA 342 Articulation and Fluency Disorders (3:3:0)

This course is a study of the causes, symptoms, evaluation, and management of articulation and fluency disorders. Prerequisites: SPPA 113, 121.

SPPA 343 Neurogenic Communication Disorders (3:3:0)

This course is a study of the causes, symptoms, and management of neurological disorders of speech and language. Aphasia and motor speech pathologies are stressed; evaluation and rehabilitative measures are explored, and applicable research findings are discussed. Prerequisites: SPPA 214, 241 and formal admission to the department.

SPPA 357 Introduction to Clinical Practicum, Lecture (1:1:0)

This course consists of classroom lecture and discussion, emphasizing speech and hearing screening, therapeutic procedures, and techniques for various speech and hearing problems. Prerequisites: SPPA 241, 342. Corequisite: SPPA 358.

SPPA 358 Introduction to Clinical Practicum, Lab (2:0:5)

This course provides supervised clinical experience principally with articulation and stuttering cases. Observations and regularly scheduled conferences are required. Prerequisites: SPPA 241 and 342; formal admission to SPPA department; completion of 25 hours of therapy observation. Corequisite: SPPA 357.

SPPA 423 Multicultural Issues in Speech-Language Pathology (3:3:0)

This course will focus on identification, assessment, intervention and prevention of

communication disorders in diverse linguistic and cultural populations including all age groups. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: SPPA 101 and 113 or 121; SOC 102 or 111.

SPPA 485 Independent Study (Semester hours arranged.)

The student is expected to submit a written request for Independent Study to the individual instructor and to include a prospectus of his/her proposed work. These may be research projects, advanced or specialized clinical methods, or in-depth study of a particular topic. Work may be done for one, two, or three credits as arranged with the instructor. Prerequisites: SPPA 231, 342.

SPPA 486 Field Experiences and Internship (Semester hours arranged.)



Theatre

School of Arts and Sciences—The Faculty of Arts and Letters

Associate Professor: O'Hearn (chair), Sickels

Assistant Professor: Law

Bachelor of Arts with a Theatre major—38 semester hours

Areas of Specialization: Acting/Directing; Technical Theatre.

Required major courses: THTR 100, 101, 102, 103 (2 s.h.), 302, 304, 420

Required specialization courses: Acting/Directing—THTR 118, 211, 240, 310, 341, 343.

Technical Theatre—THTR 240, 331, 341, any 9 semester hours from ART 151, 152, 153, 201, 202, 220, 230, 251, 321; THTR 200, 267, 343.

For university requirements see page 49.

Bachelor of Arts with a Fine Arts major (core emphasis: Theatre)—54 semester hours

Required fine arts courses: ART 101 and 201 or 202, 3 additional semester hours; MUS 100 and 211 or 311, 3 additional semester hours.

Required core courses for Theatre emphasis: THTR 101, 102, 163, 211, 302, 304, 330, 343, 420, 496, 6 additional semester hours.

For university requirements see page 49.

Participation in Stage II, the theatre production organization, is strongly recommended. Students enrolled in technical theatre courses are required to assist in theatre productions.

§THTR 100 GE: Introduction to Theatre (3:3:0)

This course examines the human need to celebrate life through the sound and action of theatre. It explores how theatre reflects both the artistic nature of human beings and their individual and societal needs, as well as their needs for exciting entertainment.

***THTR 101 GE: Play Production (3:3:0)**

This course in the art and technique of play production is designed to enhance the student's understanding of the theatrical production process and to aid the prospective producer of school and amateur theatricals. The class covers theatrical organization, theatre facilities, types of staging, and a survey of the many technical elements involved in the production of plays and musicals. Participation in production is required.

***THTR 102 GE: Acting (3:3:0)**

This course aims at development of skill in basic acting techniques with a consideration of the creative approach: growth in freedom, relaxation and confidence before an audience, and development of imagination and powers of observation as well as the ability to concentrate and to make convincing responses to imaginary situations. Preparation of specific acting assignments is required.

***THTR 103 GE: Theatre Practicum (1:0:2)**

This course is designed to allow students academic credit for participation in the theatre production program of the Theatre Department. Work in the technical and performance areas is included. Participation in production is required.

THTR 118 GE: Stage and Comic Technique (3:3:0)

The first half of this course explores the basic elements that dramatize performance or situation. The topics include relaxation, overcoming stage fright and developing stage presence. The second half of the course addresses comic technique, stressing various forms of comedy for the actor, the comic, the public speaker.

§Fine Arts

*Performing Arts

\$THTR 163 GE: Introduction to Film Study (3:3:0)

This course is designed to provide the students with an understanding of the elements necessary for film analysis toward a development of an appreciation for film as art. Representative films are screened in order to study the impact of the art form on modern society and on the individual.

***THTR 200 GE: Summer Theatre Workshop (Semester hours arranged.)**

The Workshop is open to high school and college students, teachers, and to anyone interested in theatre production. Students who enroll in this intensive Theatre Workshop will participate in all phases of Summer Theatre productions. Workshop students will participate in weekly critique sessions. Both self and group evaluative techniques will be utilized. Guest critics will be invited as participants in the critique sessions. The individual student's participation in the Workshop will be tailored to needs and abilities.

***THTR 211 GE: Voice for Performance (3:3:0)**

We investigate the elements involved in easy, good voice production and use exercises and presentations to train the performer's voice for clear and meaningful speech.

***THTR 220 GE: Children's Theatre (3:3:0)**

This course consists of selection, adaptation, and presentation by adults of plays for young audiences; it includes a study of plays with suitable moral and social values.

\$THTR 228 GE: Theatre Tour of the Performing Arts (3:2:2)

This course is designed to enhance a student's understanding and appreciation of our theatre heritage by experiencing the theatre, arts and culture of a particular country and culture. The student will attend theatre productions, participate in discussions with leading professionals, tour facilities, and visit theatre exhibitions. Travel fees additional.

\$THTR 230 GE: Stagecraft (3:3:0)

This course is an introduction to the theory and practice of contemporary set construction and stage engineering. Students will be introduced to the tools and specialized equipment of both the scene and light shops. Participation in production is required.

THTR 235 Drafting for the Performing Arts (3:3:0)

This course is designed to develop necessary skills in drafting for the stage. Students will learn how to draft floor plans, front and rear construction elevations, isometric drawings, orthographic projections, and perspective drawing for the stage.

\$THTR 240 GE: Stage Make-Up (3:3:0)

This course includes the theory and techniques of make-up and practical work where students design and create performance make-up. Prerequisite: THTR 100 or permission of instructor. Offered alternate years.

\$THTR 267 GE: Art and History of the Film (3:3:0)

This course studies the historical and aesthetic developments of the cinema, emphasizing the aesthetic aspects of film in an attempt to develop critical standards through surveying the methods and problems of film. Narrative, non-narrative, fictional, and documentary films are screened and discussed. Prerequisite: CMST 163.

THTR 290 Special Topics (Semester hours arranged.)

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

\$THTR 301 GE: Costume Design (3:3:0)

This is an introductory level course in the design and history of costumes for theatre, television, and film. The emphasis will be on script analysis, research, and design concepts. A design project and participation in stage productions are required. Prerequisite: THTR 100 or 101. Offered alternate years.

§THTR 302 GE: History of Theatre I (3:3:0)

This course deals with the study of major aspects of theatre development from ancient times through the 18th century, structure of physical theatres, representative plays, styles of acting, and trends and movements affecting the theatre. Prerequisite: THTR 100. Offered alternate years.

§THTR 304 GE: History of Theatre II (3:3:0)

Beginning with the 19th century and continuing through to contemporary modern theatre, this course is concerned with theatre development, structure of physical theatres, representative plays, styles of acting, and trends and movements in the theatre. An emphasis is placed on the American theatre. Prerequisite: THTR 100. Offered alternate years.

***THTR 310 GE: Advanced Acting (3:3:0)**

This course is a study of dramatic characterization involving analysis of voice, movement, and interpretation synthesized through the presentation of scenes and short plays. Prerequisite: THTR 102 or permission of the instructor.

§THTR 330 GE: Scenic Design (3:3:0)

This course is concerned with the theory and practice of designing scenery for the performing arts. Students will be introduced to script analysis and conceptualization of plays, musicals, and film and will learn to develop floor plans, models, and finished colored renderings of their design projects. Students will provide their own drafting equipment. Prerequisite: THTR 230.

§THTR 331 GE: Theatrical Lighting (3:3:0)

This course is concerned with the theory and practice of designing lighting for the performing arts. Students will be introduced to script analysis and conceptualization of plays, musicals, and dance and will learn to develop light plots in an experimental theatre setting. Students will provide their own drafting equipment. Prerequisite: THTR 230.

§THTR 332 GE: Scene Painting (3:3:0)

This course is concerned with the theory and practice of scene painting. Students will explore a variety of scene painting techniques and how they can artistically be translated to the stage. Prerequisite: THTR 230

***THTR 341 Stage Management (3:3:0)**

This course is offered for students interested in production management areas. A study of audition, rehearsal and production management techniques will be made. Emphasis will be on planning and organizational skills for stage management. Prerequisite: THTR 100 or 101.

***THTR 343 GE: Directing (3:3:0)**

This course considers the various significant theories and basic techniques of play direction: how to read a script, analyze it, and then put it into action that will vividly convey the play's meaning to an audience. Prerequisites: THTR 100, 102.

§THTR 370 GE: Film Genre (3:3:0)

This course will analyze significant films of either one or two genres in an attempt to define the characteristics of each genre and understand their cultural meanings. Readings will focus on the genres' historical development with emphasis on their relation to the social currents of the times. Representative films will be screened. Selected genres will vary with each offering of the course. Genres studies will include: the comedy film, the science fiction film, the musical film, the documentary film, the film noir, and the horror film. Prerequisite: CMST 163.

THTR 420 Myth and Ritual in Theatre (3:3:0)

This course explores myth and ritual as they relate to theatre, both in their primitive foundations and in their modern applications. The use of masks and various primary aspects of theatre and acting will be examined, culminating in an informal performance reflecting elemental acting skills, as they relate to mythical and ritualistic foundations of theatre.

Available for graduate credit. Prerequisites: THTR 100, 102.

THTR 485 Independent Study (Semester hours arranged.)

This course consists of directed research and study on an individual basis. It is open to a limited number of students who are juniors and seniors or who have completed 12 credit hours in Theatre Arts and who received departmental approval. A student engaging in Independent Study will complete a minimum of five (5) hours per credit of exclusive conference time with the faculty member in charge of the Independent Study relative to the design, consultation, and evaluation of the study. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of a willingness to meet the commitments of the discipline.

THTR 486 Field Experience and Internship (Semester hours arranged.)

This course provides field experience gained through placement in a practical on-the-job situation under professional supervision.

THTR 496 Fine Arts Seminar (3:3:0)

A team-taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music, or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisites: Advanced standing of 90 credits, permission of instructor. Also offered as ART 496 and MUS 496.



Women's Studies

Women's Studies Minor—18 semester hours

Required core course: CMST/ENGL 150.

Electives: ART 412; CMST 220; ENGL/CMST 396; ENGL 183, 393 (Wharton or Austen); HIST 253; 282; HLTH 408; PHIL 260; POLS 243; PSY 292; RECR 241; SOC 325, 377.

When the core course and 12 hours of Women's Studies electives have been completed, the student will enroll in CMST, ENGL or PSY or SOC 498.

At least 6 of the required 18 semester hours for the minor must be 300 or 400-level courses.

Internships in a specific major discipline may be pursued as part of the Women's Studies minor, but these are in addition to the 18 credit hours indicated above.

Coordinator and Adviser: Professor Mollie Whalen, Women's Center, Rosenkrans East, 570-422-3472.

Suggested 4-year plan for scheduling Women's Studies courses to complete the minor.

Year 1: CMST/ENGL 150 followed by a 100- or 200- level elective Women's Studies/ General Education course.

Year 2: 6 credits of 100- or 200-level Women's Studies/General Education courses.

Year 3: 3 credits of 300- or 400-level Women's Studies elective

Year 4: CMST/ENGL/PSY/SOC 498

This is an interdisciplinary minor designed to enhance any degree program. Women's Studies seeks to recognize the diversity of human experience and examine the interplay of gender, race, class, and sexuality by focusing on the experience of women, the concept of gender, and the cultural productions by and about women within different contexts and across various identities and academic disciplines.

CMST/ENGL 150 WS: Introduction to Women's Studies (3:3:0)

This course provides an overview of the history, theories, and methodological approaches of Women's Studies; examines the implications of our cultural understandings of women, gender, race, class, and sexuality; raises questions about the goals and direction of social change; and reviews the impact of Women's Studies on traditional disciplines and knowledge. Prerequisite: ENGL 103 (may be taken concurrently).

CMST/ENGL/PSY/SOC 498 WS: Seminar in Women's Studies (3:3:0)

This course is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.



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Administrative Officers and Staff

President's Office

Robert J. Dillman
Susan L. McGarry
Holly M. McCoy

President of the University
Assistant to the President
Director of Social Equity

Academic Affairs

Evelyn C. Lynch
Jane S. Bray
James A. Fagin
Bonnie H. Neumann
Mark J. Kilker
Alvin Hall
Curtis D. Bauman
Elizabeth Abrams Buzzelli
Alan T. Chesterton
Roberta L. Keppel
David G. Schappert

Provost/Vice President for Academic Affairs
Interim Dean of School of Professional Studies
Dean of Graduate Studies and Research
Dean of School of Arts and Sciences
Interim Dean of School of Health Sciences and Human Performance
Director of Summer Sessions and Continuing Education
Director of Institutional Research
Registrar
Director of Admission
Director of Programs for Academic Support
Director of Library

Finance and Administration

Richard A. Staneski
Richard D. Bull
Charles P. Gillard
Gerald S. Levanowitz
David Sanders
Jack V. Swineford Jr.

Vice President for Finance and Administration
Director, Telecommunications
Controller and Director, Business Office
Director, Human Resources Management
Director, Facilities Management
Director, Computing Center

University Advancement

Isaac W. Sanders
Douglas Smith
Robert A. Kelley
Peter Nevins
Mary Frances Postupack
James Bebla

Vice President for University Advancement
Director of University Relations
Director of Alumni Relations and Development
Sports Information Director
Director of Corporate Relations and Economic Development
Major Gifts Officer and Donor Relations

Student Affairs

Valerie M. Hodge
John A. Abbruzzese
Joy Marlene Richman
Maria Hackney
Patricia A. Kashner
David J. Marazas
Michelle Hoffman
Fredric Moses
Robert Moses
Wanda Ochei
Georgia Prell
Dennis B. Steigerwalt
Sarah J. Goodrich

Vice President for Student Affairs
Director, Counseling and Psychological Services
Director, Intercollegiate Athletics
Director, University Health Services
Assistant to the Vice President
Director of Law Enforcement and Chief of Police
Director, Mekeel Child Care Center
Director of Student Activity Association, Inc.
Director of Residence Life
Coordinator of Judicial and Commuter Student Affairs
Director of Student Financial Aid
Director of Career Services
Coordinator of Camps and Conferences

Academic Faculty and University Administration

Two dates are indicated following each individual's name. The first indicates the year of appointment to the university and the second denotes the year of appointment to the academic rank or position indicated.

Robert J. Dillman (1996, 1996)

President of the University

B.S., 1963, SUNY at New Paltz; M.S., 1970, Penn State University; Ph.D., 1976, Clark University

John A. Abbruzzese, III (1996, 2000)

Director, Associate Professor and Psychologist of Counseling and Psychological Services

A.B., 1978, Brown University; Ph.D., 1989, University of Pittsburgh

Robert Ackerman (1984, 1998)

Professor of Speech Pathology and Audiology

B.A. 1972, SUNY at Albany; M.S., 1976, Towson State University; Ph.D., 1982, Wichita State University

Ian H. Ackroyd-Kelly (1974, 1977)

Professor and Chair of Geography

B.A., 1966, Virginia Military Institute; M.A., 1972, Ph.D., 1975, University of North Carolina

Alfredo Ahumada (1996, 2000)

Associate Professor of Foreign Languages

B.A., 1983; M.A., 1988, Hunter College; M.Phil., 1993, Ph.D., 1995, City University of New York

Abdalla Aldras (1997, 1997)

Assistant Professor of Biological Sciences

B.S., 1981, Jordan University; M.S.P.H., 1987; Sc.D., 1991, Tulane University

Mary Beth Allen (1997, 1997)

Assistant Professor of Reading

B.S., 1979, University of Maryland; M.Ed., 1989, Towson State University; Ed.D., 1995, East Texas State University

Richard D. Amori (1972, 1983)

Professor and Chair of Computer Science

B.S., 1964, University of Scranton; M.S., 1965, Bucknell University; M.S., 1974, New York University

Angella D. Angelini (1970, 1975)

Assistant Professor, Librarian

B.A., 1969, Caldwell College; M.S.L.S., 1971, Villanova University

Leslie D. Antonette (1996, 1996)

Assistant Professor of English

B.A., 1990, M.A., 1992, Ph.D., 1996, University of California at Riverside

Joseph Ashcroft (1977, 1992)

Professor of Communication Studies

A.B., 1969, University of Scranton; M.A., 1978, East Stroudsburg University of Pennsylvania; Ph.D., 1990, New York University

*Edward F. Bachert (1998, 1998)

Instructor of Sociology

B.S., 1993, Kutztown University of Pennsylvania; M.S., 1996, St. Joseph's University

R. Squier Ball (1969, 1973)

Professor of Foreign Languages

B.A., 1959, Princeton University; M.A., 1963, Middlebury College; U. de Paris License es' Lettres; 1965; D.M.L., 1969, Middlebury College

Curtis D. Bauman (1989, 1991)

Director of Institutional Research

B.A., 1973, University of Delaware; M.A., 1978, Lehigh University

John J. Baxevanis (1968, 1972)

Professor of Geography

B.A., 1961, City University of New York; M.A., 1963, Indiana University of Pennsylvania; Ph.D., 1968, University of North Carolina

Todd Behr (1989, 1989)

Assistant Professor of Economics

B.A., 1973, Gettysburg College; M.B.A., 1978, Lehigh University

Allan N. Benn (1985, 1995)

Professor of English

B.A., 1974, Mercer University; M.A., 1976, Ph.D., 1983, Case Western Reserve University

Margaret L. Benson (1996, 1996)

Assistant Professor of Early Childhood and Elementary Education

B.A., 1975, University of Missouri at Kansas City; M.S., 1989, Ph.D., 1995, Florida State University

Leslie A. Berger (1979, 1986)

Assistant Professor, Librarian

B.A., 1975, Lebanon Valley College; M.L., 1976, University of South Carolina

Conrad H. Bergo (1980, 1994)

Professor of Chemistry

B.A., 1965, St. Olaf College; Ph.D., 1972, University of Minnesota

*Eli Berman (1982, 1982)

Associate Professor of Movement Studies and Exercise Science

B.A., 1952, New York University; M.D., 1957, University of Geneva, Switzerland

Adenike C. Bitto (1998, 1998)

Associate Professor of Health

B.S. M.B., 1977, University of Ibadan, Nigeria; M.P.H., 1984, Ph.D., 1994, Johns Hopkins University

Gary Braman (1983, 1988)

Associate Professor of Media Communication and Technology

A.A.S., 1972, Monroe Community College; B.S., 1975, Rochester Institute of Technology; M.S., 1977, Ed.S., 1978, Indiana University

Jane S. Bray (1994, 2000)

Associate Professor of Early Childhood and Elementary Education, Interim Dean of Professional Studies

B.S., 1972, M.A., 1974, Kutztown University of Pennsylvania; Ed.D., 1994, Lehigh University

*Christina Brecht (2000, 2000)

Instructor of Health

B.S., 1976, Pennsylvania State University; M.P.H., 1981, University of Michigan

* part-time

Shawn A. Brown (2000,2000)

Assistant Professor of Early Childhood and Elementary Education

B.S., 1989, M.S., 1991, Florida Agricultural and Mechanical University; Ph.D., 1998, Florida State University

Kathleen M. Brunkard (1984, 1997)

Professor of Biological Sciences

B.S., 1977, Southern Connecticut State College; M.S., 1979, Syracuse University; Ph.D., 1982, University of Massachusetts

David Buckley (1990, 2000)

Professor of Physics

B.A., 1981, Rutgers College; M.S., 1983, Penn State University; Ph.D., 1994, University of Massachusetts

Richard D. Bull (1978, 1978)

Director of Telecommunications

B.E.E., 1973, Ohio Institute of Technology; M.Ed., 1977, Xavier University

Seewoonundun Bunjun (1979, 1989)

Professor of Economics

B.A., 1968, University of Delhi; M.A., 1970, Delhi School of Economics; Ph.D., 1979, Penn State University

Teri L. Burcroff (1992, 1998)

Associate Professor of Special Education and Rehabilitation

B.A., 1981, SUNY at Fredonia; M.S., 1983; Ph.D., 1991, SUNY at Buffalo

William J. Burt (1989, 1989)

Associate Professor of Hotel, Restaurant & Tourism Management

B.S., 1967, Columbia University; Ed.D., 1988, Temple University

Elizabeth Abrams Buzzelli (1980, 1986)

Registrar

B.M., 1975, Ithaca College; M.Ed., 1977, M.A., 1978, Indiana University of Pennsylvania

Sharmaine Cady (1989, 1994)

Associate Professor of Chemistry

B.S., 1970, Muhlenberg College; Ph.D., 1976, Michigan State University

Elzar Camper Jr. (1972, 1986)

Professor of Media Communication and Technology

B.S., 1970, Bloomsburg University of Pennsylvania; M.L.S., 1975, Rutgers University; M.Ed., 1972; Ed.D., 1983, Temple University

Alberto Jose Cardelle (1999, 1999)

Assistant Professor of Health

B.S., 1986, Tulane University; M.P.H., 1989, Boston University; Ph.D., 1999, University of Miami

Kevin Casebolt (1999, 1999)

Assistant Professor of Movement Studies and Exercise Science

B.A., 1992, Northern Illinois University; M.S Ed., 1995, Ph.D., 1998, University of Kansas

Domenico Cavaiuolo (1999, 1999)

Assistant Professor of Special Education and Rehabilitation

B.S., 1981, M.S., 1987, SUNY at Buffalo; Ph.D., 1994, Temple University

Diane P. Cavanagh (1991, 1996)

Associate Professor and Chair of Special Education and Rehabilitation

B.A., 1976, Marist College; M.Ed., 1977, Slippery Rock University of Pennsylvania;
Ed.D., 1990, Columbia University

Joseph M. Cavanaugh (1974, 1981)

Professor and Chair of Mathematics

B.S., 1965, Siena College, M.A., 1967, Ph.D., 1970, Syracuse University

Cecile Belisle Champagne (1989, 1994)

Associate Professor of Nursing

B.S., 1962, Salve Regina College; M.S., 1964, Boston University; D.N.Sc., 1992,
Widener University

Alan T. Chesterton (1974, 1974)

Director of Admission

B.S., 1968, M.A., 1974, West Chester University of Pennsylvania

Constantinos A. Christofides (1971, 1981)

Professor of Economics

B.S., 1967, Rider College; M.S., 1968, Ph.D., 1977, Lehigh University

Russell A. Clark (1993, 1993)

Assistant Professor of Hotel, Restaurant and Tourism Management

B.S., 1972, B.S., 1983, M.S., 1987, New Hampshire College

Merlyn J. Clarke (1970, 1973)

Associate Professor and Chair of Political Science

B.A., 1965, Utah State University; M.A., 1968, Penn State University

Robert Cohen (1994, 1999)

Associate Professor of Physics

B.S., 1985, Penn State University; M.S., 1988, Drexel University; Ed.M., 1991, Temple
University; Ph.D., 1993, Drexel University

Charles L. Cole (1986, 1986)

Associate Professor of Computer Science

B.S., 1969, M.Ed., 1973, East Stroudsburg University of Pennsylvania; M.S., 1979,
Rutgers University; B.S., 1984, East Stroudsburg University of Pennsylvania

Barbara G. Collins (1977, 1989)

Professor of Sociology

B.A., 1974, Kutztown University of Pennsylvania; M.S.W., 1975, Ph.D., 1988, Rutgers
University

John H. Condit (1984, 1994)

Professor of English

B.A., 1958, Amherst College; M.A.T., 1959, Harvard University; Ph.D., 1983, Columbia
University

Patricia M. Crotty (1984, 1992)

Professor of Political Science

B.A., 1961, College of New Rochelle; M.A., 1962, Boston College; Ph.D., 1985, SUNY at
Binghamton

Donald M. Cummings (1986, 1999)

Associate Professor of Movement Studies and Exercise Science

B.S., 1984, College of Charleston; M.S., 1985, East Stroudsburg University of
Pennsylvania; Ph.D., 1997, Temple University

Shala E. Davis (1997, 1997)

Assistant Professor of Movement Studies and Exercise Science

B.S., 1987, University of Delaware; M.S., 1989, Wake Forest University; Ph.D., 1994, University of Virginia

Michael C. Decosmo (1984, 1993)

Associate Professor of Economics

B.S.A., 1976, Villanova University; M.B.A., 1984, Lehigh University

Julie Del Giorno (1999, 1999)

Instructor, Athletics

B.S., 1986, United States Military Academy; M.A., 1998, University of Central Arkansas

*Don J. Dellipriscoli (2000, 2000)

Instructor of History

B.S., 1993, M.A., 1995 East Stroudsburg University of Pennsylvania

Michael Doherty (1989, 2000)

Professor of Chemistry

B.S., 1979, Wabash College; M.S., 1982, Indiana University at Bloomington; Ph.D., 1989, Purdue University

Marie M. Donaghay (1992, 1992)

Associate Professor of History

B.A., 1965, University of Delaware; M.A., 1967, Ph.D., 1970, University of Virginia

Patrick C. Dorian (1990, 1999)

Associate Professor of Music

B.M., 1978, Ithaca College; M.M., 1979, Northwestern University

Dennis C. Douds (1966, 1966)

Assistant Professor of Movement Studies and Exercise Science

B.S., 1963, Slippery Rock University of Pennsylvania; M.S., 1966, West Virginia University

Anthony L. Drago (1992, 1996)

Associate Professor and Chair of Psychology

B.A., 1976, East Stroudsburg University of Pennsylvania; M.A., 1980, Marywood College; Ed.D., 1986, Lehigh University

Kathleen M. Duguay (1997, 1997)

Assistant Professor of English

B.A., 1981, North Adams State College; M.A., 1985, SUNY at Binghamton; Ph.D., 1997, SUNY at Albany

Gregory B. Dwyer (1998, 1998)

Assistant Professor of Movement Studies and Exercise Science

B.A., 1982, University of Texas at Austin; M.A., 1983, Wake Forest University; Ph.D., 1992, Indiana University

John Elwood (1999, 1999)

Assistant Professor of Physics

B.A., 1991, Cornell University; M.S., 1993, Ph.D., 1996, California Institute of Technology

James W. Emert (1981, 1981)

Assistant Professor of Computer Science

A.A., 1972, Montgomery County Comm. College; B.A., 1974, East Stroudsburg University of Pennsylvania; M.A., 1981, Temple University

Dennis J. Erb (1979, 1990)

Professor and Chair of Chemistry

B.A., 1973, East Stroudsburg University of Pennsylvania; Ph.D., 1978, SUNY at Buffalo

* part-time

Thomas Eshelman (1969, 1972)

Professor of Philosophy and Religious Studies

B.A., 1953, University of Dayton; M.A., 1955, Ph.D., 1961, University of Cincinnati

Sussie Eshun (1996, 1996)

Assistant Professor of Psychology

B.A., 1989, University of Ghana; M.A., 1992, Ph.D., 1996, SUNY at Stony Brook

James A. Fagin (2000, 2000)

Dean of Graduate Studies and Research

B.A., 1971, University of Nevada; M.S., 1972, Ph.D., 1978, Southern Illinois University

Frederick Fedorko (1977, 1984)

Professor of Reading

B.S., 1964, Edinboro University of Pennsylvania; M.Ed., 1968, SUNY at Buffalo; Ph.D., 1980, University of Akron

Larry Fisher (1981, 1988)

Professor of Music

B.S., 1963, M.Ed., 1970, West Chester University of Pennsylvania; D.Ed., 1981, Penn State University

Terry L. Flatt (1985, 1991)

Associate Professor and Chair of Music

B.M.Ed., 1961, Phillips University; M.M.Ed., 1964, University of Oklahoma, M.S., 1979, Indiana University

Robert P. Fleischman (1996, 2000)

Associate Professor of Movement Studies and Exercise Science

B.A., 1980, University of Michigan; J.D., 1985, Hofstra University School of Law; M.S., 1995, University of Massachusetts

Kathleen Foster (1997, 1997)

Assistant Professor of Professional and Secondary Education

B.S., 1972, East Stroudsburg University of Pennsylvania; M.Ed., 1975, Kutztown University of Pennsylvania; Ed.D., 1992, Temple University

Germain E. Francois (1979, 1987)

Professor and Chair, Academic Enrichment and Learning

B.A., 1972, Ed.M., 1973, Tufts University; Ph.D., 1979, University of Connecticut

Felix Friedman (1982, 1988)

Professor of Computer Science

M.S. 1959, Leningrad University (U.S.S.R.), Ph.D. 1975, Central Research Institute of Economics & Mathematics of the Academy of Sciences of U.S.S.R., Moscow

Glenn C. Geiser-Getz (1994, 1999)

Associate Professor of Communication Studies

B.A., 1988, University of Puget Sound; M.A., 1990, University of Arkansas; Ph.D., 1994, University of Iowa

Elizabeth Gibbons (1992, 1997)

Associate Professor of Movement Studies and Exercise Science

B.F.A., 1978, M.F.A., 1981, University of N. Carolina; Ph.D., 1989, Texas Women's University

Terry C. Giffel (1976, 1984)

Professor of Media Communication and Technology

B.S., 1967; M.S., 1970, Indiana State University; Ph.D., 1976, University of Wisconsin-Madison

Charles P. Gillard (1976, 1979)

Controller and Director, Business Office

B.A., 1964, M.B.A., 1970, University of Scranton

Marcia V. Godich (1987, 1996)

Associate Professor of Communication Studies

B.A., 1964, M.A., 1969, Ph.D., 1994, University of Pittsburgh

Steven Godin (1991, 1997)

Professor of Health

B.A., 1980, California State University-Fullerton; M.S., 1983, Ph.D., 1989, Illinois Institute of Technology; M.P.H., 1994, Robert Wood Johnson Medical School and Rutgers University

Jon S. Gold (1995, 2000)

Associate Professor of Chemistry

B.S., 1980, M.S., 1981, Ph.D., 1987, University of California at Santa Cruz

Arnold J. Goldfuss (1977, 1983)

Professor of Movement Studies and Exercise Science

B.A., 1968, Queens College; M.S., 1970, Ph.D., 1976, Penn State University

Aurora Gonzalez (1968, 1968)

Associate Professor of Foreign Languages

B.S., 1964, University of Oriente; M.A., 1968, Middlebury College

Patricia Graham (1977, 1999)

Professor, Academic Enrichment and Learning

B.A., 1972, Rutgers University; M.Ed., 1974, Antioch University; D.Ed., 1995, University of Massachusetts Amherst

Paul Graham (1988, 1994)

Associate Professor, Librarian

B.A., 1971, SUNY at Fredonia; M.L.S., 1975, SUNY at Albany

Mary Tod Gray (1991, 1991)

Assistant Professor of Nursing

B.S.N., 1965, University of Michigan; M.A., 1969, New York University

David C. Gumpfer (1973, 1992)

Professor of Psychology

B.S., 1965, M.S., 1967, Ph.D., 1970, Penn State University

Bruce L. Haase (1969, 1973)

Professor of Biological Sciences

B.S., 1961, Concordia Teachers College; M.A., 1962, Bowling Green State University; Ph.D., 1969, University of Wisconsin

Maria Hackney (1998, 1998)

Director of University Health Services

B.S.N., 1975, Penn State University; M.S., 1990, University of Scranton

Patty O. Hannon (1990, 1990)

Assistant Professor of Nursing

B.S.N., 1975, M.S.N., 1976, Medical College of Georgia

Jeffrey W. Hardy (1998, 1998)

Assistant Professor of Geography

B.S., 1991, Mississippi State University; M.S., 1993, Ph.D., 1998, Louisiana State University

Susan Harlan (1994, 1996)

Assistant Professor of Early Childhood and Elementary Education

B.A., 1972, Millersville University of Pennsylvania; M.S., 1981, Marywood College;
Ph.D., 1996, Rutgers University

Kelly A. Harrison (1993, 1996)

Assistant Professor of Movement Studies and Exercise Science

B.S., 1988, University of Delaware; M.S., 1989, Ohio University

Harrison G. Hartman (1964, 1976)

Professor and Chair of Economics

B.S., 1963, Kutztown University of Pennsylvania; M.A., 1964, Temple University;
Ph.D., 1976, New York University

John M. Hauth (1985, 1999)

Associate Professor of Movement Studies and Exercise Science

B.S., 1983, East Stroudsburg University of Pennsylvania; M.S., 1984, University of
Arizona

Peter J. Hawkes (1986, 1998)

Professor of English

B.A., 1968, Fordham University; M.A., 1972, New York University; M.Phil., 1976,
Ph.D., 1986, Columbia University

Carol R. Heinrich (1987, 2000)

Associate Professor of Nursing

B.S.N., 1972, Trenton State College; M.A., 1978, New York University; Ph.D., 1999,
Rutgers University

James N. J. Henwood (1966, 1975)

Professor of History

B.S., 1954, West Chester University of Pennsylvania; A.M., 1958, Ph.D., 1975,
University of Pennsylvania

Kathleen S. Hillman (1992, 1997)

Professor and Chair of Health

B.S., 1975, Ohio University; M.Ed., 1979, Xavier University; Ph.D., 1983, University
of Toledo

Donna L. Hodge (1986, 1993)

Professor of Psychology

B.A., 1978, Connecticut College; M.A., 1981, Ph.D., 1984, University of Michigan

Valerie M. Hodge (1976, 1993)

Vice President for Student Affairs

B.S., 1973, Adelphi University; M.S., 1974, SUNY at Albany

Michelle Hoffman (2000, 2000)

Director of Mekeel Child Care Center

B.S., 1990, Clarion University of Pennsylvania

Edward Hogan (1982, 1987)

Professor of Mathematics

A.B., 1964, Hamilton College; M.A., 1967, Ph.D., 1971, M.S., 1978, Syracuse University

Neil W. Hogan (1970, 1977)

Professor of History

B.S., 1958, M.A., 1965, John Carroll University; Ph.D., 1971, Ohio State University

Paul N. Houle (1975, 1981)

Professor and Chair of Physics

B.S., 1968, M.S., 1973, Ph.D., 1975, Lowell Technical Institute

Jane E. Huffman (1986, 1995)

Professor of Biological Sciences

B.A., 1973, M.S., 1976, University of Connecticut; Ph.D., 1983, Rutgers University

Diane W. Husic (1988, 1998)

Professor of Chemistry

B.S., 1981, Northern Michigan University; Ph.D., 1986, Michigan State University

Ramona Hylton (1999, 1999)

Assistant Professor, Librarian

B.A., 1979, Spelman College; M.S., 1983, Long Island University

Harold Jacobs (1987, 1994)

Professor of Mathematics

B.S., 1964, City University of New York; M.S., 1966, Ph.D., 1969, University of Illinois

Joseph A. Jarvis (1967, 1967)

Associate Professor

B.A., 1960, St. John's University; M.A., 1961, Columbia University

Patricia J. Jersey (1974, 1991)

Distinguished Associate Professor, Librarian

B.S., 1968, West Virginia University; M.L.S., 1969, University of Pittsburgh; Cert. of Advanced; Studies in Library Science, 1990, University of Pittsburgh

Teresa Michelle Jones-Wilson (2000, 2000)

Assistant Professor of Chemistry

B.S., 1988, Lafayette College; M.A., 1990, Ph.D., 1995, Washington University

Mamadou K. Kane (1973, 1982)

Associate Professor of Economics

B.A., 1970, M.A., 1972, New York University

Karen Johnson Karner (1980, 1992)

Professor and Chair of Nursing

B.S.N., 1976, Gwynedd Mercy College, M.S.N., 1979, University of Pennsylvania; Ed.D., 1989, Rutgers University

Patricia A. Kashner (1995, 1995)

Assistant to the Vice President for Student Affairs

B.S., 1978, Lock Haven University of Pennsylvania; M.P.A., 1992, Kutztown University of Pennsylvania

Paula M. Kelberman (1990, 1999)

Professor of Early Childhood and Elementary Education

B.A., 1973, Douglass College; M.Ed., 1975, Ed.D., 1988, Rutgers University

Martha S. Kellow (1991, 1996)

Associate Professor of Early Childhood and Elementary Education

B.S.E.D., 1975, M.S., 1980, Bloomsburg University of Pennsylvania; Ph.D., 1990, University of Pennsylvania

Robert A. Kelley (1987, 1994)

Director of Alumni Relations and Development

B.S., 1971, East Stroudsburg University of Pennsylvania

Richard Kelly (2000, 2000)

Assistant Professor of Chemistry

B.S., 1979, Davidson College; Ph.D., 1984, University of Vermont

Roberta L. Keppel (1988, 1988)

Director of Programs for Academic Support

B.A., 1963, Middleburg College; M.A., 1964, Harvard University; M.Ed., 1976, Trenton State College

John Kerckmar (1989, 1995)

Professor of Economics

B.B.A., 1971, University of Texas at El Paso; M.B.A., 1981, Ph.D., 1985, University of Houston

Rhonda Kerckmar (1989, 1994)

Associate Professor of English

B.A., 1974, North Carolina State University; M.A., 1986, Ph.D., 1989, Emory University

Peter N. Kidman (1977, 1991)

Professor of Economics

B.S., 1963, Arizona State University; M.A., 1965, Ph.D., 1971, West Virginia University

Mark J. Kilker (1981, 1991)

Associate Professor of Nursing, Interim Dean of Health Sciences and Human Performance

B.S.N., 1975, Trenton State College; M.S.N., 1980, University of Pennsylvania; Ed.D., 1994, Teachers College, Columbia University

Haklin Kimm (1999, 1999)

Associate Professor of Computer Science

B.S., 1979, Korea University at Seoul; M.S., 1984, Ph.D., 1988, University of Oklahoma

Mary E. Klein (2000, 2000)

Instructor of Nursing

B.S., 1966, Elizabethtown College; M.S.N., 1978, University of Pennsylvania

Pamela Kramer (1991, 1996)

Associate Professor of Early Childhood and Elementary Education

B.A., 1978, Marian College; M.A., 1982, Kean College; Ed.D., 1994, Lehigh University

M. Eric Kruger (1973, 1991)

Professor of Special Education and Rehabilitation

B.S., 1967, Johnson State College; M.Ed., 1971, St. Michael's College; Ed.D., 1976, Lehigh University

Caroline P. Kuchinski (1992, 1997)

Assistant Professor of Movement Studies and Exercise Science

B.S., 1980; M.S., 1986, East Stroudsburg University of Pennsylvania

Thomas C. Laduke (1997, 2000)

Associate Professor of Biological Sciences

B.S., 1981; M.S., 1983, Michigan State University; Ph.D., 1991, City University of New York

John B. Lalley (1964, 1964)

Assistant Professor, Librarian

B.A., 1960, University of Pittsburgh; M.L.S., 1962, Carnegie Institute of Technology

Richard Lally (2000, 2000)

Assistant Professor of Movement Studies and Exercise Science

B.A., 1990, Providence College; Ph.D., 1999, Pennsylvania State University

*Miharu Lane (1998, 1998)

Instructor of Art

B.A., 1991, East Stroudsburg University of Pennsylvania; M.F.A., 1995, Marywood University

Douglas Lare (1998, 1998)

Assistant Professor of Professional and Secondary Education

B.A., 1976, Macalester College; M.Ed., 1979, Harvard Graduate School of Education;
Ed.D., 1995, Lehigh University

David A. Larrabee (1995, 1999)

Associate Professor of Physics

B.S., 1976; M.S., 1978, Cornell University; M.B.A., 1993, Philadelphia College of
Textiles and Science; Ph.D., 1980, Cornell University

Mary K. Lavelle (1990, 1990)

Assistant Professor, Librarian

B.A., 1975, Marywood College; M.A., 1977, University of Denver; M.B.A., 1982, Wilkes
College

Ronald M. Law (1999, 1999)

Assistant Professor of Theatre

B.A., 1981, M.F.A., 1983, University of North Carolina at Greenboro

James H. Leiding (1968, 1968)

Distinguished Professor and Chair of Sociology

B.S., 1959, Concordia Teachers College; M.A., 1961, Western Reserve; Ph.D., 1965, Ball
State University

Donna L. Leitner (1998, 1998)

Assistant Professor and Psychologist of Counseling and Psychological Services

B.A., 1982, M.A., 1985, Lehigh University; M.S., 1991, University of Pennsylvania

Richard W. Leland (1975, 1984)

Professor of Communication Studies

B.A., 1968, University of Minnesota; M.A., 1970, University of Hawaii; Ph.D., 1975,
University of Minnesota

Denise Lepage (1992, 1997)

Associate Professor of Early Childhood and Elementary Education

B.S., 1975, M.Ed., 1977, Kutztown University of Pennsylvania; Ed.D., 1991, Lehigh
University

Gerald S. Levanowitz (1979, 1979)

Director of Human Resources Management

B.A., 1970, Mansfield University of Pennsylvania; M.A., 1972, Southern Illinois
University

Michael R. Liberman (1971, 1977)

Professor of English

B.A., 1965, University of Illinois; M.A., 1966, University of Chicago; Ph.D., 1971,
University of Nebraska

Paul Lippert (1985, 1998)

Professor of Communication Studies

B.A., 1977, University of Michigan; M.A., 1980, Ph.D., 1990, New York University

William C. Livingood Jr. (1973, 1983)

Professor of Health

A.B., 1966, Villanova University; Ph.D., 1976, Southern Illinois University

William Loffredo (1994, 1996)

Associate Professor of Chemistry

B.S., 1982, Lebanon Valley College; Ph.D., 1988, Ohio State University

Wilfredo Lopez (1976, 1979)

Associate Professor, Director of Upward Bound

A.A., 1968, Middlesex County College; B.A., 1970, M.A., 1973, Montclair State College

Daniel G. Luongo (1965, 1978)

Associate Professor of Art

B.S., 1962, M.Ed., 1964, D.Ed., 1984, Penn State University

Evelyn C. Lynch (2000, 2000)

Provost and Vice President for Academic Affairs

B.S., 1969, University of Tennessee; M.S., 1971, Ed.D., 1981, Indiana University

Richard Madigan (1995, 1999)

Associate Professor of English

B.A., 1989, University of Florida; M.F.A., 1990, Indiana University

David J. Marazas (1976, 1990)

Director of Law Enforcement and Chief of Police

B.S., 1975, Penn State University

Kenneth M. Mash (1997, 1997)

Assistant Professor of Political Science

B.A., 1987, Queens College, City University of New York; M.A., 1990; Ph.D., 1997, Penn State University

Terry L. Master (1992, 1998)

Professor of Biological Sciences

B.S., 1976, Muhlenberg College; M.S., 1980, East Stroudsburg University of Pennsylvania; Ph.D., 1989, Lehigh University

*Claranne Mathiesen (1995, 1995)

Assistant Professor of Nursing

B.S., 1985, East Stroudsburg University of Pennsylvania; M.S., 1993, Villanova University

Mary Ann Matras (1988, 1998)

Professor of Mathematics

B.S., 1970, University of Illinois; M.A., 1974, Governors State University; Ph.D., 1988, University of Maryland

Mary McClanahan (1973, 1973)

Assistant Professor of Special Education and Rehabilitation

B.S., 1968, M.S., 1970, Kansas State Teachers College

Holly M. McCoy (1999, 1999)

Director of Social Equity

B.A., 1989, University of Notre Dame; J.D., 1992, University of Pittsburgh School of Law

Robert McDonald (1983, 1983)

Associate Professor of Computer Science

B.S., 1959, U.S. Military Academy; M.S., 1968, Rensselaer Polytechnic Institute; M.S., 1971, New York University; M.S., 1983, Iowa State University

Susan L. McGarry (1988, 1997)

Assistant to the President

B.S., 1983, Ursinus College; M.S., 1991, University of Scranton

Kim L. McKay (1992, 1995)

Associate Professor of English

B.S., 1984, East Stroudsburg University of Pennsylvania; M.A., 1987, Ph.D., 1990, Lehigh University

Robert M. McKenzie (1992, 2000)

Professor of Communication Studies

B.A., 1984, Millersville University of Pennsylvania; M.A., 1987, Ph.D., 1990, Penn State University

Maureen McLaughlin (1990, 1996)

Professor of Reading

B.A., 1973, M.S., 1976, Marywood College; Ed.D., 1983, Boston University

Robert A. McMullin (1987, 1994)

Associate Professor of Hotel, Restaurant and Tourism Management

B.S., 1980, Bloomsburg University of Pennsylvania; M.B.A., 1987, Phila. College of Textile & Science; M.A., 1994, East Stroudsburg University of Pennsylvania; Ed.D., 1998, Widener University

*Edward F. Meehan (1992, 1992)

Assistant Professor of Health

B.S., 1976, Hunter College; M.P.H., 1978, University of North Carolina

Ronald Meyers (1966, 1970)

Professor of English

A.B., 1957, Brooklyn College; A.M., 1959, Columbia University; Ph.D., 1963, New York University

Barbara Micco (1997, 1997)

Assistant Professor of Academic Enrichment and Learning

B.A., 1984, Rutgers College, M.A., 1987, Radford University; Ph.D., 1993, The American University

Joseph L. Miele (1990, 1995)

Associate Professor of Psychology

B.A., 1982, Rider College; Ph.D., 1986, SUNY at Albany

Raymond G. Milewski (1979, 1987)

Associate Professor of Biological Sciences

B.S., 1970, Ph.D., 1976, University of Pittsburgh

Carol Miller (1991, 1997)

Associate Professor of Hotel, Restaurant and Tourism Management

B.S., 1981, East Stroudsburg University of Pennsylvania; M.B.A., 1990, Seton Hall University

Edith F. Miller (1987, 2000) *Professor, Academic*

Enrichment and Learning, and Coordinator of Disability Services

B.A., 1968, Gettysburg College; M.Ed., 1985, East Stroudsburg University of Pennsylvania; Ed.D., 1994, Temple University

Robert W. Miller (1977, 1985)

Professor of Music

B.M., 1973, University of Michigan; M.M., 1974, Peabody Conservatory of Music; D.M.A., 1979, Peabody Institute of Johns Hopkins University

Ann F. Millett (1987, 1993)

Assistant Professor of Speech Pathology and Audiology

B.S., 1979, M.S., 1980, College of St. Rose

Fred Misurella (1978, 1985)

Professor of English

B.A., 1962, Montclair State College; M.A., 1963; Ph.D., 1975, University of Iowa

Irene Mitchel (1961, 1969)

Professor of Art

B.S., 1954, Kutztown University of Pennsylvania; M.S., 1958, D.Ed., 1968, Penn State University

* part-time

Jesse C. Moore (1975, 1980)

Professor and Chair of Reading

B.A., 1964, Ursinus College; M.A., 1966; D.Ed., 1974, Lehigh University

Mary Ann Moore (1999, 1999)

Assistant Professor of Physics

B.M., 1973, State University at Potsdam; M.S., 1976,

B.A., 1983, Ph.D., 1988, University of Tennessee

Albert J. Moranville (1986, 1986)

Assistant Professor and Chair of Hotel, Restaurant and Tourism Management

B.S., 1983, East Stroudsburg University of Pennsylvania; M.B.A., 1986, University of Scranton

Thomas Moriarty (1999, 1999)

Assistant Professor of English

B.A., 1992, California State University at Northridge; M.A., 1994, Texas A. & M. University; Ph.D., 1999, Purdue University

Fredric A. Moses (1975, 1981)

Director of Student Activity Association, Inc.

B.A., 1971, Case Western Reserve; M.Ed., 1974, Kent State University

Robert M. Moses (1976, 1993)

Director of Residence Life

B.A., 1970, M.S., 1972, SUNY at Albany

Suzanne Mueller (1972, 1999)

Professor of Movement Studies and Exercise Science

B.S., 1969, M.Ed., 1973, East Stroudsburg University of Pennsylvania; D.Ed., 1997, Lehigh University

John G. Muncie (1967, 1969)

Professor of History

B.S., 1961, East Stroudsburg University of Pennsylvania; M.A., 1965, Ph.D., 1969, Kent State University

*Michael Muth (1990, 1990)

Assistant Professor of Sociology

B.G.S., 1972, Ohio University; J.D., 1975, University of North Carolina School of Law

Pattabiraman Neelakantan (1992, 1997)

Associate Professor of Economics

B.S., 1981, Indian Institute of Technology; M.S., 1983, National Institute for Training in Industrial Engineering; Ph.D., 1992, SUNY at Buffalo

Bonnie H. Neumann (1992, 1992)

Dean of Arts and Sciences

B.A., 1964, University of Wisconsin; M.F.A., 1966, University of Iowa;

Ph.D., 1972, University of New Mexico

Peter Nevins (1969, 1969)

Sports Information Director

B.B.A., 1960, University of Miami; M.Ed., 1984, East Stroudsburg University of Pennsylvania

Richard Nyamwange (1987, 1993)

Associate Professor of Economics

B.A., 1978, B.S., 1979, Jersey City State College; M.B.A., 1980, M.A., 1982, Long

Island University; Ph.D., 1991, Fordham University

Wanda Ochei (1998, 1998)

Coordinator of Judicial and Commuter Student Affairs

B.S., 1987, East Carolina University; M.S., 1995, Central Missouri State University

Susan O'Hearn (1992, 1997)

Associate Professor and Chair of Theatre

B.S., 1980, East Stroudsburg University of Pennsylvania; M.F.A., 1985, Catholic University

*Joni Oye-Benintende (1998, 1998)

Instructor of Art

B.F.F., 1972, Washington University; M.F.A., 1985, Tama Fine Art University, Japan

Jane Page (1984, 2000)

Professor and Chair of Speech Pathology and Audiology

A.B., 1962, Hunter College; M.S., 1964, University of Michigan;

Ph.D., 1991, Temple University

Richard F. Pekala (1988, 1997)

Professor of Biological Sciences

B.S., 1974, University of Vermont; B.A., 1978, North Adams College; M.S., 1981, University of Vermont; Ph.D., 1983, University of Massachusetts

Fernando Perez (1991, 1991)

Assistant Professor/Director of Student Support Services

B.A., 1974, Johnson State College; M.S., 1982, Florida State University

Margaret A. Persia (1992, 1994)

Assistant Professor of Hotel, Restaurant and Tourism Management

B.A., 1973, M.S., 1990, Penn State University; Ph.D., 1994, Clemson University

Cummings A. Piatt (1992, 1992)

Associate Professor of Professional and Secondary Education

B.S., 1961, East Stroudsburg University of Pennsylvania; M.Ed., 1966, Lehigh University; Ed.D., 1978, Nova University

Patricia Anne Pinciotti (1985, 1995)

Professor of Early Childhood and Elementary Education

B.A., 1971, Edgecliff College; Ed.M., 1979; Ed.D., 1982, Rutgers University

Mary Frances Postupack (1984, 1990)

Director of Corporate Relations and Economic Development

B.S., 1976, Penn State University; M.Ed., 1993, East Stroudsburg University of Pennsylvania

Georgia Prell (1979, 1989)

Director of Financial Aid

B.A., 1987, East Stroudsburg University of Pennsylvania

*Janet Primrose (1992, 1992)

Assistant Professor of Nursing

B.S., 1977, East Stroudsburg University of Pennsylvania; M.S., 1981, Northern Illinois University

Deborah E. Prince (1981, 1993)

Distinguished Professor of Mathematics

B.A. 1965, College of Wooster; M.A. 1966, Ph.D, 1970, University of Kansas

Richard G. Prince (1971, 1979)

Professor of Computer Science

B.A., 1963, College of Wooster; M.A., 1965, Ph.D., 1974, University of Kansas

Peter Pruim (1997, 1997)

Assistant Professor of Philosophy

B.A., 1976, Hope College; M.A., 1985; Ph.D., 1989, University of Wisconsin at Madison

Frank Michael Pullo (1974, 1993)

Professor of Movement Studies and Exercise Science

B.S., 1973, M.Ed., 1974, East Stroudsburg University of Pennsylvania; Ed.D., 1989, Temple University

Mary Faith Puskar (1965, 1983)

Associate Professor of Early Childhood and Elementary Education

B.S., 1962, Carlow College; M.Ed., 1965, Duquesne University

Samuel E. Quainoo (1998, 1998)

Assistant Professor of Political Science

B.A., 1982, University of Ghana; ICSA, Level 1, 1990, England; M.A., 1993, Ph.D., 1996, SUNY at Binghamton

Balakrishna R. Rao (1967, 1970)

Professor of Biological Sciences

B.S., 1957, Banaras Hindu University; M.S., 1959, Karnatak University; Ph.D., 1964, Ohio State University

Robert W. Reed (1995, 1998)

Associate Professor of Physics

B.S., 1963, Lafayette College; Ph.D., 1968, Penn State University

David C. Rheinheimer (1983, 2000)

Professor of Academic Enrichment and Learning

B.S., 1970, Drexel University; M.S., 1978, East Stroudsburg University of Pennsylvania; M.S., 1989, Ed.D., 1999 Rutgers University

Peter Roche De Coppens (1970, 1970)

Professor of Sociology

B.S., 1965, Columbia University; M.A., 1966, Ph.D., 1973, Fordham University

Joy Marlene Richman (2000, 2000)

Director of Intercollegiate Athletics

B.S. 1977, University of Georgia; M.Ed., 1978, Springfield College; Ph.D., 1992, Ohio State University

Susan Elaine Rogers (1978, 1985)

Professor and Chair of Recreation and Leisure Services Management

B.S., 1972, North Georgia College; M.S., Ed., 1975, Northern Illinois University; Ed.D., 1978, University of Oregon

Linda K. Rogers (1998, 1998)

Assistant Professor of Early Childhood and Elementary Education

B.A., 1969, Blackburn College; M.S., 1988, University of Scranton; Ed.D., 1997, SUNY at Binghamton

Sally A. Ross (1995, 1995)

Associate Professor of Sociology

B.A., 1956, Central State University - Ohio; M.S.W., 1968, University of

Pennsylvania

Christopher L. Saffici (1998, 1998)

Assistant Professor of Movement Studies and Exercise Science

B.A., 1990, Rutgers University; M.Ed., 1994, Ph.D., 1996, University of Houston

Richard K. Salch (1969, 1973)

Professor of Biological Sciences

B.A., 1961, Central College; M.S., 1962, Ph.D., 1969, Rutgers University

David Sanders

Director, Facilities Management

B.S., 1975, Texan A & M University; M.B.A., 1998, City University

Isaac W. Sanders (2000, 2000)

Vice President for University Advancement

B.S. 1971, Tuskegee Institute; M.S., 1973, Cornell University; Ph.D., 1984, Kansas State University

Gina Scala (1993, 1997)

Associate Professor of Special Education and Rehabilitation

B.S., 1979, Bloomsburg University of Pennsylvania; M.Ed, 1981, Ed.D., 1988, Lehigh University

K. Bernard Schade (1968, 1971)

Associate Professor of Music

B.M., 1961, University of Texas; S.M.M., 1965, Union Theological Seminary; Ed.D., 1976, Penn State University

David G. Schappert (1993, 1993)

Director of Library

B.A., 1977, Michigan State University; M.L.S., 1983, Drexel University

N. Paul Schembari (1991, 1996)

Associate Professor of Mathematics

B.S., 1984, Long Island University; M.A., 1987, M.Phil., 1989, Ph.D., 1991, Syracuse University

Edward Schneider (1999, 1999)

Assistant Professor of Media Communication and Technology

B.S., 1993, M.S. 1994, SUNY at Potsdam

Robert F. Schramm (1970, 1975)

Professor of Chemistry

B.S., 1964, St. Joseph's College; Ph.D., 1969, University of Pennsylvania

Bradford S. Seid (1980, 1996)

Professor of Recreation and Leisure Services Management

B.S., 1976, SUNY at Albany; M.S., 1980, Michigan State University; Ed.D., 1994, Temple University

Judy Selenski (1991, 1991)

Assistant Professor of Nursing

B.S.N., 1978, Wilkes College; M.S.N., 1984, College Misericordia

Alan Shaffer (1999, 1999)

Assistant Professor of Chemistry

B.A., 1973, Otterbein College; M.S., 1975, Miami University of Ohio; Ph.D., 1988, Memphis State University

Mertice M. Shane (1974, 1978)

Associate Professor of Movement Studies and Exercise Science

- B.S., 1973, University of Evansville; M.A., 1974, Tennessee State University
 Ellen Shannon (2000, 2000)
Assistant Professor of Nursing
 B.S.N., 1990, East Stroudsburg University of Pennsylvania; M.S.N., 1992, University of Maryland
- Richard L. Sheely (1992, 1992)
Assistant Professor of Professional and Secondary Education
 A.B., 1957, Mount Union College; A.M., 1960, John Carroll University;
 Ed.D., 1970, Columbia University
- Jerome W. Sheska (1988, 1996)
Associate Professor of Movement Studies and Exercise Science
 B.S., 1968, M.Ed., 1981, East Stroudsburg University of Pennsylvania
- Niandong Shi (1992, 1998)
Associate Professor of Mathematics
 M.S., 1982, Henon University; Ph.D., 1992, University of Illinois at Chicago
- Earl S. Shive (1969, 1973)
Professor of Health
 B.S., 1960, M.Ed., 1964, West Chester University of Pennsylvania; Ed.D., 1972, Temple University
- Elaine M. Shuey (1984, 1996)
Professor of Speech Pathology and Audiology
 B.S., 1978, Clarion University of Pennsylvania; M.A., 1980, Ph.D., 1990, Kent State University
- Q. Brian Sickels (1993, 2000)
Associate Professor of Theatre
 B.A., 1975, Central Michigan University; M.F.A., 1980, Michigan State University
- Joyce L. Simpson (1972, 1990)
Professor of Speech Pathology and Audiology
 B.A., 1969, Morgan State College; M.Ed., 1972, Penn State University;
 Ed.D., 1988, Rutgers University
- Neal H. Simpson (1971, 1971)
Assistant Professor of Academic Enrichment and Learning; Director of Center for Educational Opportunity
 B.S., 1966, Cheyney University of Pennsylvania; M.Ed., 1971, Penn State University
- Patricia S. Smeaton (1994, 1999)
Associate Professor of Professional and Secondary Education
 B.S., 1971, SUNY at Brockport; M.Ed., 1977, Millersville University of Pennsylvania;
 Ed.D., 1993, Lehigh University
- Joanne L. Smith (1969, 1985)
Associate Professor of Movement Studies and Exercise Science
 B.S., 1967, SUNY at Brockport; M.S., 1971, Penn State University; M.S., 1984, East Stroudsburg University of Pennsylvania
- John S. Smith (1998, 1998)
Assistant Professor of Biological Sciences
 B.A., 1975, M.A., 1980, University of South Florida; Ph.D., 1990, University of Texas at Austin
- Pamela Smith (2000, 2000)
Assistant Professor of Speech Pathology and Audiology

B.S.Ed., 1985, Kutztown University of Pennsylvania; M.A., 1987, Ohio University;
Ph.D., 2000, Temple University

Robert Smith (1993, 1993)

Assistant Professor and Chair of Movement Studies and Exercise Science

B.S., 1973, M.Ed., 1985, East Stroudsburg University of Pennsylvania; Ph.D., 1998,
University of Iowa

Carey J. Snyder (1987, 1994)

Associate Professor and Associate Athletic Director

B.S., 1976, Springfield College; M.A., 1981, Ph.D., 1985, University of Southern
California

Lawrence Squeri (1988, 1988)

Professor of History and Chair of History

B.A., 1964, Fordham University; M.A., 1965, Columbia University; Ph.D., 1976,
University of Pennsylvania; M.A., 1986, Temple University

Richard A. Staneski (1998, 1998)

Vice President for Finance and Administration

B.A., 1972, Claremont McKenna College; M.A., 1974, California State University at
San Jose

Michelle P. Star (1992, 1997)

Assistant Professor, Librarian

B.A., 1980, SUNY at Oswego, M.L.S., 1989, Clarion University of Pennsylvania

Daniel E. Steere (1995, 2000)

Associate Professor of Special Education and Rehabilitation

B.S., 1977, Southern Connecticut State; M.Ed., 1978, Rutgers University; Ph.D.,
1987, University of Connecticut

Dennis B. Steigerwalt (1974, 1974)

Director of Career Services

B.A., 1971, Penn State University; M.A., 1974, Indiana University of Pennsylvania;
Ph.D., 1985, Fordham University

Margaret Laubner Stish (1971, 1996)

Professor of Early Childhood and Elementary Education

B.S., 1964, East Stroudsburg University of Pennsylvania; M.S., 1967, Illinois State
University; M.Ed., 1973, East Stroudsburg University of Pennsylvania

Craig Kee Strete (1999, 1999)

Assistant Professor of English

B.A., 1975, Wayne State University; M.F.A., 1978, University of California at Irvine

Robert G. Sutton (1964, 1980)

Professor of Movement Studies and Exercise Science

B.S., 1958, A.M., 1962, George Washington University; Ph.D., 1975, University of
Utah

Robert T. Sweeney (1967, 1969)

Associate Professor of Movement Studies and Exercise Science

B.S., 1962, East Stroudsburg University of Pennsylvania; M.Ed., 1964, Temple
University

Jack V. Swineford Jr. (1971, 1985)

Director, Computing Center

B.A., 1971, East Stroudsburg University of Pennsylvania; M.B.A., 1983, University of
Scranton

Frank N. Tancredi (1968, 1977)

Professor of Psychology

B.S., 1960, East Stroudsburg University of Pennsylvania; M.A., 1967, University of Alabama; Ph.D., 1977, SUNY at Buffalo

*George S. Temprow (1997, 1997)

Instructor of Sociology

B.A., 1951, University of St. Bonaventure; M.B.A., 1976, Forham University

John R. Thatcher (1974, 1984)

Associate Professor of Movement Studies and Exercise Science

B.S., 1969, M.Ed., 1970, East Stroudsburg University of Pennsylvania

George W. M. Thompson Jr. (1972, 1975)

Professor of Philosophy

B.A., 1954, Virginia Union University; M.Div., 1957, Southern Baptist Theological Seminary; M.A., 1962, Ph.D., 1974, University of Chicago

David G. Trainer (1975, 1982)

Professor and Chair of Biological Sciences

A.B., 1967, Washington and Jefferson College; M.S., 1969, University of Maine; Ph.D., 1975, University of New Hampshire

Jack H. Truschel (1989, 1998)

Assistant Professor, Academic Enrichment and Learning/Undeclared Major Advisor

B.A. 1981, King's College; M.A., 1983, M.P.A. 1985, Marywood College Ed.D., 1996, Temple University

Margot Vagliardo (2000, 2000)

Assistant Professor of Early Childhood and Elementary Education

B.S., 1970, M.S., 1974, SUNY at Oneonta;

Douglas A. Van Belle (2000, 2000)

Assistant Professor of Political Science

B.A., 1989, University of Washington; M.A., 1991, Ph.D., 1993, Arizona State University

Nancy P. VanArsdale (1990, 1999)

Professor and Chair of English

B.A., 1979, Bucknell University; M.A., 1981, New York University; Ph.D., 1991, New York University

Linda Van Meter (1994, 1995)

Assistant Professor and Psychologist of Counseling and Psychological Services

B.A., 1972, East Stroudsburg University of Pennsylvania; M.A., 1985, Marywood College

Angela Vauter (1989, 1991)

Associate Professor of Recreation and Leisure Services Management

B.A., 1974, Wilkes College; Ed.M., 1981, Ed.D., 1998, Temple University

Ralph Vitello (1989, 1989)

Associate Professor of Foreign Languages

B.A., 1971, SUNY at Buffalo; M.Phil., 1976, Ph.D., 1980, Yale University

Lois E. Wagner (1968, 1976)

Associate Professor of Movement Studies and Exercise Science

B.A., 1966, University of Northern Iowa; Certificate in Physical Therapy, 1968,

University of Pennsylvania; M.Ed., 1971, East Stroudsburg University of Pennsylvania

Robert C. Walker (1985, 1990)

Associate Professor of Early Childhood and Elementary Education

B.S.Ed., 1968, M.Ed., 1977, East Stroudsburg University of Pennsylvania; M.S., 1977, Marywood College; Ed.D., 1983, Lehigh University

Victor S. Walker (1987, 1991)

Associate Professor of English

B.S., 1969, University of Illinois; M.F.A., 1973, Bowling Green State University

Julianne Albiero-Walton (1995, 1995)

Assistant Professor, Academic Enrichment and Learning

B.S., 1988, M.S., 1989, University of Scranton

Berticia A. Waring (1986, 1994)

Professor of Health

B.S., 1964, Bridgewater State College; M.Ed., 1975, American University; D.Ed., 1982, Boston University

Charles R. Warner (1991, 1999)

Professor and Chair of Communication Studies

B.A., 1978, M.A., 1983, Kent State University; Ph.D., 1993, Bowling Green State University

Faith Waters (1989, 1994)

Professor and Chair of Professional and Secondary Education

B.S., 1971, Bucknell University; M.Ed., 1973, Trenton State University, Ed.D., 1983, University of Pennsylvania

Martin Weatherston (1992, 1997)

Associate Professor and Chair of Philosophy and Religious Studies

B.A., 1979, M.A., 1982, Ph.D., 1988, University of Toronto

Michael W. Weaver (1969, 1969)

Associate Professor of Media Communication and Technology

B.S., 1963, Millersville University of Pennsylvania; M.Ed., 1966, Temple University

Herbert M. Weigand (1986, 2000)

Professor and Chair of Art and Director, Madelon Powers Art Gallery

B.A., 1973, Southampton College; M.F.A., 1979, Syracuse University;

Ph.D., 1984, Penn State University

*Daniel Werner (1998, 1998)

Assistant Professor and Psychologist of Counseling and Psychological Services

B.S., 1992, Kutztown University of Pennsylvania; M.A., 1995, Psy.D., 1987, Illinois School of Professional Psychology

Richard K. Wesp (1997, 1997)

Assistant Professor of Psychology

B.A., 1972, Washington College; M.A., 1975; Ph.D., 1978, West Virginia University

Mollie B. Whalen (1992, 1996)

Director of Women's Center, Associate Professor and Coordinator of Women's Studies

B.A., 1978, East Stroudsburg University of Pennsylvania; M.A., 1980, Fairleigh Dickinson University; Ph.D., 1992, New York University

Gene D. White (2000, 2000)

Assistant Professor of Movement Studies and Exercise Science

B.S., 1975, M.Ed., 1980, West Chester University of Pennsylvania;

Ph.D., 1999, Temple University

Tracy A. Whitford (1995, 1995)

Assistant Professor of Biological Sciences

B.S., 1984, Wright State University; Ph.D., 1993, SUNY at Stony Brook

Phyllis A. Williams (1984, 1989)

Associate Professor of Computer Science

B.S., 1964, East Stroudsburg University of Pennsylvania; M.S., 1965, Bucknell

University; B.S., 1983, East Stroudsburg University of Pennsylvania

Craig A. Wilson (1992, 1997)

Associate Professor of Early Childhood and Elementary Education

B.S., 1971, Baptist Bible College; M.A., 1982; Ph.D., 1988, University of Toledo

Paul B. Wilson (2000, 2000)

Assistant Professor of Biological Sciences Leisure Services Management

B.S., 1988, Lafayette College; Ph.D., 1996, Washington University

Chad A. Witmer (2000, 2000)

Instructor of Movement Studies and Exercise Science

B.S., 1995, M.Ed., 1998, East Stroudsburg University of Pennsylvania

Carolyn D. Woodhouse (1987, 1993)

Professor of Health

B.A., 1973, University of Connecticut; M.Ed., 1982, Ed.D., 1987, University of Cincinnati

Wenjie Yan (1993, 1998)

Associate Professor of Communication Studies

B.A., 1984, 1986, Shanghai Int'l Studies University; M.A., 1990, Ph.D., 1992, SUNY at Buffalo

Andrzej Zarach (1991, 1997)

Professor of Mathematics

M.S., 1971, Ph.D., 1973, Warsaw University

Leon C. Zinkler (1969, 1969)

Associate Professor of Sociology

B.S. 1956, Temple University; M. Div., 1963, Drew University; M.S., 1967, Western Connecticut State College; D. Min., 1990, Drew University

Adjunct Faculty

Cooper Hospital University Medical Center

Camden, New Jersey

EDISON CATALANO, M.D.

*Chief, Department of Pathology and
Medical Director, Schools of*

Histologic Technology and Medical Technology

KATHRYN J. DURR, M.T. (ASCP)

*Program Director, Clinical Laboratory Services,
School of Medical Technology*

Monmouth Medical Center

Long Branch, New Jersey

JOHN A. MIHOK, M.T., SM, (ASCP), CLS

Program Director,

Medical Technology Program

LOUIS A. ZINTERHOFER, M.D.

Medical Director,

Medical Technology Program

Pocono Medical Center

East Stroudsburg, Pennsylvania

CARMINE J. CERRA, M.D.

Chair, Department of Pathology

JOHN P. TINSLEY, M.D.

Laboratory Director

CAROLINA SFORZA, M.D.

Pathologist

Scranton Medical Technology Consortium, Inc.

Scranton, Pennsylvania

WILLIAM ANTOGNOLI, M.D.

Medical Director

MARY GENE BUTLER, M.S., M.T.

Program Director

Faculty Emeriti

This recognition is awarded for outstanding service during the faculty members' University Tenure. The criteria considered for Faculty Emeriti rank include the following: 1) a minimum of ten years of service at ESU; 2) retirement from the State System of Higher Education; 3) recommendation of the appropriate ESU department; 4) recommendation of the Faculty Emeriti Committee; and 5) Presidential approval. The following list represents faculty awarded the rank as of February, 2001.

Paul Allen III
Neil Anderson
Arthur E. Arnold, II
Howard Atwell
Mary Sue Balducci
Mary E. Banzhof
Charles O. Baughman
M. Paul Beaty, Jr.
Peter Bedrosian
Alvin C. Berger
Anne Berkman
Helen E. Booth

Donald R. Bortz
Lester J. Bowers
Joseph Brennan
Philip J. Briggs
Blossom S. Brooks
Helen G. Brown
Deidre Burnstine
Barbara J. Burris
Jones J. Bush
Orrin Cafferty
David S. Campbell
Roseanne Cappella

Angelo Carniel
Joseph R. Castelli
Joseph Catanzaro
C. S. Cheng
Cheng Y. Cheng
Wilfred G. Clelland
Quentin P. Currie
Robert H. Dalling
Edward P. Demansky
Donna Deutsch
Albert DiJohnson
Fred Dixon
Nova S. Dowden

John R. Eiler
 Lura E. Evans
 Judith Feller
 Walter Feller
 Jan Felshin
 Jack D. Ferrara
 Donald P. Fetterman
 David S. Forth
 Henry N. Fremount
 Beverly A. Fuller
 Beverly H. Gaglione
 John Garman
 Janet Garman
 Marion Gates
 Norman Gelber
 William E. Gessner
 John Haddon
 Wilbur Hahn
 Mary Hartman
 Glenn Hayes
 Ardath E. Houser
 Robert Howell
 Robert H. Jones
 Lewis A. Judy
 Stuart Katzman
 Theodore Keller
 Michael L. Kelly
 R. Clifford Kelsey
 C. David Kern
 Joseph B. Kernaghan
 A. Beatrice Kingsbury
 Bruno Klaus
 Joseph Kovarick
 David B. Kresge

Linda J. Lambert
 George A. Learn, Jr.
 Hamilton H.T. Lee
 Nettie K. Lind
 Charles Maclay
 Robert F. Macmillan
 Arthur Mark
 Florence McCormick
 Kathryn B. McFarland
 John M. McIntyre
 John McKeon
 John McLaughlin
 Rosemary McMahon
 John A. Mikula
 Mary Ann Mogus
 Paul Morton
 Rudolf Mueller
 Alfred Munson
 Betty Lou Murphy
 Clarence J. Murphy
 Theodore Newton
 Barbara J. Oberlander
 Arne L. Olson
 Philip H. Pfatteicher
 John C. Pooley
 Clifford Poutre
 Spas T. Raikin
 Charles R. Reese
 Ellis Riebel
 Joanne Riebel
 Larry M. Rymon
 Maryanne Schumm
 Joseph Shultz
 Hla Shwe

Frank D. Sills
 Kenneth Sisson
 Dolores Smith
 James A. Smith
 Judith A. Smith
 Elizabeth Snyder
 Numa J. Snyder
 Eugene S. Stine
 Jane W. Stoddard
 Nicholas Stowell
 Carol Sue Underwood
 Raymond A. Vanderslice
 Ouseph Varkey
 Feno S. Volpe
 Timothy Wagner
 J. Marguerite Wallace
 Samuel P. Wallace
 David C. Wartinbee
 Herbert Weber
 Clifford Wester
 Mildred A. Wheatley
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East Stroudsburg University Affiliations

American Association of Colleges for Teacher Education
 American Association of Collegiate Registrars and Admissions Officers
 American Association for Health Education
 American Association of State Colleges and Universities
 American Association of University Women
 American Chemical Society
 American Council of Education
 American Hotel and Motel Association
 American Library Association
 American Speech-Language-Hearing Association
 Association for Gerontology in Higher Education
 Association of College and University Telecommunication Administrators
 Association of College Unions - International
 Association of Departments of English
 Association of Departments of Foreign Languages
 Association of Governing Boards
 Association of University Technology Managers
 College Board
 Council of Accredited MPH Programs
 Council of Colleges of Arts and Sciences
 Council on Education for Public Health
 Council on Hotel Restaurant and Institutional Education
 Eastern College Athletic Conference
 Economic Development Council of Northeastern Pennsylvania
 Marine Science Consortium
 Middle States Association of Colleges and Schools
 Mid-Eastern Association of Opportunity Program Personnel
 National Association for Campus Activities
 National Association for Foreign Student Affairs
 National Association for Sport and Physical Education
 National Association for Women in Education
 National Association of College Stores
 National Association of Collegiate Directors of Athletics
 National Association of Women's Centers
 National Athletic Trainers Association
 National Communication Association
 National Collegiate Athletic Association
 National Collegiate Honors Council
 National Council for Research
 National Council of Educational Opportunity Associations
 National Institute for Environmental Renewal
 National League for Nursing Accrediting Commission
 National Recreation and Park Association
 National Student Exchange
 National Women's Health Network
 National Women's Studies Association
 Nursing Education Consortium for Northeastern Pennsylvania
 Pennsylvania Higher Education Nursing Schools Association

Pennsylvania Speech-Language-Hearing Association
Pocono Mountains Chamber of Commerce
Pocono Mountains Vacation Bureau
Society for Public Health Education
Teacher Education Council of State Colleges and Universities

