


BLOOMSBURG UNIVERSITY



Undergraduate Catalog

1997-99



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Bloomsburg
UNIVERSITY

*A Member of Pennsylvania's
State System of Higher Education*

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The Undergraduate Catalog
Bloomsburg University of Pennsylvania

1997-99

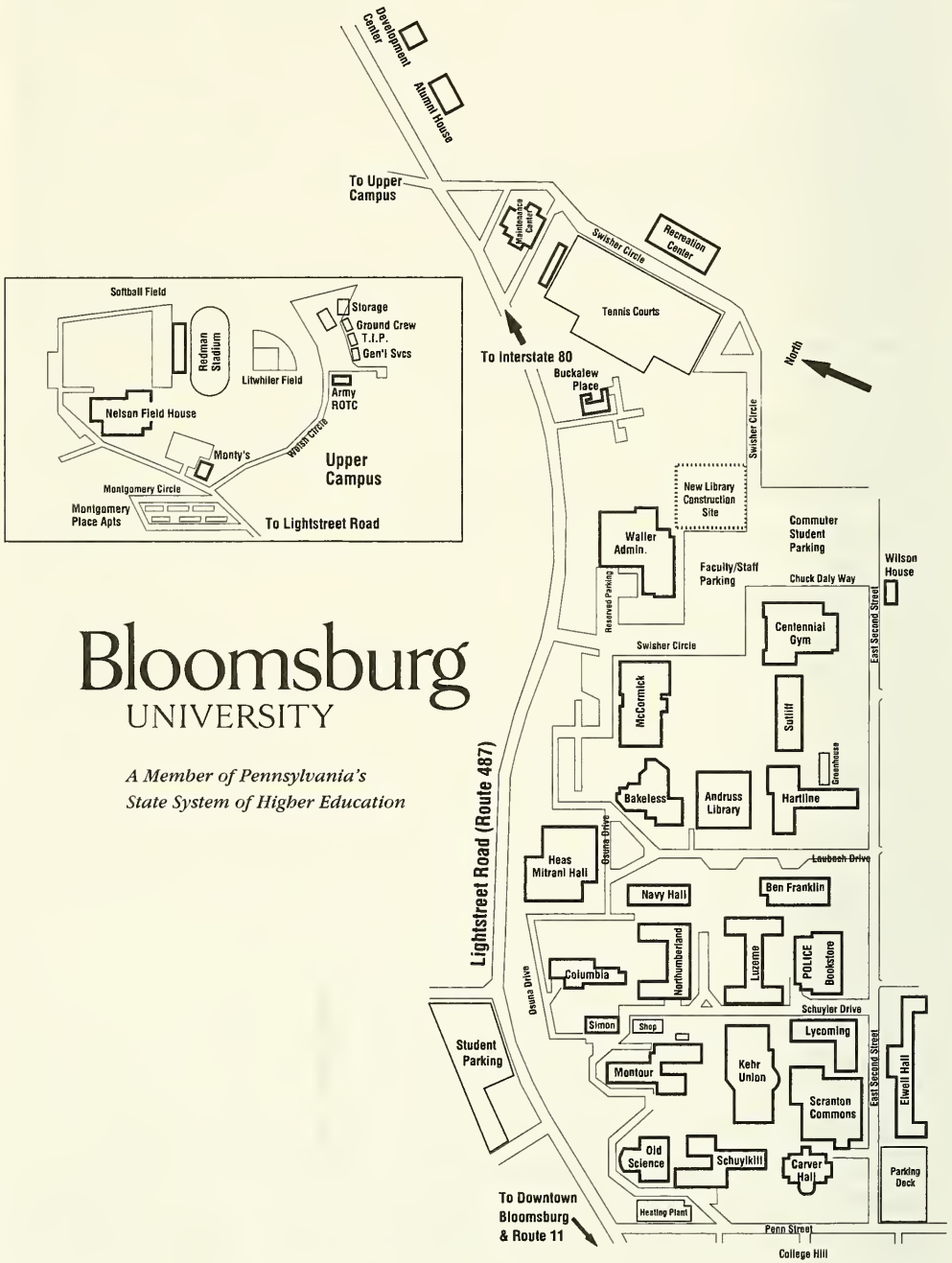
Office of the Provost and Vice President for Academic Affairs



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Bloomsburg

UNIVERSITY

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Student Parking

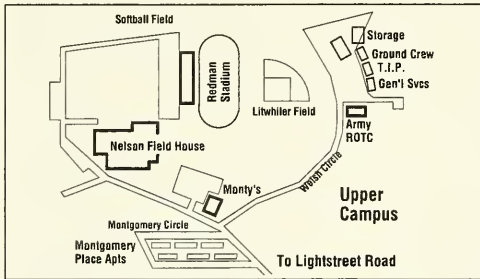
To Downtown
Bloomsburg
& Route 11

Lightstreet Road (Route 487)

To Interstate 80

To Upper
Campus

Development
Center
Admin House



College Hill

Penn Street

Heating Plant

Old Science

Schuykill

Carver Hall

Seranton Commons

Elwell Hall

Parking Deck

Schuyler Drive

Lycoming

Ben Franklin

Leubeech Drive

Hartline

Centennial Gym

Chuck Daly Way

Wilson House

Commuter Student Parking

New Library Construction Site

Faculty/Staff Parking

Waller Admin

Reserved Parking

Buckalew Plaza

Tennis Courts

Recreation Center

Swisher Circle

Swisher Circle

Swisher Circle

Swisher Circle

Swisher Circle

About Bloomsburg University

Bloomsburg University of Pennsylvania is one of the 14 state-owned universities that compose the State System of Higher Education. In addition to 63 undergraduate degree programs and one associate degree program, Bloomsburg offers 18 master's degrees in select academic disciplines and a doctoral program in elementary education in cooperation with Indiana University of Pennsylvania.

Bloomsburg University, which offers curricula in liberal arts, business, nursing, allied health sciences, and teacher education, has more than 7,500 students. The university is organized as three colleges (Arts and Sciences, Business, and Professional Studies) and the School of Graduate Studies and Division of Continuing and Distance Education. The scope and internal structure of each college is described in the succeeding chapter of this catalog.

The home of Bloomsburg University is its namesake, the Town of Bloomsburg, the county seat of Columbia County, Pa. The industrial, trading, and residential community of nearly 12,000 is located 80 miles northeast of Harrisburg and is within two miles of two interchanges off Interstate 80.

Bloomsburg is served by Greyhound and Continental Trailways bus lines. Commercial airports in the Scranton/Wilkes-Barre area and in Williamsport are approximately an hour's drive from the university.

History

An academy "to teach youth the elements of a classical education" was established in Bloomsburg in 1839. The academy continued with varied fortunes until 1856 when a charter was prepared and stock issued to reorganize it as the Bloomsburg Literary Institute. Institute Hall, later renamed Carver Hall after Henry Carver, an early principal, architect, and teacher, was erected in 1867. Today, the gold-domed, red-brick

building is the university's landmark.

Largely through the efforts of J. P. Wickersham, superintendent of public instruction, the Bloomsburg Literary Institute officially became the Bloomsburg Literary Institute and State Normal School in 1869; it continued under this name and organization until 1916 when it was purchased by the Commonwealth of Pennsylvania and named Bloomsburg State Normal School.

The emphasis at the Normal School changed during the early 1920s from secondary and college-preparatory courses for specialized teachers to full-time teacher education. In May 1927, the institutional name was changed to Bloomsburg State Teachers College, and the school was authorized to grant the Bachelor of Science in Education for teachers in elementary and secondary schools.

Under the administration of President Francis B. Haas (1927-1939), great progress was made in the teacher education program, and a new degree program in business education was initiated.

Upon the naming of Dr. Haas as state superintendent of public instruction, Dr. Harvey A. Andruss, then dean of instruction and a former director of the Business Education Department, was appointed president, a position he held until his retirement in 1969. During World War II, the U.S. Navy V-12 Officer Training Program was conducted on the Bloomsburg campus. As a result, a campus building was renamed Navy Hall. In 1957, a division of special education was instituted, and today, Navy Hall still houses that program.

Major expansion in facilities, faculty, and student body followed. Undergraduate full-time enrollment rose from 1,743 in 1960 to 6,812 undergraduates in 1996.

In 1960, the institution's name was changed to Bloomsburg State College. Authorization soon followed to grant baccalau-

reate degrees for liberal arts programs in humanities, social sciences, and natural sciences/mathematics. Graduate study, leading to the Master of Education, was inaugurated. In 1968, approval was received for the Master of Arts, in 1970 for the Master of Science, in 1976 for the Master of Business Administration, and in 1982 for the Master of Science in Nursing. A cooperative doctoral program in elementary education began in 1982.

Commonwealth legislation enacted on July 1, 1983, established the State System of Higher Education, and Bloomsburg State College became Bloomsburg University of Pennsylvania. Bloomsburg's president, Dr. James H. McCormick, became the system's interim chancellor and later its first permanent chancellor.

The following have served as presidents of Bloomsburg University:

Professor Henry Carver (1866-1871)
 Charles B. Barkley (1871-1872)
 The Rev. John Hewitt (1872-1873)
 Dr. T. L. Griswold (1873-1877)
 Dr. David J. Waller Jr. (1877-1890)
 Dr. Judson P. Welsh (1890-1906)
 Dr. David J. Waller Jr. (1906-1920)
 Dr. Charles H. Fisher (1920-1923)
 Dr. G. C. L. Reimer (1923-1929)
 Dr. Francis B. Haas (1927-1939)
 Dr. Harvey A. Andruss (1939-1969)
 Dr. Robert J. Nossen (1969-1972)
 Dr. Charles H. Carlson (1972-1973)
 Dr. James H. McCormick (1973-1983)
 Dr. Larry W. Jones (1983-1985)
 Dr. Harry Ausprich (1985-1993)
 Dr. Curtis R. English (1993-1994)
 Dr. Jessica Sledge Kozloff (1994-)

Mission Statement

Bloomsburg University, as one of 14 institutions in the State System of Higher Education of the Commonwealth of Pennsylvania, embraces the general mission of the system to assure excellence in higher education at an affordable cost. The campus is accessible and attractive, located in the Town of Bloomsburg near the Susquehanna River and Interstate 80.

Bloomsburg is a coeducational institution serving students of diverse backgrounds

from Pennsylvania, its surrounding states, and foreign countries. To its community and region, the university is an artistic and educational resource that serves a broad range of community needs in education, health care, business-related services, library resources, and cultural activities. It offers undergraduate programs as well as graduate programs in select areas of strength. There is an emphasis on a strong liberal arts preparation. The university is committed to a program of affirmative action in order to provide equal educational opportunity to all persons.

It is a goal of the university to integrate academic programs, cultural activities, and interpersonal relations to promote intellectual growth and social responsibility among students. The university seeks to extend the academic environment from the classroom into other student activities. It strives to foster openness in communication and involvement in decision making through a participatory governance structure. In this atmosphere, faculty, administration, staff, and students attain a genuine respect for one another, a concern for the enrichment of their experience, and the achievement of their common purpose. The university community is committed to the principles of personal and academic freedom within the framework of ethical responsibilities.

By emphasizing the assimilation, synthesis, and integration of information, it is a goal of the university to develop in its students the characteristics of mental resourcefulness and responsible self-expression as well as the abilities to think critically, clarify values, and demonstrate problem-solving skills. While maintaining programs for which Bloomsburg has been traditionally recognized, such as those in business and education, the university has identified strategic directions that include programs in health-related fields; programs that promote student-faculty interaction in teaching, learning, and research; programs that emphasize regional, national, international, and environmental concerns; and programs that incorporate the application of technology into instruction.

Information Resources

Information about:	Can be found in:	Available from:	Telephone
<i>Note: Items marked with an asterisk are also available and kept current on the university's World Wide Web site at http://www.bloomu.edu</i>			
Financial aid*	"Financial Aid Information"	Office of Financial Aid	389-4279
Parking on campus	"Parking Regulations"	University Police	389-4168
Crime statistics	"Safety on Campus"	University Police	389-4168
Celebrity Artists*	"Celebrity Artists"	Academic Support Services	389-4201
Provost Lecture Series*	"Provost Lecture Series"	Academic Support Services	389-4201
Concerts	"Concert Guide"	Department of Music	389-4289
Class schedules	"Course Schedule Bulletin"	Office of the Registrar	389-4263
Tuition and fees*	"Fee Schedule"	Business Office	389-4013
Identification cards	"The Pilot"	Student Activities	389-4196
Residence hall rules	"Residence Hall Handbook"	Residence Life	389-4068
Housing on campus*	"The Pilot"	Student Activities	389-4196
Dining Services*	"The Pilot"	Student Activities	389-4196
Counseling	"The Pilot"	Student Activities	389-4196
Student activities	"The Pilot"	Student Activities	389-4196
Intercollegiate Sports	"The Pilot"	Student Activities	389-4196
<i>(note: schedules, statistics and results are available at http://www.bloomu.edu)</i>			
Discrimination issues	"The Pilot"	Student Activities	389-4196
<i>(note: problems should be directed to the Office of Social Equity, 389-4528)</i>			
Voter registration	"The Pilot"	Student Activities	389-4196
Computer facilities*	"Computer Systems and Facilities"	Academic Computing	389-3072
Government, student	"The Pilot"	Student Activities	389-4196
Publications, student*	"The Pilot"	Student Activities	389-4196
Music groups	"The Pilot"	Student Activities	389-4196
Greek organizations	"The Pilot"	Student Activities	389-4196
Clubs, organizations	"The Pilot"	Student Activities	389-4196
Student conduct	"The Pilot"	Student Activities	389-4196
Alcohol policy	"The Pilot"	Student Activities	389-4196
Anti-hazing policy	"The Pilot"	Student Activities	389-4196
Drug policy	"The Pilot"	Student Activities	389-4196
Sexual harassment	"The Pilot"	Student Activities	389-4196
<i>(note: problems should be directed to the Office of Social Equity, 389-4528)</i>			
Privacy, right to	"The Pilot"	Student Activities	389-4196
Quest	"Welcome to the Great Outdoors"	Quest	389-4323
Recreation Center	"Policies, Procedures Handbook"	Student Recreation Ctr.	389-4772
Kehr Union activities	"Calendar of Events"	Kehr Union	389-4346

Degree Programs

Bloomsburg University offers 63 programs of study in the Colleges of Arts and Sciences, Business, and Professional Studies. Listed below are the degrees offered, the programs of study, the college that supports the program, and page numbers in this catalog where the majors can be found.

<i>Degree</i>	<i>Program of Study</i>	<i>College</i>	<i>Page</i>
Bachelor of Arts			
	Anthropology	Arts and Sciences	49
	Art History	Arts and Sciences	50
	Art Studio	Arts and Sciences	50
	Biology	Arts and Sciences	51
	Chemistry	Arts and Sciences	55
	Communication Studies	Arts and Sciences	25
	Economics	Arts and Sciences	67
	English	Arts and Sciences	93
	French	Arts and Sciences	95
	Geography	Arts and Sciences	98
	German	Arts and Sciences	102
	History	Arts and Sciences	104
	Humanities	Arts and Sciences	107
	Mass Communications	Arts and Sciences	113
	Mathematics	Arts and Sciences	116
	Music	Arts and Sciences	121
	Philosophy	Arts and Sciences	132
	Physics	Arts and Sciences	133
	Political Economics	Arts and Sciences	67
	Political Science	Arts and Sciences	134
	Psychology	Arts and Sciences	135
	Social Sciences	Arts and Sciences	140
	Social Welfare	Arts and Sciences	142
	Sociology/Criminal Justice	Arts and Sciences	140
	Spanish	Arts and Sciences	142
	Theatre Arts	Arts and Sciences	145
Bachelor of Science			
	Accounting	Business	46
	Exercise Science	Arts and Sciences	94
	Biology	Arts and Sciences	51
	•Marine Science	Arts and Sciences	51
	Business Administration	Business	
	• Accounting	Business	46
	• Business Economics	Business	54
	• Finance	Business	97
	• Management	Business	109
	• Management Information Systems	Business	110
	• Marketing	Business	112
	Business Economics	Arts and Sciences	67
	Chemistry	Arts and Sciences	55

Clinical Chemistry	Arts and Sciences	58
Computer and Information Science	Arts and Sciences	60
Computer and Information Systems	Business	61
Earth Science	Arts and Sciences	66
Geology	Arts and Sciences	101
Health Physics	Arts and Sciences	103
Interpreting	Professional Studies	108
Mathematics	Arts and Sciences	116
Medical Imaging	Professional Studies	118
Medical Technology	Professional Studies	119
Natural Sciences and Mathematics	Arts and Sciences	123
Office Information Systems	Business	131
Physics	Arts and Sciences	133
Speech Pathology and Audiology	Professional Studies	144
Bachelor of Science in Education		
Business Education	Business	73
Early Childhood Education	Professional Studies	74
Elementary Education	Professional Studies	76
Secondary Education	Professional Studies	78
• Biology	Professional Studies	82
• Chemistry	Professional Studies	82
• Communication/Media	Professional Studies	82
• Communication/Speech	Professional Studies	83
• Communication/Media	Professional Studies	83
• Comprehensive Social Studies	Professional Studies	85
• Earth and Space Science	Professional Studies	83
• English	Professional Studies	84
• French	Professional Studies	84
• Mathematics	Professional Studies	85
• Physics	Professional Studies	85
• Spanish	Professional Studies	85
Special Education	Professional Studies	88
Bachelor of Science in Nursing		
Nursing	Professional Studies	124
Associate of Science in Health Services		
Health Services	Professional Studies	147

Academic Calendar

Fall 1997

Electronic Registration	Aug. 18 to Aug 25 (2 p.m.)
Classes Begin	Monday, Aug. 25 (8 a.m.)
Labor Day	Monday, Sept. 1 (No classes)
Mid-Term	Tuesday, Oct. 14, 10 p.m.
Mid-Term Reading Day	Friday, Oct. 10 (no classes)
Thanksgiving Recess Begins	Wednesday, Nov. 26, 2 p.m.
Classes Resume	Monday, Dec. 1, 8 a.m.
Classes End	Saturday, Dec. 6
Reading Day	Sunday, Dec. 7
Finals Begin	Monday, Dec. 8
Finals End	Saturday, Dec. 13
Commencement	Saturday, Dec. 13

Spring 1998

Electronic Registration	Jan. 5 to Jan 12 (2 p.m.)
Classes Begin	Monday, Jan. 12
Martin Luther King Day	Monday, Jan. 19 (no classes)
Mid-Term	Tuesday, March 3, 10 p.m.
Spring Break Begins	Saturday, March 7, noon
Classes Resume	Monday, March 16
Spring Weekend Begins	Thursday, April 9, 10 p.m.
Classes Resume	Monday, April 13, 6 p.m.
Classes End	Saturday, May 2
Reading Day	Sunday, May 3
Finals Begin	Monday, May 4
Finals End	Saturday, May 9
Commencement	Saturday, May 9

Fall 1998

Electronic Registration	Aug. 25 to Aug. 31 (2 p.m.)
Classes Begin	Monday, Aug. 31 (8 a.m.)
Labor Day	Monday, Sept. 7 (No classes)
Mid-Term	Tuesday, Oct. 16, 10 p.m.
Mid-Term Reading Day	Friday, Oct. 21 (no classes)
Thanksgiving Recess Begins	Tuesday, Nov. 23, 2 p.m.
Classes Resume	Monday, Nov. 30, 8 a.m.
Classes End	Saturday, Dec. 12
Reading Day	Sunday, Dec. 13
Finals Begin	Monday, Dec. 14
Finals End	Saturday, Dec. 19
Commencement	Saturday, Dec. 19

Spring 1999

Electronic Registration	Jan. 12 to Jan 19 (2 p.m.)
Martin Luther King Day	Monday, Jan. 18 (no classes)
Classes Begin	Monday, Jan. 19
Monday Classes Meet	Friday, Jan. 22 (no evening classes)
Mid-Term	Wednesday, March 3, 10 p.m.
Spring Break Begins	Saturday, March 6, 10 p.m.
Classes Resume	Monday, March 15, 8 a.m.
Spring Weekend Begins	Thursday, April 1, 10 p.m.
Classes Resume	Monday, April 5, 6 p.m.
Classes End	Saturday, May 8
Reading Day	Sunday, May 9
Finals Begin	Monday, May 10
Finals End	Saturday, May 15
Commencement	Saturday, May 15

Colleges of the University

College of Arts and Sciences

Hsien-Tung Liu

Dean, College of Arts and Sciences

The College of Arts and Sciences includes curricula in 19 departments with the expressed intention of providing a quality liberal arts education. These curricula encourage broad exposure to knowledge, ideas, and intellectual process. The liberal arts philosophy places strong emphasis on cultural and scientific knowledge, and on essential skills such as reading, writing, quantitative and critical analysis absolutely necessary for the preparation for any particular profession. Degree programs lead to a Bachelor of Science or a Bachelor of Arts, or both.

Bloomsburg University was first authorized to offer the Bachelor of Arts in 1960 and the Bachelor of Science in 1963. Today, the college comprises about a third of the students and two thirds of the faculty at Bloomsburg University. All General Education courses - a certain number of these courses are required of all students seeking a baccalaureate degree - are offered through Arts and Sciences.

The Bachelor of Arts offers the student the opportunity for a liberal education through study in the humanities, the social sciences, and the natural sciences and mathematics. The Bachelor of Arts is for majors in the academic disciplines of arts, humanities and social sciences. The Bachelor of Science provides the opportunity for a liberal education together with a specialization in a number of fields in the natural sciences. Liberal arts graduates are prepared for a wide range of future goals. Students who are undeclared or undecided about an academic major are encouraged to enroll in Arts and Sciences curricula. There are interdisciplinary studies or broad area programs. All students must complete the general education requirements described in the general education requirements section. Each stu-

dent selects a major and fulfills the major requirements as stated at the beginning of the course descriptions for each of the 19 departments in Arts and Sciences. Several programs have more than one option for fulfilling the major requirements. In addition to achieving an in-depth understanding of an academic discipline by completing the requirements of a major, students may gain knowledge in a second area by completing the minor requirements of that discipline. Each academic minor consists of a minimum of 18 semester hours of courses. The following disciplines offer academic minors: anthropology, art studio, art history, biology, computer science, economics, English, French, geography, history, mathematics, music, philosophy, physics, political science, psychology, sociology, and Spanish. Consult the area of interest in the catalog for course requirements. Preprofessional and Career Advisement Committees offer special supplementary advisement to students. Members of these committees help students learn about admission requirements of professional schools or careers and select college courses in harmony with these requirements. Students interested in preprofessional or career advising should indicate this interest on the admission application to the university so that appropriate advisers may be notified.

As a rule, professional schools for dentistry, medicine, optometry, pharmacy, podiatry, and veterinary medicine do not specify an undergraduate major, but they do specify minimum essential courses, especially in the sciences and mathematics. These minimum requirements usually include courses in general chemistry, organic chemistry, mathematics, biology, and physics. High standards of undergraduate scholarship must be achieved if a student wishes to compete for admission to a professional school. More than 85 percent of Bloomsburg University's graduates who apply to medical and dental schools are accepted. Students

anticipating these careers should contact the Department of Biological and Allied Health Sciences which provides faculty coordinators for preprofessional advisement.

Students who intend to enter the legal profession need to be cognizant of the variations in entrance requirements for law schools. The Pre-Law Advisory Committee counsels students on course selection. Most law schools will consider applications from students with diverse majors, emphasizing the value of a thoroughly cultivated mind rather than a specific body of knowledge. Students interested in a law career or pre-law advisement should contact Dr. George Agbango in the Department of Political Science in the College of Arts and Sciences or Dr. Bruce Rockwood in the Department of Finance and Business Law in the College of Business.

Independent study provides an opportunity for the advanced student to pursue in-depth individualized study in a topic of special value or interest to the student. A limited number of independent study offerings are available each semester. Students interested in applying for independent study should develop a written proposal with their faculty sponsor. The proposed number of semester hours should be indicated in the proposal. The independent study proposal, along with the name of the faculty sponsor, is submitted to the appropriate department for recommendation, then to the dean for final approval.

Academic Departments — The College of Arts and Sciences includes 19 academic departments. Chairpersons are elected on a three-year cycle and departments with more than 15 faculty members also name an assistant chairperson. During summer sessions, a faculty member is designated as the summer chair. While most departments enjoy full-time secretarial support, some departments share clerical staff and rely on part-time and student help. The academic departments in arts and sciences include:

Department of Anthropology
 Department of Art Department of
 Biological and Allied Health
 Sciences
 Department of Chemistry
 Department of Communication Studies
 Department of Economics

Department of English
 Department of Geography and Earth
 Science
 Department of Health, Physical
 Education, and Athletics
 Department of History
 Department of Languages and Cultures
 Department of Mass Communications
 Department of Mathematics and
 Computer Science
 Department of Music
 Department of Philosophy
 Department of Physics
 Department of Political Science
 Department of Psychology
 Department of Sociology and Social
 Welfare

College of Business

David Long

Dean, College of Business

The College of Business offers undergraduate and graduate programs in business administration and business education. The college is pursuing accreditation by the American Assembly of Collegiate Schools of Business. The primary objective of the college is teaching. Information technology is a major component of instruction, as well as developing critical thinking in analysis skills of students. Moreover, research and other intellectual contributions are highly valued. Members of the faculty serve as consultants and educators in both the public and private sectors. Students enrolled in other colleges within the university who wish to transfer to a business curriculum must have completed a minimum of 15 semester hours at Bloomsburg to be eligible for consideration. In addition, a minor in business administration is available to students in other colleges. The college is committed to the incorporation of technology into the curriculum. Each full-time faculty member's office has an appropriate microcomputer. Two common access microcomputer laboratories are in operation in Sutliff Hall and are subject to recurring update and renovation. A local area network interconnects faculty and administrative offices, classrooms, and laboratories and links to other computer facil-

ities on campus. Through the State System of Higher Education Network, faculty, students and staff have access to the Internet linking them to local, regional, national, and international networks. Uniform software standards (word processing, database, and spreadsheets), multi-media, and decision support software are maintained.

Business Honors Program — The College of Business provides superior students an opportunity to participate in an honors program during their junior and senior years. Eligibility is limited to students with a minimum QPA of 3.40 for coursework in the freshman and sophomore years in their business courses (core, major, and business electives) or a 3.50 QPA overall if their QPA in their business courses is between 3.25 and 3.40.

Career Concentration—The College of Business offers a career concentration in International Business. This concentration provides students with the necessary skills and knowledge to operate in a global economy. The concentration includes a core of international business administration courses, accompanied by interdisciplinary courses with an international emphasis. A language proficiency is a requirement of the concentration.

Academic Departments

The College of Business is composed of six academic departments: Department of Accounting, Department of Business Education and Office Systems, Department of Computer and Information Systems, Department of Finance and Business Law, Department of Management, and Department of Marketing

Programs and Specialization

Business Administration: Bachelor of Science in Business Administration, Specializations in: Accounting, Business Economics, Finance, Management Information Systems, Management and Marketing.

Business Education: Bachelor of Science in Education, Certification in: Accounting, Data Processing, Marketing and Office Technologies (required for all majors)

Computer and Information Systems: Bachelor of Science in Computer and Information Science and Office Systems.

Bachelor of Science in Office Administration

College of Professional Studies

Ann L. Lee

Dean, College of Professional Studies

The College of Professional Studies offers undergraduate and/or graduate programs in nursing, health sciences, teacher education, communication disorders, education of the deaf/hard of hearing, interpreter training, and reading specialist. The college includes the School of Health Sciences and the School of Education. Programs offered in this college are accredited by national professional organizations which ensure the student that program quality is maintained.

The School of Education provides programs which prepare teachers for early childhood, elementary education, special education, and education of the deaf/hard of hearing. Secondary education programs include specialization in biology, chemistry, communication, earth science, English, French, mathematics, physics, general science, and Spanish. There are also areas of concentration available in either special education or education of the deaf/hard of hearing for education majors.

The teacher education programs are among the 500 programs in the United States that have achieved accreditation by the National Council for Accreditation of Teacher Education (NCATE). The deaf/hard of hearing program is accredited by the Council for Education of the Deaf. All teacher education areas of study have received program approval by the Pennsylvania Department of Education to recommend certification for teaching in the areas listed above.

Graduate programs in teacher education include special education, deaf/hard of hearing, early childhood education, and elementary education. The master's degree in Curriculum and Instruction is available for secondary level graduate studies. Specialist programs are available at the graduate level in reading and supervision. A cooperative doctoral program in early childhood education and elementary education is offered cooperation with Indiana University of Pennsylvania.

The School of Health Sciences provides undergraduate programs in nursing, adult

health, medical imaging, pre-pharmacy, pre-physical therapy, pre-occupational therapy, medical technology, pre-cytotechnology, health sciences associate and allied health sciences. Graduate programs are available in Speech Pathology and Audiology, Exercise Science and Adult Fitness, and Nursing.

The program of study in nursing is accredited by the National Leagues for Nursing and approved by the Pennsylvania State Board of Nursing. The speech pathology and audiology program is accredited by the National Speech, Hearing, and Language Association.

The Curriculum Materials Center is administered in the College of Professional Studies. The primary object of this center is to locate, acquire, catalog and make accessible curricular and instructional materials to pre-service and inservice teachers. The resources housed in the center include elementary and secondary textbooks, curriculum guides, games, instructional materials, tests and computer software. A materials preparation lab which includes lamination and transparency preparation is available. A cluster of Macintosh computers are located in the center for student use.

Admission

Address correspondence concerning admission and readmission to: Director of Admissions, 10 Benjamin Franklin Hall, Bloomsburg University, 400 E. Second St., Bloomsburg, PA 17815-1301; or telephone (717) 389-4316 between 8 a.m. and 4:30 p.m., Monday through Friday.

Admission Procedures

Complete and submit an application to the Office of Admissions, with a \$25 nonrefundable application fee payable to Bloomsburg University. Freshman candidates should begin the application process early in their senior year of high school, prior to Dec. 1, for the fall semester. Candidates for the spring semester should submit application materials by Oct. 1. Final dates for receiving applications in the Admissions Office for an entry period are subject to change without notice.

Applicants also need:

- An official secondary school transcript requested from and sent by a high school guidance counselor directly to the Director of Admissions.
- Results of the Scholastic Assessment Test (SAT) or the American College Test (ACT). The applicant is responsible for taking the test and requesting that the scores be forwarded directly from the testing service to Bloomsburg University. A photostatic copy of the student's SAT or ACT results on an official secondary school transcript is acceptable. No other standardized test serves as a substitute for the SAT or ACT.

Entrance Standards and Notification Procedures

The university does not prescribe fixed secondary school course requirements for admission but does, however, strongly encourage all students to take a college prepara-

tory program in secondary school. Admission to Bloomsburg University is based on an applicant's academic and personal qualifications. Decisions are reached without regard to race, color, creed, national origin, sex or disability. Acceptance is determined by the Admissions Committee upon evaluation of secondary school preparation, scores on the SAT or ACT, personal characteristics, and institutional capacity.

The majority of notifications are made during December, January, and February.

Incoming fall freshmen must submit a partially nonrefundable advance deposit of \$200 for the basic fee and housing by March 1 to secure enrollment at the university.

Health Record

An applicant offered admission must submit a medical examination report form prior to enrollment. Applicants get the appropriate examination report form upon receipt of advance deposits. Final permission to enroll is contingent upon a favorable review of the applicant's medical history by a university physician.

Act 101 and Educational Opportunity Programs

These programs equalize educational opportunity for students regardless of their economic background or status. Anyone with a secondary school diploma or certificate of equivalency is eligible to apply for admission to these programs. Non-traditional criteria are applied in predicting the potential success of an applicant when it appears that the environmental background may have adversely affected grades and/or standardized test scores. The Director of Admissions may require an applicant for these programs to file supplementary information as needed for proper consideration.

Most new students are expected to participate in a summer program prior to the first semester of their attendance, where

special assistance in tutoring and counseling is given to address specific academic, financial, and social needs. Permission to be exempted from this requirement can only be granted by the director of these programs.

Send inquiries to the Director of ACT 101/EOP or the Director of Admissions. (See Developmental Instruction.)

Early Admission

Outstanding students may be considered for admission before secondary school graduation. In addition to strong achievement and high aptitude, applicants for early admission must have the endorsement of their secondary school to receive consideration. College credit earned may apply toward the requirements for a secondary school diploma. Students interested in early admission must arrange an interview with the Director of Admissions.

University Honors Program

The University Honors Program provides a special academic experience for a preselected group of freshmen and sophomores. The program offers challenge for students who have distinguished themselves educationally, superior intellectual ability, set high standards for themselves, and who plan to seriously pursue a quality college education.

The honors curriculum fosters the growth of intellectual independence, creativity and initiative; enhance analytical thinking and problem-solving abilities; augment interpretative abilities and communication skills; and develop a sense of "common bonding." Students get a variety of courses and course designs including symposia, forums, independent study, and experiential study that require extensive reading, writing, and in-depth study and research. Honors courses are taught by university faculty designated because of distinguished scholarship, outstanding performance as teachers, and ability to relate to students.

The program requires the completion of 24 semester hours of general education credit in designated honors courses within the first two academic years. The remainder of courses in these years is selected from regular course offerings to satisfy major, minor, and other general education requirements.

Honors courses, while they satisfy general education requirements, are specially designed to emphasize the integration of interdisciplinary knowledge, concepts, and skills.

Although university scholars have many special programs and services, they also are fully integrated into the mainstream of the campus community to enjoy the same dimensions of university life that other students experience including residence hall living, a wide array of cultural activities, campus leadership opportunities, sports events, and other co-curricular programs.

Program eligibility requires a minimum of 1100 SAT and rank in the top 20 percent of high school class. Once eligible, high school seniors or graduates are selected on the basis of their application, essay, reference letters, and interview. Although high academic achievement provides eligibility, personal characteristics and extracurricular involvement are important in the selection process.

Students admitted to the University Honors Program must maintain a minimum cumulative 3.0 QPA. Students who do not attain this QPA in the first semester will be retained provisionally in the program with the stipulation that the 3.0 QPA must be attained overall before the sophomore year.

At the completion of the program, a student who has maintained a minimum QPA of 3.50 or higher will be designated a university scholar on his/her permanent record and on the diploma upon graduation.

At the end of the sophomore year, students can apply to the upper-level honors program in their major discipline to continue in enhanced academic programs during their final two years.

Transfer Students

An applicant who previously attended or at the time of application is enrolled in another college or university is a transfer applicant. Transfer admission occurs three times during the year: fall, spring and summer. Applications for the fall semester and summer sessions should be complete and on file in the Admissions Office prior to March 15. Applications for the spring semester must be complete and on file by Oct. 15. Nursing candidates for the fall semester

must have completed applications on file by Jan. 15 and by Sept. 1 for spring admission.

Requirements necessary to make a file complete for a transfer candidate include: an official secondary school transcript or a GED (General Equivalency Diploma); official transcripts from all postsecondary schools attended; and the \$25 application fee. Scholastic Assessment Test (SAT) or American College Test (ACT) results must be submitted if the applicant has not completed 24 or more credits at a post-secondary institution. Official college transcripts from each school attended should be sent to the Director of Admissions regardless of whether or not credit was earned at the other institution(s).

A transfer student may be considered for admission if certified as holding good standing in the college last attended and having an overall Quality Point Average (QPA) of 2.0 or better on a 4.0 system.

The degree programs in adult health, nursing or education require students to have a minimum cumulative QPA of 2.50 for entrance to the major.

Transfer applicants who have completed 30 semester hours at an institution of higher education must select a major upon entering the university. They may not enter as undeclared majors.

Credits are deemed transferable if earned with a grade of C (2.0/4.0) or above at an institution that is accredited by the Middle States Association of Colleges and Schools/Commission on Higher Education or its regional equivalent providing Bloomsburg University has equivalent courses. Students are informed of the tentative number of credits that may be transferred in their offer of admission letter. Official transfer evaluations are completed after the student pays the advanced deposits. These transfer credit evaluations are then reviewed by the department chairperson who renders final approval of the evaluation. A maximum of 64 credits may be transferred from a regionally accredited two-year college.

Review of transfer applications is done on a rolling basis, with the exception of nursing applicants whose files are reviewed by the Student Admission, Progression, and Retention Committee of the School of Health Sciences.

An orientation for transfer students is held prior to their enrollment. Students are notified by the Orientation Office concerning specific information.

Readmission

Students failing to register for the next semester must apply for readmission. Non-degree students may continue to register without readmission provided their next registration is within four semesters of their last enrollment. It is suggested that students apply early for readmission.

Readmitted students are responsible for the graduation requirements and academic policies that exist at the time of their reentrance.

The Director of Admissions may require an applicant for readmission to file a letter containing such supplementary information as is needed for proper consideration.

Students under academic dismissal are ineligible for readmission for one calendar year. They should present evidence of successful achievement at another college or university as part of their application for readmission.

Readmitted students who were formally dismissed for academic deficiency have two final grading periods in which to regain minimum academic progress or good standing. If dismissed the second time, these students may not attend the university for additional degree or nondegree credit study.

Temporary Withdrawal/Leave of Absence

A student may request a temporary withdrawal for a specified period by securing the appropriate forms at the Office of the Registrar. To be eligible for a temporary withdrawal, the student must submit completed forms to the Office of Admissions for processing. A student must be in academic good standing or making minimal progress toward good standing and must request the temporary withdrawal prior to the registration date of the intended period of absence.

A student on a temporary withdrawal is assured a place in the semester designated for return provided the instructions that are part of the temporary withdrawal agreement are fulfilled, and advance deposits are submitted at the time designated by the Direc-

tor of Admissions.

A student who returns from a temporary withdrawal of a calendar year or less in duration is responsible for the graduation requirements and academic policies that applied at the time the temporary withdrawal was requested. A student who returns from a temporary withdrawal of more than one calendar year duration must satisfy the graduation requirements and academic policies which exist at the time of return and is then classified as a readmitted student.

Second Baccalaureate Degree

Application materials and instructions for obtaining a second bachelor's degree at Bloomsburg University may be secured from the Office of Admissions. There is an application fee of \$25. To qualify, an applicant must hold a bachelor's degree from a regionally-accredited college or university.

This second degree track requires a student to earn a minimum of 30 semester hours in undergraduate courses while in residence at the university. All curriculum requirements for the second degree must be satisfied and free elective credit taken, if necessary, to complete the minimum of 30 semester hours.

If there is a replication of a required course(s) in the two baccalaureate programs, the course(s) cannot be applied as part of the 30-semester-hour requirement for completion of the second degree.

The applicant must provide the department chairperson from the discipline they wish to pursue, with a copy of their official college transcript and a second degree application form. Pending a favorable review of the applicant's academic credentials, the chairperson signs the application and forwards it and the official transcript to the Admissions Office.

International Students

Residents of foreign countries should initiate their application well in advance of the semester they plan to enroll. Non-U.S. citizens who are not resident aliens need to submit a special application for international students. This application may be obtained by writing the Director of Admissions. Students whose native language is other than English are required to submit the results

of the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service in Princeton, N.J. The minimum acceptable TOEFL score is 500. Those students who fail to earn a score of 500 are urged to investigate enrolling in the English as a Second Language course (ESL) that is offered at the university. Upon completion of the ESL program, the minimum QPA acceptable to supplement a TOEFL score of under 500 is a 2.5.

Certificates of educational training should be accompanied by certified translations if they are presented in a language other than English. Supplement credentials with brief course descriptions of subjects successfully completed. International transfer students must submit their credentials to an outside evaluation agency for course-by-course transfer evaluations. Instructions are given on the international student application.

Students must submit a notarized financial statement that would indicate their ability to finance their educational and living expenses for the duration of their college career. Due to financial limitations, students who are unable to provide for their educational and living expenses will not be offered admission to Bloomsburg University.

Campus Visits

Group information sessions are held regularly on campus. Arrangements can be made to attend a group information session by contacting the Office of Admissions at (717) 389-4316. The campus Visitors Center is located in the lobby of Waller Administration Building.

Four Saturday open house programs are held in October, November, February and April in Mitrani Hall, Haas Center for the Arts, beginning at 9:30 a.m. Open House programs consist of a general meeting with admissions staff and administrative personnel, a question-and-answer session, a campus tour, lunch (at a nominal cost), and meetings with faculty from various academic departments. Participation in an open house day may be more meaningful than a group information session because prospective students have the opportunity to meet directly with members of the university faculty.

Off-campus Visits

Each year, representatives from the Office of Admissions visit secondary schools and community colleges throughout Pennsylvania and in neighboring states. They also participate in approximately 100 college night/career day programs including Na-

tional College Fair programs in Philadelphia, Pittsburgh, and New Jersey. Prospective applicants should check with their school or community college counselors to learn if a Bloomsburg University admissions representative will visit their institution or a nearby college night program.

Tuition and Fees

Undergraduate Fees for the 1996-97 Academic Year

Fees are subject to change, usually in the summer, by appropriate governing boards. For the most current information, see the university web site at <http://www.bloomu.edu>

Prices shown are per semester

	Pa. Resident	Out-of- State Resident
Tuition		
(12-18 hours, full time) \$1,684		\$4,283
Tuition (per semester hour) \$140		\$357
University Housing		
Double Room 871		871
Single Room 1,307		1,307
Upper Campus Apartments 896		896
Meal Plans		
19 Meal Plan, \$100 Flex 752		752
14 Meal Plan, \$100 Flex 674		674
10 Meal Plan, \$100 Flex 625		625
7 Meal Plan, \$100 Flex 548		548
Academic Equipment Fee		
12 or more semester hours 132		132
per semester hour 11		11
Community Activities Fee		
12 or more semester hours 71		71
per semester hour 6		6
Student Union Fee		
10 or more semester hours 60		60
7 to 9 semester hours 30		30
1 to 6 semester hours 15		15
Recreation Fee		
12 or more semester hours 71		71
per semester hour 6		6
Student Union Operations Fee		
12 or more semester hours 26		26
per semester hour 2.25		2.25
Health Service Fee (9+ hours) 37		37

About Tuition

Tuition (also known as the basic fee) covers the cost of courses you will take, but does not cover books and supplies.

Tuition is established annually by the State System of Higher Education board of governors, usually in July, after the state legislature determines support levels for higher education in the commonwealth. The Commonwealth of Pennsylvania provides approximately \$5,052 per full-time equivalent student to the State System of Higher Education in support of each student's education, and the difference between in-state and out-of-state tuition reflects this support.

Tuition is the same for all 14 State System of Higher Education universities.

For course loads over 18 semester hours, Pennsylvania residents pay an extra \$140 per semester hour and out-of-state residents pay a \$357.

Tuition Refunds

The university is responsible for notifying each student of its refund policy.

Advance deposits credited toward the basic fee are non-refundable. Other amounts paid and credited toward the basic fee are refundable in full for students who withdraw for approved reasons prior to the first class day. Students who reduce their credit hour load so as to qualify for billing as part-time students are eligible for a refund of the amount paid which exceeds the part-time rate.

Tuition fees are eligible for refunds when the student withdraws from the university. All refund requests must be submitted in writing and comply with the appropriate

institution's processing procedures. Refunds on student activity fees will be within those regulations and procedures established by the student organization, as approved by the president of the university. Such refunds must be consistent with federal law. A student is eligible for consideration for a refund for any reason approved by the president or the president's designated official. The refund schedule applies also to all part-time students reducing their credit hour load. Except for minimum forfeit of advanced deposits, refunds for tuition are based on the following schedule, effective July 1, 1995:

First day	100 percent
First through second week	90 percent
Third through fourth week	50 percent
Fifth through eighth week	25 percent
After the eighth week	no refund

Full refund of tuition is granted to students of State System universities who are military reservists or members of the National Guard and are ordered to active military service by the president of the United States.

With respect to room and board fees, all refund schedules apply only to conditions in which students withdraw entirely from the university.

The following is the schedule of refunds to aid recipients under Title IV of the Federal Higher Education Act, as amended, who are first-time students at this university, and receiving Federal financial aid:

First Week	— 90 percent
Second Week	— 80 percent
Third Week	— 80 percent
Fourth Week	— 70 percent
Fifth Week	— 60 percent
Sixth Week	— 60 percent
Seventh Week	— 50 percent
Eighth Week	— 40 percent
Ninth Week	— 40 percent
Tenth Week and beyond	— No refund

Housing Fees

Housing fees for on-campus residence are established annually, usually in the spring by the Bloomsburg University Council of Trustees. Most available housing is double occupancy in seven residence halls and an apartment complex accommodates a total of 2,680 students. Although students

housing preferences are considered whenever possible, the university reserves the right to alter the composition of residence halls.

Housing and food services are provided on a combined basis only for students living in the residence halls. Students living in the Montgomery Place Apartments have the option of a meal plan. Housing and food service agreements are binding for a specified period and may not be transferred or reassigned.

Freshmen under 21 years of age must live on campus or commute from their parents residence. If extenuating circumstances justify other housing arrangements, a written request for waiver of this residency requirement must be submitted to the Director of Residence Life, Ground Floor, Elwell Residence Hall, Bloomsburg University, 400 E. Second St., Bloomsburg, PA 17815-1301

Transfer students, upon acceptance to the university and payment of the advance deposit, are eligible for on-campus housing on a space available basis, but married students and/or students with families whose housing needs are atypical are not eligible.

Students must participate in an assignment process for housing on upper and lower campus to reserve a room for the following academic year. Eligibility requirements are subject to revision in response to fluctuations in enrollment figures and student demand for on-campus accommodations.

Further information concerning on-campus or off-campus housing may be obtained by contacting the Residence Life Office at (717) 389-4089.

Single occupancy dorm — \$1,307/ per semester

Double occupancy dorm — \$871/ per semester

Upper campus apartments — \$896/ per semester

Summer session — \$55/week

Arrangements for room guests must be approved by the resident director of the hall where the guest will be housed.

Meal Plans

Meal plan fees are established annually, usually in the Spring, by the Bloomsburg University Council of Trustees.

All students who live in the residence

halls are required to take their meals in the campus dining hall under one of two food service plans during the academic year. Food service fees are payable with the housing fee as a combined charge. Housing and food service fees are the same for Pennsylvania residents and out-of-state students. The 14, 10, and seven-meal plans apply to any meals served in the dining facilities Monday through Sunday. No changes to meal plans are processed after the second week of the semester.

Charges for dining hall meals are adjusted annually after the end of the academic year. The adjustment under the food service contract, currently in force, is based on the wholesale price index.

Students who live off-campus or in the Montgomery Place Apartments have the option of purchasing a meal plan at the Business Office in Waller Administration Building.

The meal plan provides a cash equivalency option which allows students to purchase a certain dollar amount at each meal in the various food facilities on campus including the pizza shop and snack bar. After making a selection, the cash price of the meal is totaled. If the cost is under the prescribed amount, there is no charge. If it exceeds this amount, the difference must be paid in cash or in flex dollars. One cash equivalency meal equals one board meal.

Flex dollars, which are part of the meal plan and may be purchased separately by students living off-campus or in the Montgomery Place Apartments, broaden a student's options. These dollars can be used at any food facility. Each time a student uses flex dollars, the expenditure is subtracted from the balance of the student's flex account. Students living in the residence halls can add to their flex account in increments of \$25. Students living off-campus and in the Montgomery Place Apartments can purchase flex dollars at the Business Office in \$25 increments once they have made an initial minimum deposit of \$100 into their flex account.

The flex balance carries over from fall to spring semester only. Any balance left at the end of the spring semester is not refundable and cannot be transferred. Students may, however, purchase gift certificates with the

balance of their flex accounts, valid until the following October. These gift certificates are honored at all campus dining facilities. Students should use all monies in flex accounts.

Basic Meal Plans

19 meals/week (\$100 in flex dollars)
\$752/semester

14 meals/week (\$100 in flex dollars)
\$674/semester

Summer Session

19 meals/week \$44/week

15 meals/week \$42/week

In addition to basic meal plans, above, students who live off campus may also select:

10 meals/week (\$100 in flex dollars)
\$625/semester

7 meals/week (\$100 in flex dollars)
\$548/semester

Casual Meal Rate

Breakfast - \$2.70

Lunch/Brunch - \$3.90

Dinner - \$5.00

Steak Dinner - \$7.70

Special Dinner - \$6.50

Academic Equipment Fee

The Academic Equipment Fee, established by the Bloomsburg University Council of Trustees, essentially covers the cost of maintaining laboratories, such as scientific and computer labs, and equipment used by students. It is established on an annual basis.

Community Activities Fee

The Community Activities Fee, established by the Community Arts Council, finances student activities in athletics, recreation, music, lectures, student publications, general entertainment, student organizations, and other student-supported programs. Part-time students taking coursework on campus are required to pay the Community Activities fee at the rate of \$6 per semester hour.

Student Union Fee

Students are charged a Student Community Building Fee of \$60 per semester for regular sessions, \$3.50 per credit hour for summer sessions (\$42 maximum rate). The fee,

established by the Community Government Association, pays for the Kehr Union Building.

Student Union Operations Fee

Students are charged \$26, or \$2.25 per semester hour, to provide for the day-to-day operations cost of Kehr Union. The fee is established by the Community Government Association.

Recreation Fee

Students will be charged a Recreation Center fee of \$71 per semester for regular sessions, \$6 per credit hour for summer sessions. The fee, established by the Community Government Association, pays for the facility and entitles the student to use the center for recreational purposes.

Health Service Fee

All students carrying 9 or more semester hours are assessed a \$37 Health Service fee per semester. Students scheduling 8 semester hours or less will not be assessed a Health Service fee. The fee is established annually by the Bloomsburg University Council of Trustees.

The fee is not a substitute for health insurance, which students are required to have or obtain.

Faculty and staff who schedule academic courses are not assessed a Health Service fee. Student teachers and/or students on internships who are not residing in the Bloomsburg area are not liable for this fee; they may request, in writing, an exemption from the Business Office. Students registered in off-campus courses also are not assessed a health fee. Health services are available only to students who pay a health fee.

All students enrolled in a summer session are assessed \$1 per week for the length of the session(s) for health services.

The monies collected from this fee pay for the health service that has been designated by the Pennsylvania Legislature as an auxiliary function of the institution. These funds are expended for the professional salaries related to health services, plus the cost of the Hospital Emergency Room Fee Waiver Contract and other service contracts, i.e., ambulance service, family planning, medi-

cal supplies, utilities, and the self-care unit.

Miscellaneous Fees

Diploma Fee - A diploma fee of \$10 is charged at graduation for a bachelor's degree or a master's degree.

Transcript Fee - A \$2 fee is charged for each official transcript of a student's record and \$1 for an unofficial transcript.

Late Registration Fee - A late fee of \$10 is charged to a student who completes registration after the official registration date.

Application Fee - A \$25 application fee must be paid by each applicant, undergraduate and graduate, at the time of request for registration. The application fee is not refundable.

Keys Replacement - A \$30 fee is charged for replacing a room key and \$5 for a mailbox key.

Orientation Fees

There is a one-time administrative orientation fee of \$20 paid to the Business Office at the initial billing. A participatory fee for the orientation program held on-campus is included with the registration for the program and paid directly to the Orientation Office. Participatory fee for orientation:

\$52 for fall freshmen

\$10 for January freshmen

\$52 for fall transfer students

\$10 for January transfer students

\$20 for summer freshmen

\$18 for Developmental Instruction students

\$10 for January Developmental Instruction students

\$6 for adult non-traditional students

Books and Supplies

Books and supplies are estimated at \$170 per semester. Students may secure books and supplies at the University Store. The store accepts cash, credit cards and checks.

Payment of Fees

A nonrefundable advance registration fee of \$100 is due when an individual is approved for admission as an undergraduate student or when a former student is ap-

proved for readmission. This fee is credited to the first basic fee payment. The advance registration fee (\$100) is not refundable.

The Community Activities Fee for one semester is due when a student is approved for admission or when a former student is approved for readmission after being out of school for one or more semesters.

A \$100 advance housing deposit, of which \$50 is refundable, is required to reserve a room accommodation and negotiate a housing contract for the academic year. The deposit must be paid prior to room assignment and is credited to the housing charge for the current semester.

Bank drafts, post office money orders, or checks must be made out for the exact amount of the fee. Fees are payable to

Bloomsburg University.

Fees are due at times determined by the Business Office.

The university reserves the right to withhold information concerning the record of a student who is in arrears in fees or other charges including student loans.

The university does not offer a time payment plan. Billing statements of student accounts are mailed prior to registration each semester. Failure to comply with the directive concerning payment excludes the student from registration.

Inquiries concerning fees may be addressed to: Director of Accounting, Business Office, 22 Waller Administration Building, Bloomsburg University, 400 E. Second St., Bloomsburg, PA 17815.

Academic Support Services

Academic Support Services encompasses Academic Advisement, Accommodative Services, International Education, the Department of Developmental Instruction, Act 101/EOP and Upward Bound. The freshman year program and the university seminar course for new students are under the direction of Academic Support Services. Additional responsibilities include management of the university's performing arts facilities and leadership for the Celebrity Artist Series, Provost's Lecture Series and the Community Arts Council.

The goals of this area are to provide academic services and courses of study which enable students to achieve academic success and to broaden the entire university community's cultural and intellectual horizons by bringing acclaimed performing artists, ensembles and lecturers to campus.

Academic Advisement

Incoming students, who indicate and are offered admission to their preferred curriculum, are assigned to faculty advisers who specialize in advisement in these areas. Assignments to advisers are made by the coordinator of academic advisement with advice of department chairpersons and deans. Applicants for admission who are undecided about their curriculum state undecided on the application instead of specifying a cur-

riculum. These applicants are considered general studies students and will declare a specific major at the appropriate time. These students are advised or assigned to advisers by the coordinator for academic advisement. Students with questions or problems should seek assistance from the Office of Academic Advisement, 12 Benjamin Franklin Hall, (717) 389-4271.

Accommodative Services

The Office of Accommodative Services offers a wide range of services designed to support and enhance the performance of university students.

Services available through the accommodative function seek to assist those students who bring special needs to the university. Interpreters, note-takers, and readers are just a few examples of the services available.

The office also serves as an advocate on issues of accommodation beyond the classroom and acts as liaison with various other campus offices. The office regularly contacts the state offices of Vocational Rehabilitation and Visual Services to ensure that students are receiving adequate support from both the university and other agencies. Candidates for admission to the university are encouraged to contact the office in conjunction with a visit to the Office of Admissions. The Office of Accommodative Services is in-

terested in providing prospective students with a clear and comprehensive discussion of what will be available to them should they decide to enroll at the university.

International Education

The international education program advises international students and coordinates university-wide efforts to provide study, research, and teaching abroad opportunities for students and faculty. Participants experience a gamut of new cultural experiences that inspire fresh perspectives on various relationships. Opportunities are provided to study for a semester, an academic year, or a summer at a foreign institution. In recent years, Bloomsburg students have spent part of their undergraduate years in Scotland, England, Ireland, The Netherlands, France, Germany, Italy, Austria, Russia, Spain, Nigeria, Mexico, Ecuador, Brazil, Japan, China, and India. Education majors have the opportunity to complete their student teaching in a foreign country, while adding an international dimension to their professional development. The Office of International Education is located in Lower Luzerne Residence Hall.

Upward Bound

The university presents the opportunity for eighth, ninth, and tenth graders from affiliated high schools to enroll in its Upward Bound program. Participation may continue through the summer after high school graduation. The program, open to students meeting certain academic and financial requirements, is geared to promote self-confidence and to make students better informed and, thus, better prepared for life beyond high school. Upward Bound's ultimate goal for its students is completion of higher education.

The program consists of two parts. In the first segment, students spend two hours a week at their own high schools involved in academic experiences which supplement their regular scholastic program and improve their academic performance. The program's counseling service provides close individual contact for discussing career, voca-

tional, and personal interests within the high school setting. The second component of Upward Bound is a six-week summer residential experience on the Bloomsburg University campus. This segment provides concentrated academic work plus planned recreational, social, and cultural experiences, both on and off the campus.

Freshman Year Program

The freshman year program provides many services to new students during the academic year. Freshmen in need of academic assistance may contact the Office of the Dean of Academic Support Services located in lower Luzerne Hall. A one-credit elective university seminar course, 09.100 University Seminar, offered on an on-going basis, is designed to assist freshmen in making a smooth transition to their college experience.

Celebrity Artist Series

Numerous diverse cultural attractions are brought to the university campus each year. The Celebrity Artist Series features notable performing artists and groups — symphony orchestras, musical troupes, dance companies, and popular personalities. The series is sponsored by the Community Arts Council, which is comprised equally of faculty members, students, and community representatives. Faculty, staff, and students who have paid a Community Activities fee are provided seating on a limited basis. A subscription plan is available for preferred seating and may be obtained from the Office of Academic Support Services located in lower Luzerne Hall.

Provost's Lecture Series

The Provost's Lecture Series provides a public forum for the university, as well as surrounding communities, to share the fruits of learning. Scholars, executives, journalists, and professionals from various walks of life are invited to campus to speak about academic issues and special topics of interest. Faculty members often encourage students to attend events related to their discipline. The events are free and open to the public.

Undergraduate Academic Policies

Definition of Full-time and Part-time Students

An individual who is enrolled for a minimum of 12 semester hours is classified as a full-time student. One who is enrolled for fewer than 12 semester hours is a part-time student. Where the word "student" appears without clarification either by word or context in this document, full-time degree student is implied. Students should be aware that failure to maintain a certain number of semester hours per year may affect eligibility for financial aid, athletics, et al.

Semester Hour

A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes in lecture, discussion, or recitation for one semester. In some cases, as in laboratory, studio, or internship, there may not be a one-to-one correspondence between experimental time and credit.

Residence Requirements

At least 32 of the last 64 semester hours credited toward a bachelor's degree must be taken in residence at the university. Former Bloomsburg students who are certified for teaching by completing two or three years of college work and who are candidates for the Bachelor of Science in Education must complete at least one half of the remaining work for the degree program in residence. Residence credit is given for courses by Bloomsburg University for college credit.

Class Standing

A student has academic standing as a freshman until he or she has 31 semester hours, as a sophomore from 32 to 63 semester hours, as a junior from 64 to 95 semester hours, and as a senior after 96 or more semester hours of credit. Transfer credit, if any, is included in these figures.

For purposes of social and housing privi-

leges and regulations, the definitions of class standing are as follows: freshman, to and including 29 semester hours; sophomore, 30 to 59 semester hours; junior, 60 to 89 semester hours; senior, 90 or more semester hours or 6 semesters as a full-time student.

Normal Load and Overload

The normal course load of a student in any semester is 16 semester hours. A student in good standing is limited to 18 semester hours, unless he or she receives permission for an overload by his or her academic adviser. A quality point average (QPA) of 3.0 or higher is required of the student before permission can be granted for an overload. If the QPA is less than 3.0, then approval of the department chairperson is required.

A student who is making minimum progress toward academic good standing or who is on academic probation may schedule no more than 16 semester hours. (See the section on Academic Probation.) A student who has been reinstated upon appeal of academic dismissal is limited to scheduling 13 semester hours. (See the section on Appeals.)

Auditing of Courses

A full-time student who is enrolled for less than 17 hours of coursework may, with consent of the appropriate dean and subject to fees as stated in the section on Fees, register for one course as an auditor. If the registrant attends at least three-fourths of the regular class meetings, a V will be reported by the instructor, and the course will be entered on the academic record without credit. No assignments are made to an auditor, and no papers or examinations are accepted by the instructor for grading or recording either during the period of enrollment or subsequent thereto. An auditor may not participate in laboratory or studio work if such work is part of the course audited.

A part-time student may register as an au-

ditor subject to the provision that when computing the fee paid by the student, the course audited will be counted the same as if it were taken for credit. Individuals who are not enrolled as students may apply for audit privileges through the dean of the School of Continuing and Distance Education. Acceptance depends upon such factors as space in class and educational background.

Graduate Courses in the Senior Year

Seniors needing fewer than 18 semester hours of coursework to satisfy requirements for a baccalaureate degree may, with approval of a department chairperson, apply to the assistant vice president for graduate studies and research in the School of Graduate Studies for permission to supplement undergraduate courses with graduate courses. Credit for graduate courses is awarded upon verification of completion of the student's undergraduate degree.

Class Attendance Policy

Regular classroom attendance is expected of all students. A student will be afforded reasonable assistance by a faculty member when coursework is missed for such reasons as:

- Personal illness,
- Death or critical illness in the immediate family,
- Participation in a university-sponsored cocurricular activity.

In the latter instance, mutually satisfactory arrangements for assistance must be made by the student when the activity is announced.

The instructor is not required to provide make-up examinations or to review class work missed as a result of unauthorized absences.

A faculty member with departmental approval may adopt a reasonable, alternative policy if class members are provided that policy in writing during the first week of classes.

Student Course Requirements and Progress Information

Within the first week of classes each se-

mester, teaching faculty must distribute in writing at least the following information: procedures for determining each letter grade, any relationship of class attendance to the course, any other course requirements, weighted average of requirements for grade computation, and procedures for making up tests or other work missed through excused absence.

Faculty may post student grades providing a student has given written permission; the grades must not identify the student. Using social security numbers or parts of social security numbers is illegal. If grades are posted, each student should be given unique identifier which is not consistent to student names listed in alphabetical order.

At any time during the semester, teaching faculty shall be prepared to inform students of their academic progress should the student request this.

At the end of a semester or summer term, the final grade of each course is recorded on the student's permanent record; a copy of the semester grades is sent to the student at his/her home address or another address designated by the student.

Course Repeat Policy

A maximum of four courses (not more than 14 semester hours) in which grades of D or E have been recorded may be repeated. The initial grade remains on the transcript and is part of the student's permanent record. Quality points are awarded for the grade of the repeated course only. The grade of the repeated course is part of the permanent record and is used to calculate the student's quality point average. Multiple repeats of the same course are considered as one repeat. A course taken at the university in which a grade of D or E has been earned and repeated at another accredited institution of higher education is included in the permitted maximum number of repeats.

Academic Integrity Policy and Procedures

Bloomsburg University students are expected to be honest in all their academic work; this means they will not engage in any of the following acts:

Cheating on examinations including

nonauthorized use of books or notes, use of crib sheets, copying from other student's papers, exchanging information with another student orally or by signals, obtaining a copy of the examination illegally, and other similar activities.

Plagiarism in term papers, themes, essays, reports, take-home examinations, etc. (To plagiarize is to steal or use without acknowledgment the ideas, words, formulas, computer programs, etc. of another person.)

Falsifications including forging signatures, altering answers after they have been graded, insertion of answers after the fact, erasure of a grader's marking, etc.

A student found guilty of academic dishonesty may be subjected to a full range of penalties from reprimand to expulsion from the university. A faculty member who believes that a student has violated the academic integrity policy should use the following procedures to resolve the matter.

Reprimand the student orally or in writing. A faculty member also is authorized to assign a zero in the work tainted by the academic dishonesty and/or assign the grade of E for the entire course (A student may file a grievance against this action.); and/or

File a written complaint against the student with the Student-Faculty Judicial Board. The complaint must describe academic dishonesty that is alleged to have taken place and must request that the matter be shared by the board. All subsequent procedures shall follow those of the judicial system.

Diagnostic Testing Program Policy

This policy applies to testing that is not a part of the admissions procedure or course requirements. The director of academic advisement uses diagnostic test results to assist with course placement.

Students will be selected for diagnostic testing based upon their predicted freshman year grade point average or performance in courses at Bloomsburg University. A predicted freshman year QPA is calculated for each new freshman at the time of application to the university. New students with a predict-

ed QPA less than 2.5 will be given diagnostic test(s). Students whose college QPA falls below 2.0 will be considered for diagnostic testing based upon their circumstances. The specific area(s) of diagnostic testing will be determined by the pattern of SAT scores and either high school or college achievement. Students selectively low in one of the admission testing areas (e.g., below SAT math of 450 or SAT verbal of 430) will have diagnostic testing in areas which are selectively weak. Results of these tests will be released to faculty and staff on a need-to-know basis only for diagnostic evaluation and remediation of the individual tested and/or evaluation of the testing program. This information will be released with appropriate interpretation to students and to other agencies as the student permits. These data may be released without student permission for research purposes with student anonymity assured.

Depending on the results of the review of the record and the diagnostic evaluation, an individual program may be provided.

If a student is identified and placed in a developmental course(s), the course(s) is considered a prerequisite before additional courses for credit can be taken in the corresponding area. Each student will be provided with a letter indicating course placement or the recommended resources available to assist them, such as accommodative services, tutorial labs, and the College Study Skills courses. Such developmental programs will be provided for a maximum of students within the budgetary limits of the university.

Student Outcomes Assessment

The university is committed to the continuous improvement of its programs and services. In an on-going effort to monitor the quality and effectiveness of these programs and services, the university routinely conducts campus-based studies of student attitudes, student achievement, student satisfaction, and personal, professional and career development. These studies are grouped under the heading of student outcomes assessment. Participation in outcomes assessment activities is expected of all students. While every student is not selected for participation in every activity, it is likely that an individual student will be involved in one or more assessment activities during the col-

lege years. It is only through cooperative participation in the assessment process that the university can better understand itself and better serve its students.

Credit by Examination

A student may receive a maximum of 64 semester hours of credit by examination or experiential learning. Credit may be awarded for successful completion of institutional examinations and/or approved external examinations.

A student may petition for the privilege of establishing credit in a course or courses listed in the undergraduate catalog through a comprehensive examination instead of through registration and class attendance or through independent study of the course content.

A student may not petition for an examination in a course audited, nor in a course from which a grade has been recorded.

A student must present evidence of equivalent experience if the course involves laboratory or studio work.

The student's petition must be approved in sequence by the department chairperson and the dean of the college.

An examination committee must be appointed by the department chairperson and approved by the dean of the college. Unless the course is an advanced course which is taught by only one member of the faculty, the examination committee must include at least two faculty members.

The examination must cover the course syllabus in a comprehensive manner. Suitable standardized examinations may be used. The examination must be written or, if oral, subject to transcription. Where skill, as in keyboarding or use of applications software, is a course requirement, the written and oral aspects must be supplemented by a demonstration of skill. A copy of the completed approval form must be placed in the student's advisement file and the original forwarded to the Office of the Registrar.

A fee is charged for courses challenged by institutional examination taken for credit, regardless of the number of credits awarded for that course. Upon receipt of approval, this fee is payable at the university Business Office. Evidence of payment must be presented to the department before the ex-

amination can be administered.

If the student passes the examination, the grade of "P" is assigned for the course. If he/she fails, no record is made. This course does not count in the student's normal quota of pass-fail courses.

Suitable adaptations of the above procedures may be used to validate transfer courses taken in non-accredited colleges. No fee is charged for examination to validate such credit. Examinations may be based upon the syllabi of the courses taken in the previous institution or, in case the student wishes to establish equivalency with courses in this university, upon the syllabi of courses offered in this institution.

The university recognizes two external examination programs: the College Level Examination Program (CLEP) and the Advanced Placement Program (AP) of the College Board.

Credit by AP Examinations — The university will award credit for AP Exams upon receipt of verification of a score of 3, 4 or 5 by the Office of the Registrar.

Credit by CLEP Examinations — The university will award credit for CLEP Examinations upon receipt and verification of a score at or above the 50th percentile by the Office of the Registrar. Minimum scores for awarding credit and the amount of the credit granted can be secured from the Office of the Registrar. CLEP General Examinations must be taken before matriculating to Bloomsburg University. CLEP Subject Examinations may be taken anytime prior to graduation. Acceptance of credit for certain CLEP Examinations is subject to departmental approval.

Credit for Military Experience — Bloomsburg University may award credit for educational experiences of students earned while serving in the armed forces of the United States. The registrar makes a recommendation to the departmental chairperson of the student's major based upon the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Forces. Recommendations are made provided the credit applies to the student's degree program. The final decision for granting credit resides with the departmental chairperson. The university will transfer two credits in 05.100 Physical Fitness for

completing basic training in the armed forces of the United States.

Academic Examination Policy

Faculty shall give examinations during the regularly scheduled classes of the semester. The faculty are responsible for determining the length, frequency, form, and content of all examinations within the guidelines listed below. Final examinations shall be given where applicable only during the designated final examination week after the end of regularly scheduled classes and only at the designated time and place according to the final examination schedule.

Faculty will distribute in writing the requirements for each course within the first week of each academic term. In these requirements, final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade. No single exam, paper, project, or assignment shall have greater emphasis than the final examination. As a result of this condition, every course must use at least three evaluations for grading purposes.

Faculty will give final examinations, which are comprehensive in design, emphasizing subject matter presented over the entire term.

Faculty will return and/or permit students to review all unit tests, quizzes, and other types of evaluations by the last regularly scheduled class in the term. In order to prevent an excessive build-up in the number of unit tests for each student during the last week of classes, faculty are advised to refrain from testing during that week.

A final examination schedule shall be prepared by the Office of the Registrar with consultation of the faculty, if necessary, and approved by the provost and vice president for academic affairs. Regularly scheduled final examination periods will be 120 minutes in length. Part of the final examination week will include at least a one-day interval between the last full day of classes and the first day of scheduled examinations. This time will be designated as the reading period.

The following restrictions are imposed on the scheduling of activities during final examination week:

Faculty are not required to be available

to students for conferences during final examination week.

No examinations will be scheduled during the reading period unless approved by the provost and vice president for academic affairs.

No extracurricular activities or faculty-administrative activities shall be scheduled except with the consent of the individuals involved.

The Andruss Library will remain open, and other designated study areas will be made available during the final examination period with expanded hours when possible.

No student shall be required to take more than two final examinations in one day. If the student has a scheduling conflict during the final examination period resulting in an excessive number of final examinations scheduled for one day, the following procedure for rescheduling the final examination shall apply and be completed by at least two weeks before the end of regularly scheduled classes. The student should select two of the scheduled examinations to be taken during the designated time according to the following priority of choice:

Courses offered by the major department,

Additional required courses in the major program,

Other courses.

Any exceptions to any of the scheduling restrictions cited above must be made on the basis of the following procedures:

In case of noncompliance with the provisions of this policy, the student has the recourse of proper grievance procedures as established by the university.

During summer sessions, the last class period of each course shall be designated as the final examination period with the time period for the examination not to exceed 80 minutes unless the arrangements have been made in advance so that they can be announced at the first meeting of the class. Except in unusual circumstances, classes in six-week sessions shall have the final examination on the last day of the course. Final examinations for courses scheduled in three-week sessions shall be held during the last of the two class periods scheduled for the last day. Classes in the nine-week sessions shall hold final examinations on the last

scheduled class day with the period extended to 80 minutes for that class.

Faculty who wish to schedule quizzes, tests, or examinations at times other than during their regularly scheduled class periods during the term may do so only if a make-up opportunity is made available to students. This opportunity must be scheduled at a time mutually acceptable to both student and faculty and may not conflict with the student's other scheduled classes. A faculty member shall not give an examination at a time other than during a regularly scheduled class period unless approval is first obtained from the majority of the faculty members of his/her academic department. Except for abnormal circumstances, this approval should be granted by the end of the first week of classes. Notification of this alternative arrangement shall be given to the appropriate college dean.

A faculty member who believes that the content of a course does not lend itself to a scheduled examination must obtain approval for an alternative arrangement from the majority of the members of his or her academic department and college dean. Notification of the approved arrangement shall be given to the Office of the Registrar. Except for abnormal circumstances, the approval and notification shall be made by the end of the first week of classes.

To change the requirement specifying that final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade, there must be agreement for the change by the faculty member(s) in charge of the class, a majority of the members of his or her academic department, and the appropriate college dean. Except for abnormal circumstances, the approval and notification to students will be made by the end of the first week of classes. If approved, the change may remain in effect for the faculty member for the duration of this policy or until the course is re-submitted to the curriculum committee.

In order to change the time and place scheduled for a final examination, there must be agreement for the change by the faculty members(s) in charge of the class, 100 percent of the students in the class, and the appropriate college dean. This change must be made by the middle of the semester.

Student opinion in this matter will be determined by secret ballot with the faculty member in charge of the vote. If for some reason a change is made in the time and date of a final examination that results in a student conflict, the faculty member will arrange to provide a make-up opportunity during the examination period.

The additional final examination(s) should be rescheduled with consultation of the relevant faculty on a mutually convenient time. Assistance in the rescheduling of examinations may come from such individuals as the student's adviser, department chairperson, or academic dean.

Unless returned to the student, all graded final examinations must be available for student review for at least the next full semester following the final examination.

Grading Policies

Recording Grades

At the end of a semester or summer session, the final grade for each course is recorded on the student's permanent record; a copy of the semester's grades is sent to the student's home address or another address designated by the student. Midsemester grades of D plus, D and E are reported to degree students with 32 and fewer semester hours earned. These grades are not permanently recorded.

Definition of Grades

Grades given at Bloomsburg University, with their commensurate quality points, are as follows:

A = 4.00 (superior attainment)

A- = 3.67

B+ = 3.33 (above average attainment)

B = 3.00

B- = 2.67

C+ = 2.33

C = 2.00 (average attainment)

C- = 1.67

D+ = 1.33

D = 1.00 (minimum attainment)

E = 0.00 (failure)

The grades given to each student for academic credit at Bloomsburg University are assigned by those faculty who are responsible for the course in which the student is

enrolled.

Other Grades

I - Incomplete is a temporary grade given only when an instructor believes a student has been unable to complete course requirements due to circumstances beyond his/her control. Failure of a student to take the final examination or complete other course requirements without prior arrangement with the instructor for a legitimate excuse is not justification for a grade of I. When an instructor submits a grade of I to the registrar, it must be accompanied by a formal, written plan for the student to complete the course requirements and the appropriate letter grade that would be assigned if the plan were not completed by the student in the time specified. The plan for the student to complete the course requirements shall be prepared by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that work will be completed prior to the end of the next regular semester. When the plan has been completed by the student, the instructor will recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures. A request for an extension of time to complete course requirements must be initiated by the student prior to the deadline of the plan on file in the Office of the Registrar. The student must present suitable documentation to the instructor indicating that circumstances above and beyond individual control persist or new circumstances of that nature have developed. An extension of time will be granted only upon approval of the instructor and the dean of the appropriate college.

P - Passed. This grade is recorded when a student takes a course on a pass-fail basis and does work which would lead to a grade of D or higher. The grade of P also is recorded when a course is passed by proficiency examination and when a student receives a passing grade in a non-credit course or cocurricular activity such as musical ensembles, theater and forensics.

F - Failed This grade is recorded when a student takes a course on a pass-fail basis and does work which would lead to a grade of E.

The grade of F also is recorded when a student receives a failing grade in a non-credit course for a cocurricular activity.

R - Research. This grade is assigned by the instructor only when a student has been unable to complete a research component of a course because the length of time for the research exceeds the end of semester and when a formal plan for completion of the research is filed with the instructor and the chairperson. Provisions for removal of the grade are the same as those for the grade of I. The instructor must submit the grade of R to the registrar along with the formal plan for completion of the research and the grade to be assigned to the student if the research is not completed satisfactorily in the time period stipulated. The plan for the student to complete the research shall be prepared by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that the work will be completed prior to the end of the next regular semester. When the student has completed the plan, the instructor shall recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures.

V - Audit (See the section on Auditing of Courses)

X - No Grade Reported When this temporary grade is recorded, the provisions for determining academic honors, good standing, minimal progress, and satisfactory progress are not applied until the grade of X is removed.

W - Withdrawn. (See the sections on Course Withdrawal and Withdrawal from the University)

Quality Points

Quality point values are assigned as follows:

Grade	Quality Value Points
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33

D	1.00
E	0.00

Quality Point Average (QPA)

The Quality Point Average (QPA) is computed from the academic record of courses taken at Bloomsburg University in which grades of A through E were earned. The computation is executed by multiplying the number of semester hours for each course by the number of quality points for the grade in the course and adding the products, then dividing the sum obtained in the first step by the total number of semester hours represented by the courses.

A "semester QPA" is computed by including only the courses of a single semester. The "cumulative QPA" is computed by including all courses taken to date at Bloomsburg University. If a course is successfully repeated at another regionally accredited institution of higher education, the credits for a grade of D or E and the quality points for the D at Bloomsburg are deleted from the computation.

Change of Grade

After a grade of A through E has been reported to the Registrar's Office, it may be changed through the grievance process, to change a temporary grade to a final grade, or to correct a computational or clerical error. A recommendation for change of grade due to a computational or clerical error must be made in writing by the instructor and approved by the department chairperson and the dean of the appropriate college. When a grade of I and R is changed, only the approval of the department chairperson is required.

Pass-Fail Policy

After attaining sophomore standing, a degree student may elect credit courses on a pass-fail basis in accordance with the following rules:

A maximum of two courses (totaling not more than 8 semester hours) may be included as part of the minimum graduation requirement of 128 semester hours.

No more than one pass-fail course may be taken in any one semester.

A student may request to take a course on a pass-fail basis up until the close of the

business day on the second Friday of the semester or on the first Wednesday of each summer session.

Courses taken on a pass-fail basis must be free electives; no required courses may be taken as pass-fail. Required courses are those courses used to satisfy the requisites for a major (including required cognate courses) or a minor or to comply with General Education requirements. The student must complete all course requirements within the General Education area before selecting another course from that area for pass-fail.

The instructor is not informed that the course is being taken on a pass-fail basis. Grades of A, B, C, D, or E are translated into grades of P or F, with the grade of P recorded for a grade of D or higher and the grade of F recorded for E. Grades of P and F do not enter the computation of a QPA.

If subsequent to completion of a course on a pass-fail basis the student changes his/her major to one in which the original grade is required, the student may request that the chairperson of the academic department be notified of the actual letter grade earned.

A student who has received a grade of E in a course may not take it later on a pass-fail basis.

A student may revoke a decision to take a course on a pass-fail basis. The revocation must be completed by the close of the business day one week after the middle of the semester. This allows the pass-fail option to be used again.

Academic Good Standing

A student whose record at any final grading period shows a cumulative QPA of 2.00 or better is considered in academic good standing. (There are three final grading periods, fall semester, spring semester, and the total summer session.)

Satisfactory Progress

Satisfactory progress is evaluated on the basis of two criteria:

A student's ability to earn a minimum of semester hours;

A student's ability to maintain a minimum QPA at the conclusion of each grading period.

Full-time, continuously enrolled undergraduate degree students, in order to maintain satisfactory progress toward the completion of a degree, must earn a minimum of 24 semester hours in any given 12-month period (including semester hours earned in developmental studies courses).

Part-time undergraduate degree students, in order to maintain satisfactory progress within any 12-month period, must earn half of all semester hours attempted for up to 8 semester hours; two-thirds of all credit hours attempted for 9 or more semester hours.

Note: Hours earned for a repeated undergraduate course are not counted twice.

To maintain satisfactory progress, a student must meet the following minimal requirements:

Total Hours Earned (Includes Grades of P and transfer credits) Cumulative QPA Required for Minimal Progress

1 - 16 semester hours	1.25 - 1.99
17 - 32 semester hours	1.65 - 1.99
33 - 48 semester hours	1.85 - 1.99
49 - 64 semester hours	1.95 - 1.99
65 or more semester hours	2.00

A student, while making minimal progress toward academic good standing, may schedule no more than 16 semester hours.

Dean's List

A full-time degree student whose semester QPA is 3.5 or higher in 12 or more semester hours of coursework will be named to the dean's list for that semester. Grades of P or F do not enter the computation of a student's QPA.

Academic Probation

An undergraduate student in one of the following categories is permitted to attend the university on academic probation for one additional final grading period (semester/summer) but limited to 16 semester hours:

An entering freshman whose QPA at the end of his/her first final grade period is at least 1.00 but less than 1.25;

A transfer student whose QPA at his/her first final grading period is less than, but within 0.25 of the cumulative QPA required for minimal progress;

A student who has been meeting the requirement for at least two consecutive grading periods immediately prior to a grading period in which his/her cumulative QPA drops below but within 0.1 of the cumulative QPA required for minimal progress;

A full-time freshman or transfer student who was making minimal progress toward good standing at the end of the second grading period is below but within 0.1 of that required for minimal progress toward good standing;

A readmitted student who was formerly dismissed for academic deficiency who at the close of the first grading period has not regained minimal academic progress or good standing;

A full-time student who failed to earn 24 semester hours within one 12-month period;

A part-time student who failed to earn the minimum number of semester hours as prescribed above within the given semester.

Academic Dismissal

A student who at any final grading period is not in good standing, making minimal progress toward good standing, or qualified to attend for a semester on academic probation is excluded from registration, and his/her record is marked "academic dismissal." A student may be placed on "academic dismissal" without first being placed on academic probation.

A student under "academic dismissal" is ineligible to attend any courses offered for a period of at least one calendar year. Readmission regulations are stated in the section on Readmission.

Students failing to meet the minimal requirements of earned credit hours and/or QPA will be notified by the Office of the Registrar.

Appeals

A student under "academic dismissal" may petition the Academic Review Board for reinstatement. If reinstatement is granted, the conditions of reinstatement are indicated including an enrollment limit of 13 semester hours for a specified period of time. The student's record also is marked "committee reinstated." If the student does not attain good standing or is not making mini-

mal progress toward academic good standing by the end of the period granted by the conditions of reinstatement, he or she is excluded from further registration, and her/his record is again marked "academic dismissal."

If the student elects to attend the summer sessions immediately following reinstatement for a spring semester dismissal, then the entire summer session is considered the next grading period for which the student must attain minimal progress toward good academic standing or good academic standing.

Petitions to the Academic Review Board must be in writing and must be mailed to the chairperson of the Academic Review Board within 48 hours of receipt of official notification of dismissal.

The Academic Review Board includes the deans of Arts and Sciences, Business, and Professional Studies; director of Admissions; director of Academic Advisement; registrar; director of the Center for Counseling and Human Development; and a representative of the vice president for student life. At the initiative of either the applicant or the Academic Review Board, the student's adviser may be invited to participate as a voting member in the consideration of the case.

In its evaluation of a petition for reinstatement, the board is charged to consider the degree to which external factors beyond the student's control temporarily prevented optimum academic achievement; the likelihood that these or similar factors would not recur if reinstatement were granted; the likelihood that the student, if reinstated, could complete his or her curriculum successfully within a reasonable extension of the normal four-year period; and an evaluation of the plan for attaining good standing proposed by the student. A decision of the Academic Review Board is final and not subject to review.

Majors, Minors, Certification, Career Concentration

Major — Each student must complete a major field of study for graduation. A major field of study is one of the approved degree programs prescribed by the major department or the college in which the student is enrolled. The specific course require-

ments for the options within each of the degree programs leading to the degrees are described in the undergraduate catalog.

Minor — A minor field of study consists of a minimum of 18 hours, at least 15 of which must be in the department offering the minor. While courses counting toward a minor may also fulfill general education or career concentration requirements, minor courses may not be in a student's major discipline and/or certification area. A minor offered in an academic discipline may have multiple advisement options. A student may choose to pursue minors in more than one academic discipline.

Career Concentration — Career concentrations are multidisciplinary advisement programs to help students select courses to develop appropriate skills and knowledge to prepare for entry and mobility in specific professions or careers. For example, career advisory committees exist in areas such as community services, public administration, gerontology and environmental management and planning.

Teacher Certifications — Certification is the result of completing a teacher education program approved by the Pennsylvania Department of Education as defined by Chapter 49 of the Regulations of the State Board of Education - Certification of Professional Personnel. Certificates are issued by the Pennsylvania Department of Education upon the recommendation of the university, based on its approved teacher education programs. Certification does not apply to certificates issued by the university for completion of a university program. Minors cannot lead to certification to teach or supervise in the public schools of Pennsylvania.

Double Majors Across Colleges — Students electing to major in two departments must have a major adviser in each department, meet all of the major requirements of each department and all of the general education requirements. Double majors in some departments may require more than the minimum 128 credits for graduation.

Change of Area of Study (Major) — A student who wishes to change from one area of study to another must file a request to do so in the Office of Academic Advisement.

Permission to enter the new area of study may require the written approval of the de-

partment chairperson in which it is offered. In this case, approval may depend upon such factors as overall grade point average, available space, and recommendations from departmental committees. It also must be done by the student and while school is in session.

Scheduling Classes and Registration

Students enroll by scheduling classes, paying fees, and registering on the first day of each semester or summer session. The scheduling of classes is usually completed during the prior semester. Classes in progress for the current semester always constitute an obligation to the student. All scheduling procedures for the next semester shall not conflict with this obligation. The dates for scheduling and advisement are announced by the registrar. To schedule, students obtain a class schedule booklet, meet with their advisers, and enter their schedules directly at designated computer terminals.

Seniors schedule classes first, followed by juniors, sophomores, and freshmen. Fall freshmen have their schedules prepared in advance and are provided an opportunity for counseling and schedule changes during the orientation period. All students should complete English Composition I and II (or equivalent) by the end of the sophomore year.

Students shall not be required to take part in cocurricular activities until after 3:30 p.m. Scheduling activities have precedence over unscheduled meets, practices, etc.

Students off campus at the time of scheduling due to student teaching, internships, etc., will prepare their proposed schedule, which will be processed at the appointed time with those of their peers. These students mail their class scheduling form to the registrar.

Students are billed according to number of semester hours scheduled.

Students must register in person on the first day of each semester or summer session according to the instructions for registration issued by the registrar. Special provisions for registration are available for non-degree students and part-time degree students. Students who do not register will have their class

schedules dropped at the end of the first day of registration.

Students with unpaid fees, overdue library materials, and other obligations due the university will be denied scheduling and registration privileges.

Students with disabilities should contact the Office of the Registrar to make special arrangements for scheduling of classes and registration.

Change of Undergraduate Schedule

A student may change his/her semester/summer session schedule prior to the close of the fifth/third day of the semester/summer session. The consent of the adviser is not prerequisite to a change. Changes are subject to available space in classes to which the student proposes to transfer.

Schedule changes for all students in the Department of Developmental Instruction, with less than 32 earned credits, require the approval of the Department of Developmental Instruction. Schedule adjustments for students on academic probation, reinstatement and minimal academic progress require the approval of the academic adviser.

Late Registration

A student may register late until the close of business on the sixth day of the semester or the first Wednesday following a summer session registration. There is a special fee for late registration unless the student presents a medical excuse at the time of registration.

Evaluation of Undergraduate Transfer Credits

Evaluation of credit earned at other institutions for transfer students is recommended by the Admissions Office with final approval by the department chairperson. Credits for acceptable courses transfer. Grades, quality points and grade point averages do not transfer.

College-level courses completed with a grade of C (2.0/4.0) or above from a two-year or four-year institution, accredited by one of the regional accrediting agencies, are usually transferred for a degree student. Courses taken with a grade of less than C

(2.0/4.0) will not transfer to Bloomsburg University.

Transfer credit will be deleted if the student subsequently registers for courses which substantially duplicate the content of courses accepted for transfer.

When the substitution of transfer credit for a required course is in question because the course was taken in an unaccredited institution or because the description of standards of the course are unclear, a student is entitled to an opportunity to validate the course by examination.

Correspondence courses are subject to acceptance to a total that does not exceed 15 semester hours if taken from a college or university accredited by one of the two regional accrediting agencies and acceptable by that institution toward graduation in a baccalaureate degree program.

Courses taken in another institution on a pass-fail basis are acceptable for transfer as free electives if they conform to the conditions for such grades at Bloomsburg University. A student applying to transfer courses must fulfill the provisions of the sections on residence requirement and graduation requirements.

Credits from other institutions accredited by one of the regional accrediting associations earned by a Bloomsburg degree student will transfer provided approvals are obtained first from the student's adviser and department chairperson. An approval form can be obtained from the registrar. Upon completion of a course, it is the student's responsibility to provide the registrar with an official transcript. Course evaluations by department chairpersons must be secured before the registrar can record courses and credits on the student's academic record.

Evaluation of credit earned at other institutions by transfer students and by readmitted students who earned credit subsequent to their prior enrollment at Bloomsburg is made in the Admissions Office with guidelines provided by a department chairperson, cooperatively established by a college dean. A transfer student is issued an evaluation sheet that stipulates the requirements for graduation which remain to be met. This is subject to revision in the light of subsequent changes in the evaluation of the transcript.

Withdrawal from a Course

After the schedule change period and continuing until three weeks past mid-term, if a student withdraws from a course a grade of "W" will be recorded. As a means of notification of the instructor to the intent of the withdrawal, a student is required to obtain his/her instructor's signature on the withdrawal form.

No withdrawals will be permitted after the close of the work day three weeks after the middle day of the semester.

Prior to the last week of classes, in exceptional circumstances, for compelling, justified and documented reasons, the dean of the college in which the course is being taught may waive these restrictions. Poor academic performance will not constitute grounds for late withdrawal.

A limit of four (4) withdrawals during the degree program shall apply. (Withdrawal from the university is an exception.) Faculty are encouraged to include the University late withdrawal policy on the syllabus distributed to students at the beginning of the semester.

This policy applies to all undergraduate students enrolled beginning in Fall 1996.

Withdrawal from the University

A student may withdraw from the university by completing a withdrawal form at the Office of the Registrar, Room 6, Benjamin Franklin Hall. Students withdrawing in absentia must submit a written request to the registrar.

When students withdraw during a semester, the grade of W is recorded for each of the courses on the student's schedule if the withdrawal occurs prior to the beginning of the final examination period. Students may not withdraw during the final examination period.

The effective date of a withdrawal is the date on which the student signs an official withdrawal form in the Office of the Registrar or the date on which the written request is received by the registrar for a student withdrawing in absentia.

Students failing to register for the next semester are classified as withdrawn and must apply for readmission. Non-degree students may continue to register without re-

admission provided their next registration is within four semesters of their last enrollment.

An individual who discontinues attendance without clearing all obligations to the university waives the right to a transcript and future readmission until all obligations are cleared.

Policies which cover reimbursements are stated in the subsection on Miscellaneous Fees.

In addition to withdrawing from the university, students may be absent for extended periods of time. The categories include:

Temporary Withdrawal/Leave of Absence is granted by the Admissions Office after a student completes the withdrawal procedures and when he/she files a temporary withdrawal/leave of absence form with the Admissions Office.

Clinical Experience absence is authorized by the registrar when a student is participating in the clinical year(s) of the medical technology and radiological technology programs.

Students in this category are not charged fees by the university during the time of their clinical experience at a cooperating hospital.

Study Abroad absence is authorized by the registrar when a student is participating in a university-sanctioned exchange program with a cooperating university abroad. The student may be charged fees in accordance with the agreement with the cooperating university.

Completing Degree elsewhere absence is authorized by the registrar when a student receives permission from his or her adviser and department chairperson to complete course requirements at an approved institution other than Bloomsburg University.

Mandatory Leave is recorded by the registrar when a student is required to leave the university due to medical and/or psychological reasons or is suspended.

General Education Requirements

The College of Arts and Sciences, College of Business and College of Professional Studies at Bloomsburg University of Pennsylvania administer undergraduate curricula. Requirements for the curricula are in sections describing each college.

Each curriculum, leading to a baccalaureate degree, requires successful completion of at least 128 semester hours in the major, general education and free electives. This section deals with general education; requirements for each major are listed under department headings. While electives are unrestricted, it's helpful to consult with a faculty adviser.

When a student makes a tentative choice of a major, preliminary or prerequisite courses required in that major are assigned. Admission is selective or restrictive at the junior year entry level for some curricula. The university is not bound to admit the student if the student is not admissible according to the competition for available spaces or other selective criteria.

Students who plan to major in two departments must have a major adviser in each department and meet all of the major requirements of each department and all of the general education requirements. Double majors in some departments may require more than the minimum 128 semester hours for graduation. Double majors in departments in two colleges must have the permission of both college deans to declare a double major.

Credit

A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes of lecture, discussion or recitation for one semester. In some cases as in laboratory, studio or internship, there may not be a one-to-one correspondence between experimental time and credit.

General Education Requirements

The general education program includes specific course requirements totalling 18 credits, distribution requirements totalling 36 credits, and a diversity requirement of two courses. The goals of the general education program are to develop:

- An ability to communicate effectively;
- An ability to think analytically and quantitatively;
- A facility to make independent and responsible value judgments and decisions according to high ethical values and life goals;
- An appreciation of the need for fitness and lifelong recreation skills;
- A capacity for assessing the validity of ideas and an understanding of the approaches used to gain knowledge through the development of critical thinking abilities;
- A greater appreciation of theater, literature, art, and music through stimulation of one's creative interests;
- An understanding of our society and the relative position of an individual in this society;
- An understanding of the relationship between an individual and his/her physical and biological environments;
- A familiarity with the major contributions of human knowledge in the humanities, social sciences, natural sciences, and mathematics; and
- An awareness and global understanding of the relative position of the individual in the world community.

Specific Course Requirements

Communication (9 credits; unless student qualifies for 20-104 Honors Composition in which case only 6 credits are required.) Students eligible for 20-104 Hon-

ors Composition are excused from taking 20-101 and one of the second level courses.

- 20-101 Composition 1 and one of the following:
- 20.201 Composition 2
- 20.203 Approaches to Literary Study or a writing-intensive literature course:
- 20.131 Bible as Literature
- 20.151 Introduction to Literature
- 20.152 Literature and Society
- 20.156 Popular Literature
- 20.226 European Literature 1
- 20.227 European Literature 2
- 20.236 American Literature 1
- 20.237 American Literature 2
- 20.246 British Literature 1
- 20.247 British Literature 2
- 20.256 Non-Western Literature 1
- 22.257 Non-Western Literature 2

The remaining three credits in Communication are to be selected from these courses:

- 09.231 Technical Writing
- 10.101 French 1
- 10.102 French 2
- 10.203 French 3
- 10.204 French 4
- 10.205 Applied Phonetics and Pronunciation
- 11.101 German 1
- 11.102 German 2
- 11.203 German 3
- 11.204 German 4
- 12.101 Spanish 1
- 12.102 Spanish 2
- 12.203 Spanish 3
- 12.204 Spanish 4
- 12.205 Phonetic Theory and Practice
- 13.101 Russian 1
- 13.102 Russian 2
- 13.103 Russian 3
- 13.104 Russian 4
- 14.101 Italian 1
- 14.102 Italian 2
- 16.105 Chinese 1
- 16.106 Chinese 2
- 18.101 Latin 1
- 18.102 Latin 2
- 20.112 Practical Grammar
- 20.301 Creative Writing
- 25.103 Public Speaking
- 25.104 Interpersonal Speech Communication
- 74.153 Introduction to Sign Language

Quantitative-Analytical Reasoning (3 credits)

- 40.246 Business & Economics Math 1
- 40.346 Business & Economics Stat 1
- 45.260 Basic Social Statistics
- 48.160 Basic Statistics
- 53.101 Math Thinking
- 53.111 Finite Mathematics
- 53.114 College Algebra
- 53.118 Applied Matrix Algebra
- 53.123 Essentials Calculus
- 53.125 Analysis 1
- 53.141 Introduction to Statistics
- 53.241 Probability and Statistics
- 56.110 Introduction to Computer Science

Values, Ethics and Responsible Decision Making (3 credits)

- 09.213 Science, Technology and Human Values
- 09.230 Human Sexuality
- 28.220 Ethics
- 28.290 Medical Ethics
- 28.292 Contemporary Moral Problems
- 28.294 Ethics Politics and Public Policy
- 41.105 Environmental Issues/Choices
- 42.210 Values Conflict 20th Cent
- 42.215 Global Issues: Contemporary Values
- 44.207 Ethics, Politics and Public Policy
- 46.102 Anthropology & World Problems
- 46.260 Men & Women Anthropology Perspective
- 48.131 Psychology Adjustment
- 48.254 Psychology Aspects Society Issues
- 50.254 Social Implications Biology
- 60.205 Career Development and Life Planning
- 82.217 Alcohol: Use and Abuse

Fitness & Recreational Skills(3 credits)

- 05.149 Aquatics - Begin Non-Swim
- 05.150 Beginning Aquatics
- 05.151 Intermediate Aquatics
- 05.155 Swimmastics
- 05.200 CPR and Safety
- 05.214 Fencing
- 05.217 Bicycling

- 05.219 Tennis
- 05.221 Jazz Dance
- 05.222 Creative Dance
- 05.223 Modern Dance
- 05.224 Fitness Dance
- 05.225 Beginning Ballet
- 05.226 Jogging / Walking
- 05.228 Gymnastics
- 05.230 Weight Training & Fitness
- 05.231 Archery
- 05.232 Bowling
- 05.233 Badminton
- 05.234 Golf
- 05.235 Riflery
- 05.236 Volleyball
- 05.237 Mod Physical Education
- 05.238 Racquetball-Handball
- 05.239 Square Dance
- 05.240 Fitness-Slimnastics
- 05.241 Judo-Self Defense
- 05.243 Backpacking
- 05.244 Orienteering
- 05.245 Canoeing
- 05.246 Beginning Skin/Scuba Diving
- 05.247 Basic Rock Climbing
- 05.248 Basic Sailing
- 05.249 Synchronized Swimming
- 05.250 Lifesaving
- 05.265 Basketball
- 05.270 Exercise and You
- 05.271 Intermediate Archery
- 05.272 Intermediate Bowling
- 05.273 Intermediate Golf
- 05.274 Intermediate Tennis
- 05.275 Intermediate Volleyball
- 05.276 Intermediate Judo
- 05.277 Advanced Sailing
- 05.298 Fitness & Wellness (1 credit only)
- 05.321 First Aid & Safety (1 credit only)
- 05.397 Adult Hlth Dev Program (1 credit only)
- 50.205 Intro to Nutrition (1 credit only)

Distribution Requirements

Thirty-six semester hours are required with 12 semester hours required from each of the three general academic areas of humanities, social sciences, and natural sciences and mathematics. No more than three semester hours from a given academic major may count toward this distribution re-

quirement.

Courses which an individual uses to satisfy the specific communication, quantitative/analytical reasoning, values/ethics, and fitness and recreation requirements may not be used to satisfy distribution requirements. Bloomsburg University Curriculum Committee (BUCC) or an individual academic department, with the approval of the BUCC, may exclude any of its courses from being counted as a distribution requirement.

In some cases, qualifications exist in the form of prerequisites, two semester continuity, etc. Consult the class schedule, the university catalog or the student information system for prerequisites and other qualifications. Please be aware that not every general education course is offered each semester.

The courses appearing here are approved for general education as of May 1, 1995. If a course was previously listed for general education and does not appear in this class schedule, that course will still fulfill general education credit for the student, provided the student enrolled in the course during the time the course was approved for general education. However, students scheduling the course after the course no longer is approved may not receive general education credit for the course.

Questions regarding courses listed as general education should be directed to the academic department which offers the course.

Courses selected to fulfill the distribution requirements must be from at least three different departments within each of the three groups with two or more credits required from each department selected. Courses which a student uses to satisfy the specific course requirements in the categories of communication, quantitative/analytical reasoning, values/ethics, and fitness and recreation may not be used to satisfy the distribution requirements.

Students who otherwise meet the prerequisites are permitted to take any course offered by the departments listed below, unless the course is expressly excluded for general education by the university curriculum committee or the department with the approval of the curriculum committee.

No more than three credits from a given academic major may count toward the dis-

tribution requirement. Students with a double major must adhere to this policy for one of the majors.

Group A - Humanities and the Arts - Select courses totalling 12 credits from these departments:

Art
 Art History
 Art Studio
 Communication Studies
 English
 History
 Languages and Cultures
 French
 German
 Spanish
 Russian
 Italian
 Japanese, Chinese
 Latin
 Mass Communications
 Music
 Philosophy
 Theatre Arts

Group B - Social and Behavioral Sciences - Select courses totalling 12 credits from these departments:

Anthropology
 Economics
 Geography
 Political Science
 Psychology
 Sociology and Social Welfare
In addition, these courses are eligible:
 09.172 Sch Sem Soc Sci
 09.496 Honors Independent Study Soc Sci I
 09.497 Honors Sem Soc Sci
 09.498 Honors Independent Study Soc Sci II
 70.101 Introduction to Exceptional Individuals
 72.152 Introduction to Communications Disorders

The following courses are not eligible for group B credit:

40.246 Business and Economics Mathematics
 40.280 Special Topics
 40.346 Business and Economics Statistics I
 40.400 Econometrics
 40.446 Business and Economics Statistics II

40.470 Senior Seminar
 40.480 Advanced Special Topics
 40.490 Independent Study
 41.350 Advance Planning

Group C - Natural Sciences and Mathematics - Select courses totalling 12 credits from these departments:

Biological and Allied Health Sciences
 Chemistry
 Geography and Earth Science
 Mathematics (but not computer science courses)
 Physics

In addition, these courses are eligible:

09.173 Seminar Natural Sciences and Mathematics
 09.495 Honors Seminar Natural Sciences and Mathematics

The following courses are not eligible for Group C credit:

50.205 Intro to Nutrition
 09.230 Human Sexuality
 50.254 Social Implications Biology

Cultural Diversity Requirement

The Cultural Diversity requirement is effective for all degree students entering or re-entering with the fall semester 1993 and thereafter. Students enrolled in degree programs for the 1993 summer sessions or before are not required to meet this requirement.

Each student must successfully complete two courses from this list of diversity focused courses. These courses may be applied toward courses for the major, general education or free electives.

09.230 Human Sexuality
 25.220 Intercultural Communication
 10.211 Foundations of French Culture and Civilization
 10.212 France Today
 11.211 German Culture and Civilization I
 11.212 German Culture and Civilization II
 12.211 Spanish Culture and Civilization
 12.212 Spanish-American Culture and Civilization
 16.211 Chinese Culture and Civilization I

- 16.212 Chinese Culture and Civilization II
- 20.256 Non-Western Literature I
- 20.257 Non-Western Literature II
- 20.287 Black Women Writers
- 20.288 Feminist Reading of Culture
- 20.388 Gender/Race/Class
- 25.494 Special Topic: Diversity
- 25.309 Gender Issues in Communication
- 25.494 Special Topic: Diversity
- 28.308 Feminist Philosophy
- 31.345 History of Near Eastern Art
- 31.346 History of Far Eastern Art
- 40.313 Labor Economics
- 41.102 World Cultural Geography
- 42.141 Modern Far East
- 42.143 Black Africa
- 42.210 Values Conflict in 20th Century History
- 42.224 Immigrant Experience
- 42.329 The American Woman
- 42.228 African-American History
- 42.469 Women/Gender Euro 1
- 42.470 Women/Gender Euro 2
- 44.222 Women and Politics
- 44.377 Feminist Political Theory
- 45.215 Racial & Ethnic Minorities
- 46.102 Anthropology & World Problems
- 46.200 Principles of Cultural Anthropology
- 46.290 Anthropology of Race and Racism
- 46.310 Aztecs and Mayans
- 46.320 Contemporary World Cultures
- 46.333 Ethnic Identity in the United States
- 46.350 Medical Anthropology
- 46.390 Sociology of the Child
- 46.410 Anthropology of Art
- 46.440 Language & Culture
- 46.450 Peoples & Cultures of South America
- 46.480 Religion & Magic
- 48.350 Psychology of Sex & Gender
- 60.394 Education in an Urban Society
- 60.406 Multicultural Education
- 70.101 Introduction to Exceptional Individuals
- 82.410 Community Health Nursing
- 82.450 Transcultural Health Issues
- 91.320 International Accounting
- 93.355 Managing Multicultural Organizations
- 97.410 International Marketing
- 98.340 Law and Literature
- 98.407 International Legal Environment
- 98.460 Employment, Discrimination and Affirmative Action

Undergraduate Academic Programs

Academic programs of Bloomsburg University appear in alphabetical order in the following section. The program requirements are current as of April 1, 1997, and are subject to change. To obtain the most current information, students should check with the departments that administer the respective programs, or with the university's World Wide Web site at

<http://www.bloomu.edu>

Official documents relating to program requirements, course descriptions and course syllabi are maintained at the Office of the Provost and Vice President for Academic Affairs.

Each catalog listing includes the name, address, telephone number and other pertinent information relating to the department that administers the program. Enrollments shown are for the 1996-97 academic year, compiled by the Office of Planning, Institutional Research and Information Management.

Descriptions of courses are found beginning on page 150 and are listed in numeric order.

Credentials of instructional faculty are found beginning on page 242, and are listed in alphabetical order.

Accounting

Administered by: Department of Accounting
 College: Business
 Campus address: 219 Sutliff Hall
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4519
 Fax number: (717) 389-3892
 Department chair: Michael Blue
 Degree awarded: Bachelor of Science
 Enrollment: 407

Departmental Faculty

Professors: Richard L. Baker, E. Burel Gum,
 Dennis B. K. Hwang
Associate Professors: Martin Billet, Michael
 C. Blue, Nancy Coulmas
Assistant Professors: Richard E. McClellan

About the Program

The accounting curriculum provides specialized knowledge and skills to prepare graduates for entry-level accounting positions in public accounting, private industry, banking, government, higher education, and health care. It also provides the necessary academic preparation to become a certified public accountant (CPA). Bloomsburg University also offers a masters program in accounting.

Required Courses

General Education Requirements - General education requirements of the university apply to this major. Required general education courses include:

- 20.101 Composition I
- 20.201 Composition II
- 25.103 Public Speaking
- 40.246 Business and Economic Mathematics or 53.123 Essentials of

Calculus

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 53.118 Applied Matrix Algebra

Also required are 3 semester hours in Values and Ethics; 3 semester hours in Fitness and Recreational Skills; 12 semester hours in Humanities and the Arts (Group A); six remaining semester hours in Social and Behavioral Sciences (Group B), and nine remaining semester hours in Natural Sciences and Mathematics (Group C).

Requirements for the Major - A total of 63 semester hours is required for a major in accounting under the business administration degree program. Required courses include:

Business Core Curriculum (30 semester hours):

- 91.221 Principles of Accounting I
- 91.223 Managerial Accounting
- 98.331 Business Law I
- 92.150 Introduction to Computer and Information Science
- 93.344 Principles of Management
- 93.445 Managerial Communications
- 93.446 Business Policies and Strategies
- 96.313 Business Finance
- 97.310 Marketing: Principles and Practice
- 40.346 Business and Economic Statistics I

Accounting Requirements (24 semester hours):

- 91.222 Principles of Accounting II
- 91.321 Intermediate Accounting I
- 91.322 Intermediate Accounting II
- 91.323 Intermediate Accounting III
- 91.324 Federal Tax Accounting
- 91.342 Auditing Theory and Procedure
- 91.348 Cost Accounting
- 98.332 Business Law II

Elective Courses - Select three courses totaling 9 semester hours from an extensive list of courses. In selecting an elective, the student is reminded to have the proper prerequisites and to avoid elected courses below that level for which the student has already been prepared in that subject field.

Courses designated with a 90, 91, 92, 93, 96, 97, or 98 prefix are business courses. Additional courses permitted as electives include:

Six semester hours in an internship experience (91.432) also may be applied to-

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

ward this elective requirement.

Free Electives - Select 11 semester hours in free elective courses. Note: Graduation requires successful completion of a total of 128 semester hours. Forty percent (52 semester hours) must be earned in courses at the 300 level or above.

Requirements for the Minor - A minor in accounting provides students in disciplines outside of the College of Business with a broad background in accounting and its functional areas. The minor is designed so students can have the background necessary to apply their major discipline in the business environment. The minor consists of 18 semester hours, 12 of which must be taken at Bloomsburg University. The following courses are required:

- 91.220 Financial Accounting
 - 91.223 Managerial Accounting
 - 91.321 Intermediate Accounting I
 - 91.322 Intermediate Accounting II
- Choose two of the following three

courses:

- 91.324 Tax Accounting
- 91.342 Auditing 9
- I.348 Cost Accounting

Allied Health Preparatory Programs

Pre-Physical Therapy, Pre-Occupational Therapy, Pre-Cytotechnology, Pre-Pharmacy

Administered by: School of Health Sciences
College: Professional Studies
Campus address: 105 Hartline Science Center

Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4130
Fax number: (717) 389-3028
Program coordinator: James E. Cole
Enrollment: 150

Advisers

Professors: James E. Cole, Lynne C. Miller, Cynthia A. Surmacz

Associate Professors: Margaret L. Till

About the Program

The programs in allied health sciences encompass those health areas in which individuals support, aid and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. Programs in this area combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs may enter their professions immediately. Others may select post-graduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program Description

At Bloomsburg University the preparatory programs in physical therapy, occupational therapy, pharmacy, and cytotechnology usually span two to four years. Students then transfer to another institution for their clinical training and, upon completion of the program, earn a baccalaureate or master's degree. Bloomsburg University does not award specific degrees in these areas.

Students who select these preparatory programs follow a course of study that not only prepares them for entry into a variety of programs at other schools, but provides the option of pursuing a bachelor's degree in biology if they should decide to complete a degree program at Bloomsburg University.

The university cannot guarantee placement in allied health programs at other institutions; however, the school boasts a high

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

rate of success in matching students with clinical programs and the variety of placement sites is considerable.

The opportunity to obtain degrees in physical therapy, occupational therapy, or cytotechnology is enhanced by an affiliation with Thomas Jefferson University's College of Allied Health Sciences. This agreement facilitates the transfer of students who have completed a minimum of two years preparatory work at Bloomsburg into upper-division baccalaureate and master's programs at Thomas Jefferson University. This "2 plus 2" or "2 plus 3" arrangement couples an educational experience at a rural university with advanced clinical training at a major medical center in Philadelphia. Although the "2 plus 2" arrangement remains in place for most allied health programs, the arrangement for physical therapy is "2 plus 3" and culminates in a master's degree from Thomas Jefferson University.

It is important to note that many physical therapy programs are entered after the student has received a baccalaureate degree, and the post-baccalaureate program leads to a master's degree.

Bloomsburg University is an active participant in the PACE (Plan A College Education) program sponsored by Thomas Jefferson University's College of Allied Health Sciences. PACE is an advanced early admission program for academically talented secondary school seniors who wish to matriculate to Thomas Jefferson University after attending an accredited university for, at least, the first two years. All colleges of pharmacy in the United States offering the Bachelor of Science in pharmacy require five years of college education for the completion of degree requirements. The five-year curriculum is usually divided into two years of pre-pharmacy education and three years of professional pharmacy education. Thus it is a "2 plus 3" program. Students who present course credits for pre-pharmacy work done at Bloomsburg University, and for which they

have received a grade of C or better, have been given credit for courses which correspond in length and content with those prescribed by the curricula in most colleges of pharmacy accredited by the American Council of Pharmaceutical Education.

Required Courses

The curricula for these preparatory programs vary. Students are encouraged to design a program that satisfies the requirements of the school to which they intend to transfer. For example, the courses cited below under "Professional Courses" are required by Thomas Jefferson University's physical and occupational therapy programs.

Professional Courses

The following courses are required:

- 20.101 Composition I
- 20.201 Composition II
- 45.211 Principles of Sociology (not required for physical therapy)
- Select one of these (not required for physical therapy):
- 46.200 Principles of Cultural Anthropology
- 45.215 Racial and Ethnic Minority Groups (not required for physical therapy)
- Select one of these:
- 48.101 General Psychology
- 48.210 Life Span Psychology
- 48.211 Child Psychology
- 48.335 Abnormal Psychology (required for occupational therapy only)
- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.173 Anatomy and Physiology I
- 50.174 Anatomy and Physiology II
- Select one of these:
- 53.112 Trigonometry
- 53.123 Essentials of Calculus
- 53.125 Analysis I

Chemistry and physics courses are required for the physical therapy program at Thomas Jefferson University. These include:

- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 54.111 Introductory Physics I

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

54.112 Introductory Physics II

Students must select additional elective courses to complete 55 semester hours in occupational therapy or 65 semester hours in physical therapy.

Anthropology

Administered by: Department of Anthropology
 College: Arts and Sciences
 Campus address: Old Science Hall
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4860
 Fax number: (717) 389-4946
 Department chair: David Minderhout
 Degree awarded: Bachelor of Arts
 Enrollment: 35

Departmental Faculty

Professors: David J. Minderhout
Associate Professors: Thomas F. Aleto, Dee Anne Wymer
Assistant Professors: Susan R. Dauria, Faith Warner

About the Program

Anthropology, the study of humankind, attempts to establish useful information and generalizations about people, their behavior, and their cultural and biological origins, to arrive at the fullest possible understanding of human diversity. Anthropology promotes global cultural awareness through classroom studies of cultures everywhere. Anthropology, in common with other sciences, is concerned with the formulation and testing of hypotheses or tentative explanations of observed human phenomenon. Anthropology also has an important humanistic tradition. At Bloomsburg University, anthropology is divided into three study areas: cultural anthropology, which studies ways of life in societies across the world; physical anthropology, which traces human origins and biological variability; and archaeology, which seeks to explain human behavior by studying material remains from past cultures. The Department of Anthropology's principle mission is to provide a liberal edu-

cation for all students. Graduates in this discipline have been very successful in gaining employment in business and government and in preparation for academic careers.

Required Courses

General Education Requirements - The anthropology department lists suggested courses in other disciplines for majors in the department booklet Anthropology at Bloomsburg.

Requirements for the Major - A total of 36 semester hours is required for a major in anthropology. The following courses are required:

- 46.200 Principles of Cultural Anthropology
 - 46.210 Prehistoric Archaeology
 - 46.220 Human Origins
 - 46.385 Anthropology Research and Writing
 - 46.405 Primates
 - 46.470 History of Anthropological Thought and Theory
- Choose one of the following four courses:
- 46.301 Field Archaeology
 - 46.466 Independent Study in Anthropology
 - 46.475 Field Methods in Cultural Anthropology
 - 46.497 Internship in Anthropology

Elective Courses - Students may choose five courses, totaling 15 or more semester hours. At least 6 semester hours must come from each of the following two subdisciplines:

- Archaeology**
- 46.200 Archaeological Method and Theory
 - 46.301 Field Archaeology
 - 46.310 Aztecs and Mayans
 - 46.311 Archaeology of Northeastern North America
 - 46.212 South American Archaeology
 - 46.340 Native North Americans
- Cultural Anthropology**
- 46.102 Anthropology and World

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Problems

- 46.260 Men and Women: An Anthropological Perspective
- 46.290 Race and Racism
- 46.320 Contemporary World Cultures
- 46.333 Ethnic Identity in the United States
- 46.350 Medical Anthropology
- 46.360 Pseudoscience
- 46.390 Socialization of the Child
- 46.410 Anthropology of Art
- 46.440 Language and Culture
- 46.450 Peoples and Cultures of South America
- 46.466 Independent Study in Anthropology
- 46.475 Field Methods in Cultural Anthropology
- 46.480 Religion and Magic
- 46.495 Special Topics in Anthropology
- 46.497 Internship in Anthropology

Students contemplating graduate school are advised to take an introductory course in computer science.

Minor in Anthropology

A minor constitutes 18 semester hours in anthropology. This includes three required courses, 46.200 Principles of Cultural Anthropology, 46.210 Prehistoric Anthropology, and 46.220 Human Origins, and 9 semester hours from department electives.

Program Emphasis in Prehistoric Archaeology

The Anthropology Department features a special program emphasis in prehistoric archaeology. Students can enroll in multiple archaeology courses in order to gain a professional understanding of academic archaeology and archaeological method and theory. The department offers summer field schools where methods and techniques in archaeological analysis are refined. During summers and upon graduation, students have many opportunities to find temporary

or permanent employment in the field of archaeology both in the United States and abroad. The program has provided fieldwork and study in North America, Me-soamerica, and South America.

Art History and Art Studio

Administered by: Department of Art
College: Arts and Sciences

Campus address:

213 Old Science Hall
Bloomsburg University
400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4646

Fax number: (717) 389-4946

Department chair: Christine M. Sperling

Degree awarded: Bachelor of Arts

Enrollment: 78

Departmental Faculty

Professors: Stewart L. Nagel

Associate Professors: Karl A. Beamer, Carol Burns, Gary F. Clark, Christine M. Sperling, Barbara J. Strohmman, Charles T. Walters, Vera Viditz-Ward

Assistant Professors: Vincent Hron, Andrea G. Pearson

About the Program

The study of art requires both an inner desire and a firm technical basis to support the artist's growth throughout life. The art department is dedicated to providing an ideal environment for the nurturing of this development within the confines of a liberal arts education. Art professors are committed to excellence in teaching as well as actively involved in their own field of expertise. Since art is a reflection of society, a study of the history of art is needed to place art of the past and present in the context of our lives. This program addresses the commonality of visual expression among diverse cultures and nationalities.

The studio is used as a means of giving the student a chance to develop skills through mediums of visual expression that will lead to statements of personal worth.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Competency is expected within the electronic media as well as the traditional means for students to fully explore their expressive desires. Through explorations in the various arts, the student should understand the richness of the working process as a framework for the end product. In addition to traditional academic study, interaction with the faculty and use of facilities on campus are important to the student's development.

Required Courses

General Education Requirements: general education requirements of the university apply to this major

Requirements for Art History

Required courses include: 24 semester hours in art history courses; 6 semester hours in art studio courses; 3 semester hours in either art education, art history, or art studio courses; and 6 semester hours in a foreign language, namely, French, German, Italian, or a language approved by the department chairperson.

Required Courses for Art Studio

- 32.151 Three-Dimensional Design
- 32.152 Two-Dimensional Design
- 32.111 Drawing I
- 32.212 Drawing II
- 32.231 Painting I
- 32.241 Sculpture I

Also required are: 6 semester hours in art history; 9 semester hours in either ceramics, fabric design, graphics, painting, photography, sculpture, or weaving or drawing, plus 9 semester hours in elective art courses for a total of 39 semester hours.

Minor in Art History

A minor in art history requires 15 semester hours in art history courses plus Art 30.101 for a total of 18 semester hours. A course in art studio also is recommended.

Minor in Art Studio

The minor in art studio requires 15 semester hours in art studio courses, including three levels of a studio specialization, plus Art 30.101 for a total of 18 semester hours. A course in art history also is recommended.

Biology

Administered by: Department of Biological and Allied Health Sciences
 College: College of Arts and Sciences
 Campus address: Hartline Science Center
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4400
 Fax number: (717) 389-3028
 Department chair: Louis Mingrone
 Degree awarded: Bachelor of Science or Bachelor of Arts
 Enrollment: 290

Departmental Faculty

Professors: Louis V. Mingrone, James E. Cole, Judith P. Downing, Phillip A. Farber, Frederick C. Hill, Thomas S. Klinger, Mark S. Melnychuk, Lynne C. Miller, James E. Parsons, Cynthia A. Surmacz

Associate Professors: George P. Chamuris, Joseph P. Ardizzi, George J. Gellos, Margaret L. Till

Assistant Professors: George Davis, Judith Kipe-Nolt, Jeanne W. Lawless, Casey A. Shonis, Marianna Deeney Wood

About the Program

The Bachelor of Science program in biology provides a rigorous background in biology, chemistry, physics, and mathematics. The program meets the needs of students who plan to enter graduate studies, the medical field, or professions that require in-depth preparation in the natural sciences. In contrast, the Bachelor of Arts program allows more freedom in choosing courses and enables students to gain a broad-based background in the natural sciences. This flexibility gives students the opportunity to tailor a program to their specific interests,

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

backgrounds, and career objectives. Students pursuing either degree program may elect an option in microbiology. The required courses in microbiology specified under the option are identical for both programs of study. The marine science option, which is also open to majors in both bachelor's programs, provides students with the opportunity to specialize in marine biology while obtaining a general background in the biological sciences. At least four courses, totaling 12 semester hours, must be taken at the Marine Science Center in Virginia. Graduates in biology have entered medical, veterinary, dental, graduate, and paramedical schools. They are employed in federal, state, and local agencies as biologists, ecologists, and naturalists. They have found employment in laboratories operated by universities, pharmaceutical companies, private industry, and government agencies. Others have gone on to earn advanced degrees in the biological or health sciences.

Required Courses

General Education Requirements - General education requirements of the university apply to this major. Biology majors may substitute 50.290 Writing in Biology for the second English writing course (20.200 or 20.201).

Non-biology majors may select any biology courses designated with the 50 or 55 code in General Education Group C, Natural Sciences and Mathematics, providing they have met the prerequisites. Exceptions include those courses specifically reserved for biology/allied health students and the following: 50.205 Introduction to Nutrition and 50.254 Social Implications of Biology.

Suggested courses include:

- 50.101 General Biology I
- 50.102 General Biology II
- 50.110 Biology of Animals
- 50.111 General Biology Laboratory
- 50.120 Biology of Plants

50.231 Biology of Aging

50.240 Introduction to Microbiology

Requirements for the Major A total of 38 semester hours is required for a major in biology.

Required Courses for Bachelor of Science in Biology

50.110 Biology of Animals

50.120 Biology of Plants

50.242 Biology of Microorganisms

50.271 Cell Biology

50.332 Genetics

50.351 General Ecology

50.380 Biology Seminar

Choose one of the following four courses:

50.371 Principles of Mammalian Physiology

50.372 Plant Physiology

50.475 Cell Physiology

50.473 Systemic Physiology

And additional biology courses for a minimum of 38 semester hours.

52.115 Fundamentals of Inorganic Chemistry

52.131 Fundamentals of Organic Chemistry

52.216 Chemical Principles and Measurements

52.232 Intermediate Organic Chemistry

52.341 Biochemistry

Choose one of the following combinations:

54.111 Introductory Physics I and

54.112 Introductory Physics II,

54.211 General Physics I and 54.212

General Physics II

Choose one from the following set of options:

53.141 Introduction to Statistics or 48.160 Basic Statistics and 53.123 Essentials of Calculus

53.141 Introduction to Statistics or 48.160 Basic Statistics and 53.125 Analysis I

53.125 Analysis I and 53.125 Analysis II

Languages and Cultures: at least one semester of any foreign language at the 102 level or above.

In this degree program, students may choose an option in microbiology or marine biology.

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Required Courses for Bachelor of Arts in Biology

- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.242 Biology of Microorganisms
- 50.271 Cell Biology
- 50.332 Genetics
- 50.351 General Ecology
- 50.380 Biology Seminar

Choose one of the following four courses:

- 50.371 Principles of Mammalian Physiology
- 50.372 Plant Physiology
- 50.475 Cell Physiology
- 50.473 Systemic Physiology

And additional biology courses for a minimum of 38 semester hours.

- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 52.216 Chemical Principles and Measurements
- 52.232 Intermediate Organic Chemistry
- 52.341 Biochemistry

Mathematics (6 hours)

Choose two of the following options:

- 53.141 Introduction to Statistics or 48.160 Basic Statistics 53.123 Essentials of Calculus or 53.125 Analysis I

- 56.110 Introduction to Computer Science.

Languages and Cultures: at least one semester of a foreign language at the 102 level or above.

In this degree program, students may choose an option in microbiology or marine biology.

Microbiology Option

The option provides a biology major the opportunity to specialize in microbiology while obtaining a general background in biology. The option is also open to medical technology majors; see the section on Medical Technology. The requirements for this option are the same for the Bachelor of Science program as they are for the Bachelor of Arts program.

- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.242 Biology of Microorganisms
- 50.271 Cell Biology
- 50.332 Genetics

- 50.351 General Ecology
 - 50.380 Biology Seminar
- Choose one of the following four courses:

- 50.371 Principles of Mammalian Physiology
- 50.372 Plant Physiology
- 50.475 Cell Physiology
- 50.473 Systemic Physiology

- 50.242 Biology of Microorganisms
- 50.342 Medical Bacteriology
- 50.343 Immunology

Electives (9 semester hours) Choose from:

- 50.350 Plant Pathology
- 50.432 Microbial Genetics
- 50.442 Virology of Mammals
- 50.450 Mycology
- 50.455 Environmental Microbiology
- 50.470 Medical Parasitology

Marine Biology Option

This option provides the biology major with the opportunity to specialize in marine biology while obtaining a foundation in the fundamental principles of biological science. Program specific courses in marine biology are offered at the Marine Science Center, Wallops Island, Va., a field station supported by the department.

Biology:

- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.242 Biology of Microorganisms
- 50.271 Cell Biology
- 50.332 Genetics
- 50.380 Biology Seminar

Choose one of the following four courses:

- 50.371 Principles of Mammalian Physiology
- 50.372 Plant Physiology
- 50.475 Cell Physiology
- 50.473 Systemic Physiology

Marine Biology:

- 55.221 Marine Invertebrates

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- 55.241 Marine Biology
 55.260 Marine Ecology
 Electives (3 to 9 semester hours):
 55.250 Wetland Ecology
 55.298 Physiology of Marine Invertebrates
 55.300 Behavior of Marine Organisms
 55.320 Marine Microbiology
 55.330 Tropical Invertebrates
 55.334 Marine Embryology
 55.342 Marine Botany
 55.343 Marine Ichthyology
 55.344 Anatomy of Marine Chordates
 55.345 Ornithology
 55.431 Ecology of Marine Plankton
 55.441 Biology of Molluscs
 55.491 Coral Reef Ecology
 55.492 Marine Mammals

Minor in Biology

The minor in biology consists of 22 semester hours. Required courses are:

- 50.110 Biology of Animals
 50.120 Biology of Plants
 50.242 Biology of Microorganisms
 50.271 Cell Biology

and at least two courses (6 semester hours) at the 300-level or above that are chosen from departmental offerings acceptable to the major. These may not include: 50.279, 50.380, 50.390/50.391, 50.479 50.490, 50.493 and 50.494.

Allied Health curricula for medical technology, radiological technology, pre-physical therapy, pre-occupational therapy, pre-cyotechnology, and health services associate are detailed in the sections on Medical Technology, Medical Imaging, Allied Health and Health Services.

Cooperative Education/Internship/Independent Study- The department provides opportunities for students to engage in cooperative education, internships, and independent

study. Only 6 semester hours can be applied as biology electives from the following courses:

- 50.279 Cooperative Education in Biology and Allied Health Sciences
 50.390 Independent Study in Biology I
 50.391 Independent Study in Biology II
 50.479 Cooperative Education in Biology and Allied Health Sciences
 50.490 Internship in Biology and Biology Research
 50.493 Honors Independent Study I - Biological Research
 50.494 Honors Independent Study II - Biological Research

Business Administration - Economics

Administered by: Department of Finance and Business Law

College: Business

Campus address: 223 Sutliff Hall
 Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4560

Fax number: (717) 389-3892

Department chair: David Heskell

Degree awarded: Bachelor of Science in Business Administration

Enrollment: 18

Departmental Faculty

Professors: Barbara E. Behr, Bruce L. Rockwood

Associate Professors: David G. Heskell, Karen J. Elwell, David G. Martin, W. Steven Smith

About the Program

The major in business administration-economics provides a perspective of the domestic and international economic system on the Macro and Micro levels and the influence it exerts on the decision-making process of financial markets and institutions. This major provides students with educational opportunities that prepare them for ca-

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reers in the domestic and international fields. A total of 63 semester hours is required for a major in business administration-economics. Other majors in this degree program include accounting, finance, management, management information systems, and marketing.

Required Courses

General Education Requirements of the university apply to this major.

Requirements for the Major - A total of 18 semester hours is required for a major in business administration-economics. For a specialization in business economics take an additional economics course (3 semester hours) and one course (3 semester hours) in business.

Required courses include:

- 40.211 Principles of Economics I
 - 40.212 Principles of Economics II
 - 40.246 Business and Economic Mathematics
 - 40.311 Intermediate Micro-Theory and Managerial Economics
 - 40.312 Intermediate Macroeconomic Theory
 - 40.313 Labor Economics
 - 40.346 Business and Economic Statistics I
- Choose one of the following two courses::
- 40.422 Contrasting Economics
 - 40.423 History of Economic Thought
 - 53.118 Applied Matrix Algebra
 - 91.220 Financial Accounting
 - 91.223 Managerial Accounting
 - 92.150 Introduction to Computer and Information Science
 - 93.344 Principles of Management
 - 93.445 Managerial Communications
 - 93.446 Business Policies and Strategies
 - 96.313 Business Finance
 - 97.310 Marketing: Principles and Practice
 - 98.331 Business Law I

Electives to complete a minimum of 63 semester hours. In selecting an elective, the student must have the proper prerequisites and avoid choosing courses below that level for which the student has already been prepared in the subject field. Courses designated with a 91, 92, 93, 96, 97 or 98 prefix are

business courses and those with a 40 prefix are economics courses. Additional courses permitted as electives include:

- 25.307 Business and Professional Speech
- 42.223 Economic History of the United States
- 42.472 History of Labor in the United States
- 90.101 Introduction to Business (*Note: 90.101 will not be allowed as a business elective once a student has completed six semester hours in business administration courses.*)
- 90.341 Principles of Selling
- 90.431 Independent Study in Business
- 90.432 Internship in Business

Chemistry

Administered by: Department of Chemistry
College: Arts and Sciences

Campus address: 230 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4107

Fax number: (717) 389-3028

Department chair: Lawrence Mack

Degree awarded: Bachelor of Science in Chemistry

Enrollment: 39

Departmental Faculty

Professors: Wayne Anderson, Lawrence Mack, Roy D. Pointer

Associate Professors: Christopher Hallen, Michael E. Pugh, Emeric Schultz, Bruce Wilcox

Assistant Professors: Michael Berg, Sharon Yee Fredericks, Linda Jacobs, E.J. Neth, John Townsend

About the Program

The Bachelor of Science program in

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chemistry is designed to give students a strong background in chemistry with ample time available for taking courses in other disciplines. Often students in this program carry a double major, and many follow a pre-law or pre-med curricula. Students who intend to pursue advanced degrees in chemistry, biochemistry, or related disciplines or who anticipate a career in the chemical industry are encouraged to take the Bachelor of Science program that is approved by the Committee on Professional Training of the American Chemical Society. Advanced chemistry courses and an independent research project are required as part of this program.

A Bachelor of Science in Education program is designed for students who wish to teach chemistry on the secondary education level.

A knowledge of chemistry is central to research in all areas of scientific knowledge. Chemists are considered to be among the most versatile of all scientists and, therefore, are very employable. A recent survey by the American Chemical Society finds that the median annual salary of entry level chemists is over \$28,000. The program at Bloomsburg is recognized as offering high quality preprofessional training for careers in research, industry, education, medicine, and allied health professions. Since not all chemists are employed in a laboratory environment, chemistry majors may consider careers as teachers, consultants, patent lawyers, librarians, or editors.

The strength of the programs at Bloomsburg University is in the quality of its faculty, in the structure of the curriculum, and in the modern facilities. The Department of Chemistry is recognized by the Committee on Professional Training of the American Chemical Society (ACS) as one that meets its nationally recognized standards for undergraduate education in chemistry. This recognition by the ACS is an honor granted

to only about 400 colleges in the U.S. The chemistry department is housed in a newly renovated facility, with an excellent collection of computers and chemical instrumentation dedicated to undergraduate education. At Bloomsburg the student will have a Ph.D. chemist in the laboratory as the instructor, not a graduate student.

The Bachelor of Science program in chemistry gives students a strong background in the science and a broad background in general education. The degree has three tracks both with a common 3-year core requirement. The first is the standard Bachelor's of Science Degree (B.S.) The second is the B.S.-ACS degree, which is certified to meet the standards for undergraduate professional training by the American Chemical Society. The third is a B.S. in chemistry with a biochemistry track. Students who intend to pursue advanced degrees in chemistry, biochemistry, or related disciplines or who anticipate a career in the chemical industry and research are encouraged to take our B.S.-ACS program. Students in this program will culminate their studies by conducting an independent research project in collaboration with a faculty member. These individual research projects may be part of a larger research program by the faculty member and may lead to a presentation or publication with the student as a co-author. This experience is extremely valuable if the student decides to go to graduate school.

Students who wish to qualify for Honors in Chemistry must take the B.S.-ACS course of study and three semesters of undergraduate research.

Students meeting the requirements for the ACS-approved Bachelor of Science in Chemistry or the biochemistry track, with the department's assistance, are certified by the American Chemical Society and become eligible for membership in the society without the usual two-year waiting period.

Although the B.S. degree also offers a strong professional preparation in chemistry, we recommend the Bachelor's of Science major for those students who wish to follow a pre-law or pre-med curricula or to enter business upon graduation. Our standard B.S. degree allows ample time available for taking additional courses in other disci-

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plines. Our B.S. chemistry-business minor program allows students to enter the Masters of Business Administration program in the College of Business at the end of the fourth year.

Facilities and Equipment

The chemistry department has available for student use most of the major scientific equipment normally present in industrial and graduate research environments, including instrumentation in such areas as atomic absorption, electrochemistry, FT-IR spectroscopy, UV-visible-NIR spectroscopy, gas and liquid chromatography, fluorescence spectrophotometry, mass spectrometry, ultra-centrifugation, light scattering, vacuum techniques, protein and nucleic acid electrophoresis, laser kinetic apparatus, DNA thermocycler, and nuclear magnetic resonance.

Required Courses

General education requirements of Bloomsburg University apply to this major.

Requirements for the Major (B.S.)

- 52.115 Fundamentals of Inorganic Chemistry
 - 52.131 Fundamentals of Organic Chemistry
 - 52.216 Chemical Principles and Measurements
 - 52.232 Intermediate Organic Chemistry
 - 52.233 Organic Spectroscopy
 - 52.321 Analytical Chemistry
 - 52.322 Analytical Chemistry II
 - 52.361 Physical Chemistry I
 - 52.362 Physical Chemistry II
 - 52.452 Advanced Inorganic Chemistry
 - 53.125 Analysis I
 - 53.126 Analysis II
 - 53.225 Analysis III
 - 54.211 General Physics I
 - 54.212 General Physics II
- Choose one of the following
- 56.110 Introduction to Computer Science
 - 56.121 Computer Science I
 - 56.116 Algorithmic Processes for Computers

Students who want American Chemical Society certification upon graduation must complete the following additional requirements:

- 52.281 Introduction to Scientific Literature
- 52.492 Independent Study II: Introduction to Research
- 52.493 Independent Study III: Chemical Research

A restricted elective selected from any 300 and 400-level course in chemistry (except Independent Study) or any approved 300 or 400-level course in mathematics or physics.

Requirements for the Major (B.S. in Chemistry, biochemistry track)

- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 52.216 Chemical Principles and Measurements
- 52.232 Intermediate Organic Chemistry
- 52.233 Organic Spectroscopy
- 52.281 Introduction to Scientific Literature
- 52.321 Analytical Chemistry
- 52.341 Biochemistry I
- 52.442 Biochemistry II
- 52.361 Physical Chemistry
- 54.211 General Physics I
- 54.212 General Physics II
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III

Choose one of the following three courses:

- 56.110 Introduction to Computer Science
- 56.121 Computer Science I
- 56.210 Algorithmic Processes for Computers

Chemistry electives - choose two of the following five courses:

- 52.322 Analytical Chemistry II (required for ACS certification)
- 52.452 Advanced Inorganic Chemistry (required for ACS certification and highly recommended)

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for graduate school or M.D./
Ph.D. program)

- 52.362 Physical Chemistry (required
for ACS certification)
- 52.492 Introduction to Research
(highly recommended for
graduate school or M.D./Ph.D.
program)
- 52.493 Chemical Research (highly
recommended for graduate
school or M.D./Ph.D. program)

Required biology courses:

- 50.242 Biology of Microorganisms
- 50.271 Cell Biology
- 50.332 Genetics

Choose one of the following seven
courses:

- 50.343 Immunology
- 50.371 Principles of Mammalian
Physiology
- 50.372 Plant Physiology
- 50.411 Radiation Biology
- 50.432 Microbial Genetics
- 50.441 Cytogenetics
- 50.472 Cell Physiology

Requirements for the Minor - The minor in
chemistry consists of 19 to 21 semester
hours.

- 52.115 Fundamentals of Inorganic
Chemistry
- 52.131 Fundamentals of Organic
Chemistry
- 52.216 Chemical Principles and
Measurements

One of the following combinations of re-
stricted electives:

- 52.232 Intermediate Organic Chemistry
- 52.233 Organic Spectroscopy
- 52.321 Analytical Chemistry or 52.232
Intermediate Organic Chemistry
- 52.361 Physical Chemistry I
or
- 52.321 Analytical Chemistry I
- 52.361 Physical Chemistry I

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*To see the most current information on this
major, check the WWW site at [http://
www.bloomu.edu](http://www.bloomu.edu)*

Clinical Chemistry

Administered by: Department of Chemistry
College: College of Arts and Sciences
Campus address: 230 Hartline Science
Center

Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4107
Fax number: (717) 389-3028

Department chair: Lawrence Mack
Degree awarded: Bachelor of Science in
Clinical Chemistry
Enrollment: 4

Departmental Faculty

Professors: Wayne Anderson, Barrett W.
Benson, Lawrence Mack, Roy D. Pointer

Associate Professors: Christopher Hallen,
Michael E. Pugh, Emeric Schultz, Bruce
Wilcox

Assistant Professors: Michael Berg, Linda
Jacobs, E.J. Neth, John Townsend

Adjunct Faculty for Clinical Chemistry,
Geisinger Medical Center, Div. of
Laboratory, Danville, Pa.: John P. Anhalt,
Ph.D., M.D., Chairperson of Laboratory
Medicine; Paul Bourbeau, Ph.D.,
Director of Microbiology; Jay Burton
Jones, Ph.D., Director of Chemistry/
Toxicology; Mildred Louise Kaiser
Fleetwood, Ph.D., Director of
Immunology; Archimedes D. Garbes,
M.D., Associate Pathologist; Stephen
Meschter, M.D., Associate Pathologist;
Alvin Swartzentruber, B.S., Educational
Coordinator, School of Medical
Technology, Aloysius J. Schulski, B.A.,
Supervisor of Clinical Chemistry
Laboratory.

About the Program

The Bachelor of Science program in clin-
ical chemistry is designed to prepare stu-
dents for careers in a hospital setting or a
pharmaceutical clinical laboratory.

The strength of the programs at Blooms-
burg University is in the quality of its facul-
ty, in the structure of the curriculum, and
in the modern facilities. The Department of
Chemistry is recognized by the Committee

on Professional Training of the American Chemical Society (ACS) as one that meets its nationally recognized standards for undergraduate education in chemistry. This recognition by the ACS is an honor granted to only about 400 colleges in the U.S.

The chemistry department is housed in a newly renovated facility, with an excellent collection of computers and chemical instrumentation dedicated to undergraduate education. At Bloomsburg the student will have a Ph.D. chemist in the laboratory as the instructor, not a graduate student.

The Bachelor of Science program in chemistry gives students a strong background in the science and a broad background in general education. The degree has two tracks both with a common 3-year core requirement. The first is the standard Bachelor's of Science Degree (B.S.) The second is the B.S.-ACS degree, which is certified to meet the standards for undergraduate professional training by the American Chemical Society. Students who intend to pursue advanced degrees in chemistry, biochemistry, or related disciplines or who anticipate a career in the chemical industry and research are encouraged to take our B.S.-ACS program.

Students in this program will culminate their studies by conducting an independent research project in collaboration with a faculty member. These individual research projects may be part of a larger research program by the faculty member and may lead to a presentation or publication with the student as a co-author. This experience is extremely valuable if the student decides to go to graduate school.

Students who wish to qualify for Honors in Chemistry must take the B.S.-ACS course of study and three semesters of undergraduate research.

Students meeting the requirements for the ACS-approved Bachelor of Science in Chemistry, with the department's assistance, are certified by the American Chemical Society and become eligible for membership in the society without the usual two-year waiting period.

Facilities and Equipment

The chemistry department has available for student use most of the major scientific

equipment normally present in industrial and graduate research environments, including instrumentation in such areas as atomic absorption, electrochemistry, FT-IR spectroscopy, UV-visible-NIR spectroscopy, gas and liquid chromatography, fluorescence spectrophotometry, mass spectrometry, ultra-centrifugation, light scattering, vacuum techniques, electrophoresis, and nuclear magnetic resonance.

Required Courses

General education requirements of Bloomsburg University apply to this major.

Requirements for the Major

- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 52.216 Chemical Principles and Measurements
- 52.232 Intermediate Organic Chemistry
- 52.233 Organic Spectroscopy
- 52.321 Analytical Chemistry
- 52.341 Biochemistry
- 52.361 Physical Chemistry I
- 50.271 Cell Biology
- 50.343 Immunology
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III
- 54.211 General Physics I
- 54.212 General Physics II
- 56.116 Algorithmic Processes for Computers
- Clinical year (30 semester hours) at Geisinger Medical Center in Danville, Pa.

Students who want American Chemical Society certification upon graduation must complete the following additional requirements:

- 52.281 Introduction to Scientific Literature

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 52.492 Independent Study II: Introduction to Research
 52.493 Independent Study III: Chemical Research
 plus a restricted elective selected from any 300 and 400-level course in chemistry (except Independent Study) or any approved 300 or 400-level course in mathematics or physics.

Computer and Information Science

Administered by: Department of Mathematics and Computer Science
 College: Arts and Sciences
 Campus address: 1105 McCormick Center for Human Services
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4500
 Fax number: (717) 389-3599
 Department chair: James Pomfret
 Degree awarded: Bachelor of Science in Computer and Information Science
 Enrollment: 77

Departmental Faculty

Professors: Paul C. Cochrane, Paul G. Hartung, Stephen Kokoska, Reza Noubary, James C. Pomfret, Mehdi Razzaghi, John. H. Riley, June L. Trudnak
Associate Professors: E. Dennis Huthnance Jr., Curt Jones, Zahira S. Kahn, Yixun Shi Clinton J. Oxenrider, Erik Wynters
Assistant Professors: Helmut Doll, Scott Inch, Robert Montante, Mary Nicholson, Timothy Phillips

About the Program

The Computer and Information Science

program of the Department of Mathematics and Computer Science gives students a thorough grounding in the design, production, and analysis of software. Both the practical and theoretical issues involved in software and its development are emphasized. Students also obtain a basic understanding of hardware and its principles, particularly as it influences software.

Mathematics is an essential tool in the curriculum. Students work in a variety of computing environments, ranging from single-user personal computers to multiple-user minicomputers and mainframes. Graduates are prepared for either further study in computer science or employment in the software industry.

Required Courses

General Education Requirements

25.103 Public Speaking

Other general requirements apply to this major.

Requirements for the Major

A total of 54 semester hours is required for a major in computer science.

53.125 Analysis I

53.126 Analysis II

53.185 Discrete Mathematics

56.121 Computer Science I

56.122 Computer Science II

56.221 Computer Science III

56.240 Assembly Language Programming

56.250 Programming Language Paradigms

56.330 Digital Design

56.350 Organization of Programming Languages

56.355 Analysis of Algorithms and Data Structures

56.386 Concurrent Programming and Foundations of Operating Systems

Specialized Requirements

Select five courses totaling 15 semester hours from the following list:

56.356 Windows Programming

53.361 Coding and Signal Processing

56.373 Numerical Methods in Computing

53.374 Introduction to Discrete Systems Simulation

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 56.471 Numerical Analysis
 - 56.472 Matrix Computation
 - 56.491 Special Topics in Computer Science
 - 56.323 Artificial Intelligence
 - 56.357 Principles of Database Design
 - 56.375 Local Area Networks
 - 56.497 Internship in Computer Science
- Choose at most one of the following three

courses:

- 53.241 Probability and Statistics
- 53.225 Analysis III
- 53.314 Linear Algebra

Choose at least one of the following four

courses:

- 56.410 Computer Graphics
- 56.430 Computer Architecture
- 56.444 Parallel Processing
- 56.450 Compiler Construction

Requirements for the Minor - The Department of Mathematics and Computer Science offers a minor in computer science, which requires completion of six courses in computer science and mathematics. Several courses are required and others should be chosen from an approved list after consulting with the computer science coordinator, Erik Wynters. Specific requirements for the minor can be obtained from the Department of Mathematics and Computer Science.

Computer and Information Systems

Administered by: Department of Computer and Information Systems

College: Business

Campus address: 224 Sutliff Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4560

Fax number: (717) 389-3892

Department chair: James S. Dutt

Degree awarded: Bachelor of Science in Computer and Information Systems

Enrollment: 157

Departmental Faculty

Professors:

Frank S. Davis Jr.

Associate Professors: Carl J. Chimi, James S. Dutt, Harold K. Frey, Gene M. Gordon, Charles J. Hoppel

Assistant Professors:

Patricia M. Boyne

About the Program

The Department of Computer and Information Systems in the College of Business offers two baccalaureate degree programs: Computer and Information Science (CIS) and Management Information Systems (MIS).

While both programs involve learning how to develop information systems for the business environment, they differ significantly in emphasis. (For information on the Management Information Systems program, see the section on Management Information Systems.)

The CIS curriculum prepares students in the development, operation and maintenance of computer-based information systems for the business environment. The program's focus centers on commercial software and hardware with an emphasis on problem solving, system analysis and design, data management, data communications and software development within a commercial context.

CIS has a strong technical emphasis. While students are required to take courses in economics, accounting, and other areas of business, the majority of the required course work is in computer and information science. Students work in a variety of environments including networked micro-computers and workstations, multiuser minicomputers, and mainframes. The program prepares business students for positions such as: application programmer, programmer-analyst, systems analyst, data base administrator, and information specialist.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Required Courses

General Education Requirements - General Education requirements of the university apply to this major. In addition to mathematics and economics, CIS majors are required to take English 20.101 and 20.201 as general education selections.

Requirements for the Major - A total of 57 semester hours is required for a major in computer and information science.

Students enrolled in other colleges within Bloomsburg University who wish to transfer into the CIS curriculum must have completed a minimum of 15 semester hours.

Two courses from Mathematics (the combination of 53.123 and 53.125 does not satisfy this requirement):

53.118 Applied Matrix Algebra

53.123 Essentials of Calculus

53.125 Analysis I

53.126 Analysis II

Choose one:

53.141 Introduction to Statistics

53.241 Probability and Statistics

40.211 Principles of Economics I

40.212 Principles of Economics II

91.221 Principles of Accounting I

91.222 Principles of Accounting II

92.177 Structured Programming Methodology

92.252 Business Oriented Programming

92.256 Data and Information Systems

92.350 Analytic Computing Concepts

92.351 Systems Analysis and Design

92.352 Advanced Programming

92.354 Data Base Processing Systems

92.452 Advanced Software Development

Elective Courses - A total of 15 semester hours is required in restricted elective courses. These are drawn from computer and information system courses. An additional 12 semester hours must be selected from courses in accounting, business law, finance, management, and marketing.

Free Electives - Free elective courses account for the remaining 17 to 20 semester hours required for graduation. Students may

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elect to focus these credits on obtaining a minor in business.

Internship

Students are strongly encouraged to take an internship (92.432 Internship in Business), although it is not a degree requirement. The course is counted as a free elective and can be taken for a maximum of 6 semester hours.

Communication Studies

Administered by: Department of Communication Studies and Theatre Arts

College: Arts and Sciences

Campus address: 1103 McCormick Center for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4184

Fax number: (717) 389-3516

Department chair: Howard N. Schreier

Degree awarded: Bachelor of Arts in Communications Studies

Enrollment: 74

Departmental Faculty

Professors: Mary Kenny Badami, Dale A. Bertelsen, Howard N. Schreier

Associate Professors: Karen Anselm, Michael Collins, Harry C. Strine, James E. Tomlinson

Assistant Professors: Janet Reynolds Bodenman, Bruce Candlish, Timothy B. Rumbough, Kara Shultz, Janice M. Youse

About the Program

The communication studies division of the department supports general education for the entire university with courses in public speaking, interpersonal communication, and intercultural communication.

Students who major in communication studies learn how communication functions in social and professional contexts. Students may focus their study in one of three func-

tional areas:

Interpersonal relationship management: This area focuses on the importance of communication in human relationships. Students develop competencies that allow them to explore human interactions, assess barriers to communication in relationships and acquire communication skills necessary for successful personal and professional development. Study in this area prepares students for careers in social and human services such as counseling, public administration, health service management and the ministry.

Leadership and social influence: This area focuses on the importance of communication in a democratic society. Students develop competencies that allow them to understand the public deliberative process, to assess and create messages, and to enhance their leadership skills. Study in this area prepares students for careers in government, law, public information, speechwriting, lobbying, campaign direction, or elective office.

Applied communication: This area focuses on the importance of communication in business and professional settings. Students develop competencies that allow them to understand communication in professional organizations, develop professional communication skills, and to train others to communicate effectively in professional settings. Study in this area prepares students for careers in personnel management, sales, executive management, industrial and labor relations, employee training or as a development officer.

Forensic Society - Students in the forensics program debate current topics, develop original speeches, and present readings at inter-collegiate competitions. Team members compete locally, regionally, and nationally, and they help to organize tournaments sponsored by Bloomsburg University.

Participants may earn up to one credit per year by taking 25.108 Forensics Practicum. Students from all majors are welcome to join the forensics team to improve their self-confidence, competence in research, knowledge of current events, appreciation of literature, and public presentation skills.

Required Courses

General Education requirements of the university apply to this major.

25.103 Public Speaking

Requirements for the Major - Core requirements: A total of 9 semester hours are required from the following:

25.104 Interpersonal Communication

25.207 Investigating Communication

25.220 Intercultural Communication
(diversity)

Areas of Concentration: All majors are required to take five of six courses in their chosen area of concentration, which must include the appropriate required course for that area, plus a minimum of one course from each of the other two areas of concentration, for a total of 21 semester hours. Students may take additional courses as free electives.

Interpersonal Relationship Management

25.215 Communication Theory
(required)

25.309 Gender Issues in Communication (diversity)

25.313 Communication and Conflict

25.419 Communication in the Family

25.425 Communication in Relationships

25.426 Leadership and Team Building

Leadership and Social Influence

25.205 Understanding Social Influence
(required)

25.315 Persuasion

25.321 Argumentation

25.406 Evaluating Communication

25.413 Community Leadership

25.417 Evaluating Media Influence

Applied Communication

25.210 Organizational Communication
(required)

25.306 Computer Applications for Professional Communicators

25.307 Communication for Business Professionals

25.407 Interviewing

25.423 Communication Training in Organizations

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

25.424 Corporate Communication

Capstone Experience: The capstone experience is required of all students in the major regardless of the area of concentration. After completing 80 or more semester hours, students with a minimum 2.5 cumulative grade point average are eligible to register for an internship that will serve as their capstone experience. Students may register for 3 to 12 internship semester hours. Additional internship credit beyond the required 3 hours cannot be substituted for other course work, but would be considered as electives. Students academically ineligible for Internship in Communication should consult their academic adviser to arrange a suitable alternative experience, such as additional specialized course work.

25.497 Internship in Communication

Elective Courses:

- 25.108 Forensics Practicum
- 25.206 Oral Interpretation
- 25.218 Discussion
- 25.470 Independent Study
- 25.492, 25.493, 25.495 Advanced Studies in Communication
- 25.494 Advanced Studies in Communication (diversity)

Requirements for the Minor

Admissions Standards: Students who hold a minimum 3.0 cumulative grade point average on a minimum of 15 semester hours are eligible for admission to the minor. Students must maintain the minimum 3.0 cumulative grade point average to continue study for a Communication Studies minor. Students who do not maintain the required grade point average will be put on probation for one semester during which they must regain the required grade point average.

General Education Requirement: 25.103 Public Speaking

Core Course Requirements: A total of 9 semester hours are required from the follow-

ing:

- 25.104 Interpersonal Communication
- 25.207 Investigating Communication
- 25.220 Intercultural Communication (diversity)

Areas of Concentration: Choose one course from each of three areas of concentration.

Interpersonal Relationship Management

- 25.215 Communication Theory
- 25.309 Gender Issues in Communication (diversity)
- 25.313 Communication and Conflict
- 25.419 Communication in the Family
- 25.425 Communication in Relationships

25.426 Leadership and Team Building

Leadership and Social Influence

- 25.205 Understanding Social Influence
- 25.315 Persuasion
- 25.321 Argumentation
- 25.406 Evaluating Communication
- 25.413 Community Leadership
- 25.417 Evaluating Media Influence

Applied Communication

- 25.210 Organizational Communication
- 25.306 Computer Applications for Professional Communicators
- 25.307 Communication for Business Professionals
- 25.407 Interviewing
- 25.423 Communication Training in Organizations
- 25.424 Corporate Communication

Developmental Instruction

Administered by: Academic Support Services, Academic Affairs

Campus address: 14 Waller Administration Building

Bloomsburg University

400 E. Second Street

Bloomsburg PA 17815-1301

Telephone number: (717) 389-4492

Fax number: (717) 389-3893

TDD: (717) 389-4492

Department chair: John Wardigo

Departmental Faculty

Assistant Professors: Harold C. Ackerman, Virgie Bryan, Wayne George, James F.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Mullen, Carol J. Venuto, John Wardigo,
Irvin Wright

Instructors: Chris Kinney, Janice Walters

About the Program

The Department of Developmental Instruction, including Act 101/EOP and University Tutorial Services, provides academic support services for all students admitted to the university. The supportive services are designed to assist students achieve their potential and compete on an equal basis with all other students. Specifically, the department offers developmental courses designed to help any student admitted to the university to develop skills in reading, writing and math.

Developmental courses do not carry graduation credit. In addition, students receive academic advising, personal and financial aid counseling and participate in activities to acquaint them with the campus environment.

Act 101/EOP

To be considered for admission to the university through Act 101/EOP, students must demonstrate the potential for success at this level. Students receiving the highest priority for admission should have a 700 or better SAT score, have a 94 percent or better attendance rate in high school, be ranked in the upper half of their high school class and have a recommendation from a counselor or teacher.

Students admitted to the university through Act 101/EOP must participate in diagnostic testing, and successfully complete a six-week pre-college summer program. Faculty assess each student's potential for success every week during the summer program. Criteria include grades, attitude and attendance. Admission to the university in the fall is guaranteed only after satisfying these conditions.

On average, students in the program graduate in four and one half years because developmental courses do not count for graduation credit and must be taken in addition to the required 128 credits for graduation.

Act 101/EOP gets mid-term grade reports for each student who has not completed

64 hours of study, and those students who have completed 64 hours but have not earned a grade point average of 2.3 on a 4.0 scale.

About 500 students are presently enrolled at Bloomsburg through Act 101/EOP. Of this number, 48 percent represent minorities, 65 percent are women and 20 percent are nontraditional age students. All these students have two things in common: they do not match the usual Admission Office profile (perhaps because of SAT scores) and they meet the requirements of either the state or the university's program for disadvantaged students. For eligibility as a disadvantaged student at Bloomsburg, one should be classified in the categories of financial, cultural, social, physical or educational. Act 101 participants must be academically and economically disadvantaged.

Financial aid is available to eligible students. Advisement is done by the program that supplements efforts of the financial aid and academic advisement offices.

The department also has an Act 101/EOP program for part-time students.

University Tutorial Services offers services created to support and enhance the academic performance of any undergraduate student at the university. Peer tutoring is available upon request in a variety of courses and is provided by university students who have distinguished themselves by exemplary overall academic performance as well as proven superior achievement in each course offered. Tutors must also qualify for federal or state work-study employment unless they wish to volunteer as a service to the university. In addition, all tutors must participate in a personal interview, an orientation session, and any tutor training activities provided each semester.

Any university student desiring tutorial service need only complete a brief application in order to request this free service. Applications and further information are available at the University Tutorial Office,

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which is open during both the day and evening hours and is located in the main lobby of Elwell Hall. University Tutorial Services welcomes referrals by faculty, administration and fellow students of both tutors and tutees.

The goals of developmental instruction are to assist in the successful performance of all students and their smooth integration into the higher education process. The philosophy of Developmental Instruction is based on the principles of prevention of problems and dedication to meeting individual needs. The department offers a full range of academic, advisory, and counseling services to students. Services also are open to non-program students who wish to take advantage of developmental reading, writing, or mathematics courses/labs conducted by faculty members and student tutors. The department has also established an experimental course in English as a second language.

The Reading Lab, located in Room 310 of Bakeless Center, offers individualized instruction in understanding textbooks and learning strategies for most courses on campus. Group instruction also is provided for selected courses based on student enrollment in the program. Workshops on test-taking strategies and mini-courses on speed reading are scheduled periodically.

A developmental writing course is available to any university student as a primer to entering the required English courses. Students who do not need a full semester of instruction may establish an individualized instruction program through the Act 101/EOP Writing Center in Bakeless Center for the Humanities, Room 309.

The purpose of developmental mathematics is to improve mathematical skills necessary for the successful completion of college-level courses. The mathematics lab, located in 309 Bakeless Center for the Humanities, also offers workshops on topics such as Building Self-Confidence in Mathematics

and tutorial assistance for math classes offered at the university, especially College Algebra and Math Thinking. Students may use a variety of instructional materials including individualized learning programs, supplementary texts, audio tapes, microcomputers, and computer software (for computational skills, geometry, and algebra). Based upon incoming academic credentials, students may be required to take diagnostic examinations for possible placement in developmental courses.

For descriptions of courses offered, see page 150

Earth Science

Administered by: Department of Geography and Earth Science

College: Arts and Sciences

Campus address: 116S1 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4108

Fax number: (717) 389-3028

Department chair: Brian A. Johnson

Degree awarded: Bachelor of Science in Earth Science

Enrollment: 20

Departmental Faculty

Professors: Norman M. Gillmeister, Brian A. Johnson, James T. Lorelli, Duane D. Braun

Associate Professors: Joseph R. Pifer, Dale A. Springer, Lawrence H. Tanner

Assistant Professors: Shahalam M. Amin, John E. Bodenman, Sandra J. Kehoe-Forutan, Michael K. Shepard, Karen M. Trifonoff, Cynthia Venn

About the Program

The primary goal of the faculty of the geology-earth science program is to provide students with a solid foundation in geology and/or the earth sciences. This is accomplished by balancing classroom studies, laboratory exercises, and field experience with ancillary courses in chemistry, physics, and mathematics. The departmental program also supports the university's aim of provid-

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Faculty credentials begin on page 242.

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ing a strong liberal arts background for our students. This integration of science and liberal arts successfully prepares graduates for entry-level employment in the earth science profession or for acceptance into highly competitive graduate programs in the geological sciences.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 56 semester hours is required for a major in earth science. Required courses are:

- 51.101 Physical Geology
- 51.102 Historical Geology
- 51.111 Physical Geology Laboratory
- 51.112 Historical Geology Laboratory
- 51.255 Meteorology
- 51.259 Oceanography
- 51.260 Earth Materials
- 54.110 Introduction to Astronomy
- 54.111 Introductory Physics I
- 54.112 Introductory Physics II

Choose four from the following 13 courses:

- 51.261 Mineralogy
- 51.262 Petrology
- 51.265 Geomorphology
- 51.320 Remote Sensing of the Earth
- 51.355 Synoptic Meteorology
- 51.360 Introduction to Paleontology
- 51.369 Structural Geology
- 51.370 Hydrology
- 51.468 Stratigraphy and Sedimentation
- 51.470 Groundwater Hydrology
- 51.475 Independent Study
- 51.493 Bibliography and Research
- 51.496 Internship in Earth Science

Choose one from the following two courses:

- 56.110 Introduction to Computer Science
- 92.150 Introduction to Computer and Information Science

Or a higher level course in programming

Choose two from the following six courses:

- 53.113 Pre-Calculus
- 53.123 Essentials of Calculus
- 53.124 Essentials of Calculus II
- 53.125 Analysis I

53.126 Analysis II

53.141 Introduction to Statistics

Choose two from the following three courses:

52.115 Fundamentals of Inorganic Chemistry

52.131 Fundamentals of Organic Chemistry

52.216 Chemical Principles and Measurements

Approved courses offered by the Marine Science Center, Wallops Island, Va. Courses in marine science are offered during the summer by the Marine Science Consortium. The consortium is a joint program sponsored by several Pennsylvania state universities. A maximum of 9 semester hours from the Marine Science Consortium may be applied toward this bachelor's degree.

Economics

Administered by: Department of Economics
College: Arts and Sciences

Campus address: 316 Bakeless Center for the Humanities

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4335

Fax number: (717) 389-4338

Department chair: Saleem Khan

Degrees Awarded: Bachelor of Arts in Economics

Bachelor of Science in Business Economics

Bachelor of Arts in Political Economics

Enrollment: 21

Departmental Faculty

Professors: Saleem M. Khan, Peter H. Bohling, Mehdi Haririan, Woo Bong Lee, Rajesh K. Mohindru

Associate Professors: Robert P. Ross

Assistant Professors: Sukhwinder K. Bagi, Robert S. Obutelewicz, Elizabeth P. Patch

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

About the Program

The Department of Economics at Bloomsburg University offers a systematic study of the economic activities of government, business, and consumers. The core of the curriculum enables the student to master basic principles of economics, to develop analytical skills, and to interpret economic phenomena.

To accommodate the diversity of interests at the undergraduate level, the department has three tracks open to economic majors, two lead to a Bachelor of Arts and one to a Bachelor of Science. The three tracks are: a general study of economics in preparation for graduate school or a career in the public or private sector; business economics, the student is interested in analytical economics and intends to pursue graduate work or career in business or government; and political economics, if the prospect of a career dealing with political and international problems in the public arena is appealing or the student intends to pursue advanced study in the field.

A total of 45 semester hours is required for a major in economics. A total of 48 semester hours is required for a major in business economics. A total of 45 semester hours is required for a major in political economics.

Required Courses

General Education requirements of the university apply to this major.

Requirements for the Major - The following five courses are required:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 40.311 Intermediate Micro-Theory and Managerial Economics
- 40.312 Intermediate Macroeconomic Theory
- 40.346 Business and Probability Statistics

Plus a track in either economics, business

economics, or political economics.

Elective Courses

Electives in economics, business, and political science in any of the options require the adviser's approval.

General Economics - Choose one:

- 40.246 Business and Economic Mathematics
- 53.125 Analysis I

27 semester hours in elective courses in economics, including 40.400 Introduction to Econometrics or 40.446 Business and Economic Statistics.

Business Economics

Choose one set:

- 91.221 Principles of Accounting I
- 91.222 Principles of Accounting II
- or
- 91.220 Financial Accounting
- 91.223 Managerial Accounting
- 93.345 Human Resource Management
- 96.313 Business Finance
- 97.310 Marketing: Principles and Practice
- 56.110 Introduction to Computer Science or equivalent;

15 semester hours in elective courses in economics, including 40.446 Business and Economic Statistics II

Political Economics

- 44.120 United States Government
- 44.336 Public Administration Theory
- 40.315 Business and Government
- 40.422 Contrasting Economics
- 40.460 Advanced Political Economy
- 6 semester hours of elective courses in economics

9 semester hours of elective courses in political science.

Minor in Economics

The minor provides a basic competence in economics for non-economics majors and constitutes 18 semester hours. Courses required for a minor in economics include:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 40.311 Intermediate Micro-Theory and Managerial Economics
- 40.312 Intermediate Macroeconomic Theory

6 semester hours of elective courses in economics chosen from

- General Economics Theory
- 40.313 Labor Economics

Course descriptions begin on page 150

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

40.315 Business and Government
 40.316 Urban Economics
 40.410 Public Finance
 40.413 Money and Banking
 40.415 Environmental Economics
 40.433 International Economics
 Statistical Analysis
 40.346 Business and Economic
 Statistics I
 40.400 Introduction to Economet-
 rics

40.446 Business and Economic
 Statistics II
 Economic History and Systems
 40.422 Contrasting Economics
 40.423 History of Economic
 Thought
 40.424 Economic Theory of the
 Western World
 40.434 Economic Growth in
 Underdeveloped Areas
 40.460 Advanced Political Economy

Teacher Education Policies

Introduction

Bloomsburg University offers programs for preparation of teachers for early childhood centers and elementary schools, academic subjects in secondary schools, special education, communication disorders, and business education. The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional. More specifically, the teacher education programs provide:

The basic academic preparation for persons to acquire a depth and breadth of knowledge in both general and specialized studies

Basic training to insure mastery of the specific skills necessary for competent functioning as a professional

An opportunity for further enrichment within the individual's area of professional competence through a regular program of speakers, seminars, and related activities

Human and physical resources necessary to assist in the educational development and growth of the community served by the university; and

The means for advancement of knowledge

through research in specific areas of education.

Bloomsburg University is committed to the preparation of teachers of the highest quality.

Generic Role Competencies

The teacher education faculty believe that for successful teaching to occur, the teacher must perform effectively in a number of different roles. The teacher also must command functional knowledge in appropriate content area(s) as well as in cognate disciplines with direct or related significance for the act of teaching. Six generic role competencies and 15 related cognate strands have been identified as central to the preparation of candidates in teacher education programs at Bloomsburg University.

Role Competencies

Assessing and Diagnosing
 Planning
 Instructing
 Communicating and Interacting
 Managing
 Documenting, Evaluating and Reflecting
 Cognate Strands
 Curriculum Theory
 Educational Research

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Educational Anthropology
 Educational Sociology
 Educational History
 Educational Technology
 Educational Law
 Group Dynamics
 Educational Measurement and Evaluation
 Human Development and Exceptionality
 Educational Organization and Administration
 Instructional Theory
 Educational Philosophy
 Educational Psychology

Accreditation of Teacher Education

Bloomsburg is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Council on Education of the Deaf. The teacher education programs outlined in this catalog have been approved for teacher certification by the Pennsylvania Department of Education. The Speech, Hearing, and Language Clinic is certified by the Professional Services Board of the American Speech, Hearing, and Language Association.

Teacher Certification

The completion of one of the approved programs in teacher education is prerequisite to institutional recommendation for a teacher's certificate. Upon recommendation, an initial certificate is granted by the Commonwealth of Pennsylvania. The appeal procedure for considering the problems of certification candidates can be found in the section of the catalog dealing with academic grievances. As of June 1987, all individuals seeking teacher certification in Pennsylvania are required to pass state mandated tests at levels determined by the Secretary of Education. The tests assess basic skills, general knowledge, knowledge of subjects in which certification is sought, and professional knowledge. Students must pass the specialty test for each area of certification. An initial certificate is designated as Instructional Level I. It is valid for six years. A Level I certificate is not subject to renewal beyond a total of six years after the individual be-

gins teaching. A permanent Level II certificate is issued upon completion of three years of successful teaching and experience under a Level I certificate and the completion of a minimum of 24 semester hours of post-baccalaureate coursework. Programs offered for Level I certification are:

- Early Childhood Education (Preschool through Grade 3)
- Elementary Education (Kindergarten through Grade 6)
- Business Education (accounting, data processing, marketing)
- Secondary Education (biology, chemistry, communication, earth science, English, French, Spanish, general science, mathematics, physics, comprehensive social studies)
- Special Education (mentally and/or physically handicapped)
- Communication Disorders (speech correction or hearing impaired)

Interstate Certificate Agreements

Pennsylvania cooperates in several interstate agreements that stipulate that holders of Pennsylvania Instructional Certificates are eligible, subject to special provisions, for reciprocal credentials in other states. Participating states currently include: Alabama, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Puerto Rico, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington and West Virginia. This list is updated as additional states complete the contract process. Other states may be willing to grant reciprocity. Graduates of Pennsylvania-approved programs are advised to contact the teacher certification office in the state in which they wish to obtain certification for application forms and instructions. The names and addresses of the appropriate officials should be available in most college placement offices.

Admission to Candidacy

Students should submit application to candidacy no later than completion of 65

credits. Transfer students should submit application to candidacy after completion of the first semester at Bloomsburg University, but not before the second semester of their sophomore year. Enrollment in upper division teacher education course work (300 and 400-level courses) is contingent upon admission to the teacher education program.

1. Possession of an overall cumulative grade point average of 2.5 or higher.
2. Successful completion of a five to 10-day noncredit field experience in the freshman year or at the earliest possible time in the case of transfer or non-traditional students.
3. Submission of two (2) recommendations from teacher education faculty.
4. Successful completion (grade of C or better) of two English composition courses or Honors Composition, and Public Speaking or interpersonal communication course.
5. Completion of speech screening, hearing screening and tuberculosis screening. (Speech and hearing screening tests can be completed at no cost to the student in the Speech, Hearing and Language Clinic in Navy Hall. Tuberculosis testing is available each semester at minimal cost to students).
6. Possession of a professional liability insurance policy is highly recommended.
7. Submission of a resume that includes personal interests, special skills and experience with children, youth or adults that would be relevant for a preservice teacher.
8. Completion of Act 34 clearance.
9. The completed admission packet should be submitted to the faculty adviser, who will review the packet, interview the student and submit a recommendation to the department chairperson indicating that the student be admitted or not be admitted to the program.

Admission to teacher education programs permits students to schedule upper division teacher education courses (300 and 400-level).

Monitoring

1. Completion of all professional educa-

- tion courses with a grade of C or better.
2. Maintenance of an overall cumulative grade point average of 2.5 or better and an average of 2.5 or better in the area of academic specialization or be placed on probation one semester. If grade point average falls below 2.5 overall, or below a 2.5 in the area of academic specialization in a secondary education program beyond one semester, then dismissal from the program, but not the department, occurs. Students will remain in the department for one additional semester after dismissal from the program so that appropriate advisement is available to the student.
3. Continuation of field and clinical experiences as outlined in the curriculum.
4. Continuation of professional liability insurance is recommended.
5. Students are required to make contact with their adviser(s) throughout the program of study.

There will be close supervision of the above criteria by advisers and chairpersons to ensure student teaching eligibility and to suggest counseling and/or remediation.

Eligibility for Student Teaching

Eligibility for student teaching will be determined at the scheduling period prior to the semester of student teaching. Student teaching eligibility is contingent upon:

1. Completion of the admission to candidacy process.
2. Possession of an overall cumulative grade point average of 2.5 or better and an average of 2.5 or better in the area of academic specialization.
3. A grade of C or better in all professional education and specialty courses.
4. Completion of appropriate methods courses determined by each teacher education program.
5. Continuation of a professional liability insurance policy or presentation of evidence of membership in a professional education organization providing professional liability insurance.
6. Completion of Act 34 clearance.

Competency in Student Teaching

1. Recommendations from and competency evaluation by cooperating teacher(s).
2. Recommendations from and competency evaluation by university supervisor(s).
3. A grade of C or better.

Exit Criteria

1. Completion of the prescribed teacher education curricula with an overall cumulative grade point average of 2.5 or better and a 2.5 average in the area of specialization.
2. Demonstration of competency in student teaching. In order to receive Pennsylvania Department of Education Instructional Level I certification, candidates must successfully complete Praxis Series (cutoff scores to be established by the secretary of education): Core battery tests (general knowledge, communication skills, professional knowledge) and specialty tests.

Student Teaching

Teacher education culminates in student teaching. Having satisfied the prerequisites for student teaching courses, undergraduates are assigned to positions in public or private schools for the first or second semester of their senior year. They are placed based on the availability of qualified cooperating teachers in their subject area and the willingness of schools with programs approved by the university. Students should be prepared to accept assignments in any of the student teaching centers. A student teaching semester is divided into two equal periods so that students may teach at two grade levels and frequently in two socioeconomic environments. Because of constantly changing educational and socioeconomic circum-

stances, flexibility of format is maintained in the student teaching program.

Student Teaching Centers

Student teaching centers and cooperating teachers are drawn from urban, suburban, and rural areas. Students in early childhood, elementary and secondary education may be assigned to Central Pennsylvania, to suburban Philadelphia, or to inner-city locations. Business education student teaching centers are located in the Bloomsburg, Allentown, and Williamsport areas. Student may arrange their student teaching assignment in one of the international centers with which Bloomsburg cooperates, for example, in Liverpool or London, England. Information about this program may be obtained from department chairpersons.

Cooperating Teachers and Clinicians

Cooperating teachers and clinicians are selected by faculty in teacher education based on criteria set forth by the Pennsylvania Department of Education. These parameters are:

1. At least three years of teaching experience, one year of which has been in the district to which the teacher candidate is assigned;
2. A teaching assignment appropriate to the subject competency of the teacher candidate;
3. Completion of a program of preparation on observation and evaluation skills developed by the college or university for the cooperating teacher. Training at the university is achieved through the following means:
 1. Individualized training;
 2. Use of student teaching and clinical manual;
 3. Providing research and reading materials to cooperating teachers and clinicians on a regular basis;
 4. Consortiums (cooperating teachers/clinicians are invited to a yearly meeting);
 5. Graduate course offerings.

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Business Education

Administered by: Department of Business
Education and Office Systems

College: Business

Campus address: 217 Sutliff Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4109

Fax number: (717) 389-3892

Department chair: Roger Ellis

Degree awarded: Bachelor of Science in
Education

Enrollment: 90

Departmental Faculty

Professors: Donna J. Cochrane, John J.
Olivo, Jr.

Associate Professors: Roger W. Ellis, Ellen
M. Clemens, Nancy A. Dittman, Dennis
O. Gehris

Assistant Professors: Janice C. Keil

About the Program

The business education curriculum provides specialized knowledge and skills to prepare graduates for certification for secondary teaching, positions as training managers for business and government, and advanced study in business education and related fields.

Admission to Teacher Education - Students who are admitted as business education majors must apply for acceptance into teacher education upon completion of 65 or more semester hours. For information about admission to teacher education, contact one of the department faculty.

Required Courses

General Education Requirements - General Education requirements of the university apply to this major. The following general education courses are required with a grade of C or better:

20.101 Composition I

20.201 Composition II

25.103 Public Speaking

40.211 Principles of Economics I

40.212 Principles of Economics II

48.101 General Psychology

70.101 Introduction to the Exceptional
Individual

Choose from:

53.141 Introduction to Statistics

48.160 Basic Statistics

Business Education Core

90.101 Introduction to Business

90.333 Business Communications
and Report Writing

91.221 Principles of Accounting I

92.150 Introduction to Computer
and Information Science

94.221 Office Systems Concepts

94.405 Training and Development in
Office Systems

98.331 Business Law I

Requirements for the Major - A total of 74 semester hours is required for a major in business education. The student must have completed the following courses with a grade of C or better to be considered for certification as a teacher of business subjects:

60.201 Field Studies in Education

Choose one:

60.251 Psychological Foundations of
Education

48.251 Psychological Foundations of
Education

Choose one:

60.393 Social Foundations in
Education

60.394 Education in an Urban
Society

65.374 Teaching Reading in
Academic Subjects

90.402 Methods of Teaching
Business Education

90.403 Business Education Field
Experience

90.404 Professional Semester in
Business Education

90.406 Clinical Studies in Business
Education

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Areas of Certification - Upon completion of the curriculum, receipt of a recommendation from the university, and successfully passing the National Teachers Examination, the graduate will be issued an Instructional Level I Certificate by the Pennsylvania Department of Education. Every certification indicates at least two subject areas of which Office Technologies is always one.

Students must complete each course in the certification area with a grade of C or better. Areas of certification in business education include:

Accounting

- 91.222 Principles of Accounting II
- 91.223 Managerial Accounting
- Accounting elective

Data Processing

- 92.177 Structured Programming Methodology
- 92.254 Management Information Systems
- Computer and Information Systems elective

Marketing

- 90.341 Principles of Selling
- 97.310 Marketing: Principles and Practice
- Marketing elective

Office Technologies - This certification area is required for all business education majors

- 94.302 Business Document Generation
- 94.330 Telecommunications
- 94.401 Information Resource Management
- 94.403 Office Systems Management

Elective Courses

- Students must choose at least 3 semester hours from:
- 90.234 Business Mathematics
 - 90.341 Principles of Selling

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Early Childhood Education

Administered by: Department of Curriculum and Foundations

College: Professional Studies

Campus address: 3213 McCormick Center for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4025

Fax number: (717) 389-3894

Department chair: William O'Bruba

Degree awarded: Bachelor of Science in Education - Early Childhood Education

Enrollment: 150

Departmental Faculty

Professors: William S. O'Bruba, Nancy G. Gilgannon, John R. Hranitz., Gorman L. Miller, Edward Poostay, Lorraine A. Shanoski, David E. Washburn

Associate Professors: Chris A. Cherrington, Henry D. Dobson, Gary J. Doby, Bonita B. Franks, Mary G. Harris, Frank Misiti, Donald L. Pratt, Bonnie L. Williams

Assistant Professors: C. Meade Beers, Neil L. Brown, Robert L. Clarke, M. Hussein Fereshteh, Robert E. Gates, Jane McPherson, Gilda M. Oran, Egerton O. Osunde, Rosemary T. Radzевич, Shelly C. Randall, Viola C. Supon, Mary Alice Wheeler, Patricia K. Wolf

About the Program

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

The Department of Curriculum and

Foundations includes teacher education programs in elementary, early childhood and secondary education; educational foundations; and reading clinic. A dual certification program leading to a bachelor's degree and certificates for teaching K-6 and nursery school/kindergarten through third grade is available. All departments are accredited.

Facilities are modern and up-to-date technologies are available including a course in educational computing. A state-of-the-art computer laboratory enables students to learn current advances in computer-assisted instruction.

Students are required to spend time observing and assisting in actual classroom settings through two field studies courses offered in the sophomore and junior years. These courses prepare students for the actual student teaching experience. Students may select an internship which provides a work-study program in an education-related setting. Overseas student teaching opportunities are another available option.

Early childhood education curriculum focuses on the growth and development of young children in addition to teaching specialized skills for dealing with the very young child. Students have the opportunity to gain practical experience by working at the campus child care center. Students in this program earn a Bachelor of Science in Education with nursery school/kindergarten through grade three certification.

Early childhood education majors take 74 credits of professional education and early childhood education specialization.

Required Courses

General Education Requirements - A total of 54 semester hours in General Education Courses is prescribed for the early childhood education major inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from three of the groupings from general education requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Requirements for the Major Early Child-

hood Education (N-K-3) - The following courses develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, and methods of teaching particular subjects, and to provide student teaching experience. A total of 65 semester hours is taken in required courses. None may be taken on a pass/fail basis.

- 60.201 Field Studies in Education I
- 60.204 Educational Computing and Technology
- 60.251 Psychological Foundations of Education
- 60.291 Principles of Teaching
- 60.301 Field Studies in Education II
- 60.311 Educational Measurements and Evaluation
- 60.375 Teaching the Reluctant Reader
Choose one of the following two courses:
- 60.393 Social Foundations of Education
- 60.394 Education in an Urban Society
- 60.497 Teaching in Education: First Experience
- 60.498 Teaching in Education: Second Experience
- 62.121 Introduction to Early Childhood Education
- 62.302 Teaching Science in the Elementary School
- 62.310 Teaching Fine Arts in the Elementary School
- 62.322 Seminar in Learning Experiences with Young Children
- 62.371 Teaching Reading in the Elementary School
- 62.373 Diagnostic and Remedial Reading
- 62.390 Teaching Social Studies in the Elementary School
- 62.391 Teaching Language Arts in the Elementary School
- 62.398 Teaching Mathematics in the Elementary School

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 62.410 Methods and Materials in Early Childhood Education I
- 62.420 Methods and Materials in Early Childhood Education II
- 70.101 Introduction to Exceptional Individuals

Elective Courses - A minimum of 9 semester hours is taken in elective courses. None of these courses may be taken on a pass/fail basis.

- 05.311 Methods and Materials in Elementary School Physical Education
- 05.320 Health and Safety in the Elementary School
- 20.384 Literature for Children
- 30.205 Children's Art
- 60.302 Research Literacy
- 60.427 Classroom Management and Effective Discipline
- 62.304 Environmental Education in the Elementary School
- 62.376 Language Experiences for Children
- 62.389 Individualized Instruction Activities in the Elementary School
- 62.450 Methods of Teaching Foreign Languages in the Elementary School
- 79.312 Internship in Education (1 to 3 semester hours only in this area)

An area of concentration is optional.

No free electives are available for this program.

Elementary Education

Administered by: Department of Curriculum and Foundations

College: Professional Studies

Campus address: 3213 McCormick Center for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4025

Fax number: (717) 389-3894

Department chair: William O'Bruba

Degree awarded: Bachelor of Science in Education - Elementary Education

Enrollment: 150

Departmental Faculty

Professors: William S. O'Bruba, Nancy G. Gilgannon, John R. Hranitz, Gorman L. Miller, Edward Poostay, Lorraine A. Shanoski, David E. Washburn

Associate Professors: Chris A. Cherrington, Henry D. Dobson, Gary J. Doby, Bonita B. Franks, Mary G. Harris, Frank Misisi, Donald L. Pratt, Bonnie L. Williams

Assistant Professors: C. Meade Beers, Neil L. Brown, Robert L. Clarke, M. Hussein Fereshteh, Robert E. Gates, Frank Keating, Jane McPherson, Mark Ness, Gilda M. Oran, Egerton O. Osunde, Raymond Pastore, Rosemary T. Radziewich, Shelly C. Randall, Charles Starkey, Viola C. Supon, Mary Alice Wheeler, Patricia K. Wolf

About the Program

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

The Department of Curriculum and Foundations includes teacher education programs in elementary, early childhood and secondary education; educational foundations; and reading clinic. All departments are accredited.

Facilities are modern and up-to-date technologies are available including a course in educational computing. A state-of-the-art computer laboratory enables students to learn current advances in computer-assisted instruction.

Students are required to spend time observing and assisting in actual classroom settings through two field studies courses offered in the sophomore and junior years. These courses prepare students for the actual student teaching experience. Students may select an internship which provides a work-study program in an education-related setting. Overseas student teaching opportunities are another available option.

The major in elementary education leads to a Bachelor of Science in Education and certification to teach kindergarten through sixth grade (K-6).

A dual certification program leading to a bachelor's degree and certificates for teaching K-6 and nursery school/ kindergarten through third grade is available.

Elementary and early childhood education majors must complete the general education requirements and 54 credits of academic background courses. Elementary education majors are required to take 62 credits of professional education. Early childhood education majors take 74 credits of professional education and early childhood education specialization.

Required Courses

General Education Requirements - A total of 54 semester hours in General Education courses is prescribed for the elementary education major inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from three of the groupings listed in the section on General Education requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Requirements for the Major Elementary

Education (K-6) - These courses are intended to develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, and methods of teaching particular subjects, and to provide student teaching experience. A total of 53 semester hours is taken in required courses. None may be taken on a pass/fail basis.

- 60.201 Field Studies in Education I
- 60.204 Educational Computing and Technology
- 60.251 Psychological Foundations of Education
- 60.291 Principles of Teaching
- 60.301 Field Studies in Education II
- 60.311 Educational Measurements and Evaluation
- 60.375 Teaching the Reluctant Reader
- Choose one:
- 60.393 Social Foundations of Education
- 60.394 Education in an Urban Society
- 60.497 Teaching in Education: First Experience
- 60.498 Teaching in Education: Second Experience
- 62.302 Teaching Science in the Elementary School
- Choose one of the following seven courses:
- 62.310 Teaching Fine Arts in the Elementary School
- 35.311 Music in the Elementary School
- 62.371 Teaching Reading in the Elementary School
- 62.373 Diagnostic and Remedial Reading
- 62.390 Teaching Social Studies in the Elementary School
- 62.391 Teaching Language Arts in the Elementary School
- 62.398 Teaching Mathematics in the Elementary School

Elective Courses - No elective courses may

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be taken on a pass/fail basis. Students select a minimum of 9 semester hours from the following courses:

- 05.311 Methods and Materials in Elementary School Physical Education
- 05.320 Health and Safety in the Elementary School
- 35.311 Music in the Elementary School
- 20.384 Literature for Children
- 30.205 Children's Art
- 60.302 Research Literacy
- 60.427 Classroom Management and Effective Discipline
- 62.121 Introduction to Early Childhood Education
- 62.304 Environmental Education for the Elementary School Teacher
- 62.322 Seminar in Learning Experiences with Young Children
- 62.376 Language Experiences for Children
- 62.389 Individualized Instruction Activities in the Elementary School
- 62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary Education
- 62.410 Methods and Materials in Early Childhood Education I
- 62.420 Methods and Materials in Early Childhood Education II
- 62.450 Methods of Teaching Foreign Languages in the Elementary School
- 62.480 A Study of Discipline in the Elementary School
- 79.312 Internship in Education (1 to 3 semester hours only in this area)

An area of concentration is optional. Internship or free electives is necessary to complete graduation requirements.

Early Childhood and Elementary Education: **Dual Certification**

Administered by: Department of Curriculum and Foundations
 College: Professional Studies
 Campus address: 3213 McCormick Center for Human Services
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4025
 Fax number: (717) 389-3894
 Department chair: William O'Bruba
 Degree awarded: Bachelor of Science in Education - Early Childhood Education and Elementary Education
 Enrollment: 150

Departmental Faculty

Professors: William S. O'Bruba, Nancy G. Gilgannon, John R. Hranitz, Gorman L. Miller, Edward Poostay, Lorraine A. Shanoski, David E. Washburn

Associate Professors: Chris A. Cherrington, Henry D. Dobson, Gary J. Doby, Bonita B. Franks, Mary G. Harris, Frank Misiti, Donald L. Pratt, Bonnie L. Williams

Assistant Professors: C. Meade Beers, Neil L. Brown, Robert L. Clarke, M. Hussein Fereshteh, Robert E. Gates, Frank Keating, Jane McPherson, Mark Ness, Gilda M. Oran, Egerton O. Osunde, Raymond Pastore, Rosemary T. Radzевич, Shelly C. Randall, Charles Starkey, Viola C. Supon, Mary Alice Wheeler, Patricia K. Wolf

About the Program

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

The Department of Curriculum and Foundations includes teacher education programs in elementary, early childhood and secondary education; educational foundations; and reading clinic. All programs are accredited.

Facilities are modern and up-to-date technologies are available including a course in educational computing. A state-of-the-art computer laboratory enables students to learn current advances in computer-assisted instruction.

Students are required to spend time observing and assisting in actual classroom settings through two field studies courses offered in the sophomore and junior years. These courses prepare students for the actual student teaching experience. Students may select an internship which provides a work-study program in an education-related setting. Overseas student teaching opportunities are another available option.

The dual certification program leads to a bachelor's degree and certificates for teaching K-6 and nursery school/kindergarten through third grade.

Elementary and early childhood education majors must complete the general education requirements and 54 credits of academic background courses. Elementary education majors are required to take 62 credits of professional education. Early childhood education majors take 74 credits of professional education and early childhood education specialization.

Required Courses

General Education Requirements - A total of 54 semester hours in General Education courses is prescribed for this dual certification program inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from four of the groupings listed in the section on General Education Requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Requirements for the Major Dual Certi-

fication in Early Childhood and Elementary Education - These courses develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, methods of teaching particular subjects, and to provide student teaching experience. A total of 65 semester hours in required courses is taken. None may be taken on a pass/fail basis.

60.201 Field Studies in Education I
60.204 Educational Computing and Technology

Choose one from the following two courses:

60.251 Psychological Foundations of Education

48.251 Psychological Foundations of Education

60.291 Principles of Teaching

60.301 Field Studies in Education II

60.311 Educational Measurements and Evaluation

60.375 Teaching the Reluctant Reader

Choose one from the following two courses:

60.393 Social Foundations of Education

60.394 Education in an Urban Society

60.497 Teaching in Education: First Experience

60.498 Teaching in Education: Second Experience

62.121 Introduction to Early Childhood Education

62.302 Teaching Science in the Elementary School

62.310 Teaching Fine Arts in the Elementary School

62.322 Seminar in Learning Experiences with Young Children

62.371 Teaching Reading in the Elementary School

62.373 Diagnostic and Remedial Reading

62.390 Teaching Social Studies in the

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- Elementary School
 62.391 Teaching Language Arts in the Elementary School
 62.398 Teaching Mathematics in the Elementary School
 62.410 Methods and Materials in Early Childhood Education I
 62.420 Methods and Materials in Early Childhood Education II
- Elective Courses** - A minimum of 9 semester hours is taken in elective courses. None of these courses may be taken on a pass/fail basis.
- 05.311 Methods and Materials in Elementary School Physical Education
 05.320 Health and Safety in the Elementary School
 20.384 Literature for Children
 30.205 Children's Art
 35.311 Music in the Elementary School
 60.302 Research Literacy
 60.427 Classroom Management and Effective Discipline
 62.304 Environmental Education in the Elementary School
 62.376 Language Experiences for Children
 62.389 Individualized Instruction Activities in the Elementary School
 62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary Education
 62.450 Methods of Teaching Foreign Languages in the Elementary School
 79.312 Internship in Education (1 to 3 semester hours only in this area)
 An area of concentration is optional.
 No free electives are available for this program.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Secondary Education

Administered by: Department of Curriculum and Foundations
 College: Professional Studies
 Campus address: 3213 McCormick Center for Human Services
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4025
 Fax number: (717) 389-3894
 Department chair: William O'Bruba
 Degree awarded: Bachelor of Science in Education - Secondary Education
 Enrollment: 365

Departmental Faculty

Professors: William S. O'Bruba, Nancy G. Gilgannon, John R. Hranitz, Gorman L. Miller, Edward Poostay, Lorraine A. Shanoski, David E. Washburn

Associate Professors: Chris A. Cherrington, Henry D. Dobson, Gary J. Doby, Bonita B. Franks, Mary G. Harris, Frank Misiti, Donald L. Pratt, Bonnie L. Williams

Assistant Professors: C. Meade Beers, Neil L. Brown, Robert L. Clarke, M. Hussein Fereshteh, Robert E. Gates, Frank Keating, Jane McPherson, Mark Ness, Gilda M. Oran, Egerton O. Osunde, Raymond Pastore, Rosemary T. Radzевич, Shelly C. Randall, Charles Starkey, Viola C. Supon, Mary Alice Wheeler, Patricia K. Wolf

About the Program

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

The Department of Curriculum and

Foundations includes teacher education programs in elementary, early childhood and secondary education; educational foundations; and reading clinic. All programs are accredited.

Facilities are modern and up-to-date technologies are available including a course in educational computing. A state-of-the-art computer laboratory enables students to learn current advances in computer-assisted instruction.

Students are required to spend time observing and assisting in actual classroom settings through two field studies courses offered in the sophomore and junior years. These courses prepare students for the actual student teaching experience. Students may select an internship which provides a work-study program in an education-related setting. Overseas student teaching opportunities are another available option.

The major in secondary education leads to a Bachelor of Science in Education and certification to teach grades seven through 12.

Required Courses

General Education Requirements - Some courses which satisfy general education requirements are included in the course listings for the individual areas of specialization under secondary education.

Requirements for the Major Secondary Education (7-12) - A total of 35 semester hours in required courses is taken for this major.

60.201 Field Studies in Education I

60.204 Educational Computing and Technology

Choose one from the following two courses:

60.251 Psychological Foundations of Education

48.251 Psychological Foundations of Education

60.291 Principles of Teaching

60.301 Field Studies in Education II

60.311 Educational Measurements and Evaluation

60.497 Teaching in Education: First Experience

60.498 Teaching in Education: Second Experience

Choose one from the following two courses:

60.393 Social Foundations of Education

60.394 Education in an Urban Society

Choose one from the following five courses:

65.351 Teaching Communication in the Secondary School

65.352 Teaching Mathematics in the Secondary School

65.353 Teaching Science in the Secondary School

65.355 Teaching Social Studies in the Secondary School

65.358 Teaching Foreign Language in the Secondary School

65.374 Teaching of Reading in Academic Subjects

Areas of Specialization in Secondary Education - Each area of specialization develops scholarship basic to teaching the content subject. Course requirements are enumerated under the area of specialization.

Biology

Chemistry

Communication/Theater

Communications/Media

Communications/Speech

Comprehensive Social Studies

Anthropology

Economics

Geography

History

Philosophy

Political Science

Psychology

Sociology

Earth and Space Science

English

French

General Science

Mathematics

Physics

Spanish

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Elective Courses - Free Electives, if necessary, to complete the minimum graduation requirements of 128 semester hours.

Secondary Education Specialization

Each area of specialization develops scholarship basic to teaching the content subject in secondary schools, and course requirements listed here are in addition to those required of secondary education majors at Bloomsburg University.

Biology

- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.233 Human Genetics
- 50.242 Biology of Microorganisms
- 50.271 Cell Biology
- 50.332 Genetics
- 50.351 General Ecology
- 50.380 Biology Seminar
- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 52.216 Chemical Principles and Measurements
- 52.341 Biochemistry

Choose from:

- 51.101 Physical Geology
- 51.255 Meteorology
- 51.259 Oceanography

Choose from

- 54.103 Principles of Physical Science
- 54.105 Energy: Sources and Environmental Effects
- 54.106 The Science of Sound
- 54.110 Introduction to Astronomy

9 semester hours of elective courses in biology including 3 semester hours in a field course

Choose one from the following two courses:

- 53.113 Pre-Calculus
- 53.123 Essentials of Calculus

Choose one from the following two courses:

- 53.141 Introduction to Statistics
- 48.160 Basic Statistics

Chemistry

- 52.115 Fundamentals of Inorganic Chemistry
- 52.131 Fundamentals of Organic Chemistry
- 52.216 Chemical Principles and Measurements
- 52.232 Intermediate Organic Chemistry
- 52.321 Analytical Chemistry I
- 52.341 Biochemistry
- 52.361 Physical Chemistry I
- 52.362 Physical Chemistry II
- 52.281 Introduction to Scientific Literature
- 54.211 General Physics I
- 54.212 General Physics II
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III

Choose one from the following two courses:

- 50.110 Biology of Animals
- 50.120 Biology of Plants

Choose one pair from the following two sets:

- 51.101 Physical Geology **and**
- 51.111 Physical Geology Laboratory
- 51.102 Historical Geology **and**
- 51.112 Historical Geology Laboratory

Communications/Media

- 20.302 Advanced Composition
- 20.311 Structure of English
- 20.312 History of the English Language
- 26.102 Introduction to Theatre Arts
- 27.315 Social Foundations of Mass Communications
- One course in World Literature
- 27.310 Media Law
- 27.360 Mass Media Processes and Effects
- 27.420 Audience Analysis
- Choose two courses from:

- 27.110 Mass Communications and the Popular Arts
- 27.275 Cinema Appreciation
- 27.230 Newswriting
- 27.251 PR: Theory and Practice
- 27.261 Principles of Advertising

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Choose three courses from:

- 27.271 Media Operations
- 27.334 Editing
- 27.352 Publicity and Public Relations
- 27.371 Broadcast Journalism
- 27.482 Mass Communications Seminar
- 27.485 RTF Authorship Theory and Practice

Communication/Speech

- 20.302 Advanced Composition
- 20.311 Structure of English
- 20.312 History of the English Language
- one course in World Literature
- one course in Mass Communications
- 25.104 Interpersonal Communication

Choose one:

- 25.206 Oral Interpretation of Literature
- 25.315 Persuasion

Choose one:

- 25.205 Understanding Social Influence
- 25.215 Communication Theory
- 25.315 Persuasion
- 26.102 Introduction to Theater Arts

Choose from:

- 26.211 Theater Production/Stagecraft
- 26.215 History of the Theater
- 26.316 Play Directing
- 26.416 Modern Theater

and four courses selected from the Communications Studies course listing.

Note: 25.103 Public Speaking is required for secondary education majors and is listed among the General Education courses for communication. One semester of 25.108 Forensic Practicum also is required and; therefore, it may not be applied toward this requirement. Speech Communication majors must participate in the Bloomsburg University Forensic Society for a minimum of one semester under 25.108. A grade of pass/fail is issued.

Communication/Theater

- 20.302 Advanced Composition
- 20.311 Structure of English
- 20.312 History of the English Language
- one course in World Literature
- one course in Mass Communications
- 25.104 Interpersonal Communication

Choose one:

- 25.206 Oral Interpretation of Literature

- 25.421 Persuasion

- 26.102 Introduction to Theatre Arts

- 26.211 Theater Production/Stagecraft

Choose from

- 26.215 History of the Theatre

- 26.316 Play Directing

- 26.416 Modern Theatre

plus four courses from the Theatre Arts course listing.

Note: 25.103 Public Speaking is required for secondary education majors and is listed among the General Education courses for communication. One semester of 25.108 Forensic Practicum also is required and; therefore, it may not be applied toward this requirement. Speech Communication majors must participate in the Bloomsburg University Forensic Society for a minimum of one semester under 25.108. A grade of pass/fail is issued.

Earth and Space Science

- 50.101 General Biology

- 51.101 Physical Geology

- 51.102 Historical Geology

- 51.105 Environmental Geology

- 51.111 Physical Geology Laboratory

- 51.112 Historical Geology Laboratory

- 51.255 Meteorology

- 51.259 Oceanography

Choose one:

- 52.115 Fundamentals of Inorganic Chemistry

- 52.131 Fundamentals of Organic Chemistry

- 52.216 Chemical Principles and Measurements

- 54.111 Introductory Physics I

- 54.112 Introductory Physics II

- 53.175 Introduction to Computer Science

Choose one from the following five courses:

- 53.112 Trigonometry

- 53.113 Pre-Calculus

- 53.123 Essentials of Calculus

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 53.125 Analysis I
- 53.126 Analysis II

Choose three from the following eleven courses:

- 51.105 Environmental Geology
- 51.261 Mineralogy
- 51.262 Petrology
- 51.355 Synoptic Meteorology
- 51.360 Introduction to Paleontology
- 51.365 Geomorphology
- 51.369 Structural Geology
- 51.370 Hydrology
- 51.451 Field Techniques in Earth Science
- 51.468 Stratigraphy and Sedimentation
- 51.470 Groundwater Hydrology

Choose a maximum of 3 semester hours in marine science courses offered by the Marine Science Consortium.

English

20.203 Approaches to Literary Study is required in place of 20.200, 20.201 and also is required of those students who have taken 20.104. Required courses, totaling 30 semester hours, are:

Choose one:

- 20.226 European Literature I
- 20.236 American Literature I
- 20.237 American Literature II

Choose one:

- 20.246 British Literature I
- 20.247 British Literature II

Choose one:

- 20.256 Non-Western Literature I
- 20.257 Non-Western Literature II

Choose one:

- 20.302 Advanced Composition
- 20.306 Theory and Practice of Writing
- 20.311 Structure of English
- 20.312 History of the English Language
- 20.363 Shakespeare

Elective courses account for 12 semester hours and are drawn from 300 or 400 level English courses; only one may be from 20.300 or 20.301 or 20.303.

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

French

- 10.203 French III
 - 10.204 French IV
 - 10.205 Applied Phonetics and Pronunciation
 - 10.206 Structure of the French Language
 - 10.207 Conversation: French Daily Life and Customs
 - 10.211 Foundations of French Culture and Civilization
 - 10.402 Contemporary Issues in Francophone Media
 - 10.422 Masterpieces of French Literature
 - 10.423 Black Francophone Writers and Culture
- Choose one:
- 20.311 Structure of English
 - 20.411 Modern Linguistic Theory

Electives:

- 10.281 Special Topics
- 10.290 French Studies Abroad
- 10.295 Art and Culture of France
- 10.309 Commercial French
- 10.331 Selected 20th Century Writers
- 10.401 Advanced French Language
- 10.409 Commercial French II
- 10.490 Independent Study in French

Note: A student exempted from a required course must substitute the course in child psychology and anthropology in this curriculum.

General Science

- 50.110 Biology of Animals
 - 50.120 Biology of Plants
 - 52.115 Fundamentals of Inorganic Chemistry
- Choose one from the following two courses:
- 52.131 Fundamentals of Organic Chemistry
 - 52.216 Chemical Principles and Measurements
- Choose one from the following two courses:
- 54.111 Introductory Physics I
 - 54.211 General Physics I
- Choose one
- 54.112 Introductory Physics II
 - 54.212 General Physics II
- 51.101 Physical Geology
 - 51.102 Historical Geology
 - 51.111 Physical Geology Laboratory
 - 53.112 Historical Geology Laboratory

Choose one from the following two courses:
 53.141 Introduction to Statistics
 53.241 Probability and Statistics
 28.303 Philosophy of Science (recommended)
 42.250 History of Science (recommended)
 54.110 Introduction to Astronomy
 16 semester hours of 200-level or above science courses.

Mathematics

53.125 Analysis I
 53.126 Analysis II
 53.185 Discrete Mathematics
 53.225 Analysis III
 53.226 Analysis IV
 53.231 College Geometry
 53.241 Probability and Statistics
 53.310 Introduction to Abstract Algebra
 53.314 Linear Algebra
 53.360 Number Theory
 46.121 Computer Science I
 9 semester hours in courses which must include at least one computer science course numbered 56.122 or higher and at least one mathematics course numbered 53.271 or higher.

Physics

54.211 General Physics I
 54.212 General Physics II
 54.302 Mechanics: Dynamics
 54.310 Modern Atomic Physics
 54.314 Electricity and Magnetism
 54.315 Electronics
 54.318 Optics
 54.400 Advanced Physics Laboratory
 51.101 Physical Geology
 52.115 Fundamentals of Inorganic Chemistry
 52.116 Chemical Principles and Measurements
 51.102 Historical Geology
 53.125 Analysis I
 53.126 Analysis II
 53.225 Analysis III
 53.322 Differential Equations
 Select an elective course in physics totaling 3 semester hours.

Spanish

12.203 Spanish III

12.204 Spanish IV
 12.205 Phonetics: Theory and Practice
 12.206 Structure of the Spanish Language
 12.207 Conversation: Hispanic Daily Life and Customs
 12.211 Spanish Culture and Civilization
 12.214 The Hispanic World Today
 12.331 Selected 20th Century Writers
 12.402 Issues in the Hispanic Media
 12.421 Hispanic Prose

Choose one:

20.311 Structure of English
 20.411 Modern Linguistic Theory

Note: A student exempted from a required course must substitute the course with an advanced elective in Spanish. Students also should include a course in child psychology and anthropology in their curriculum.

Comprehensive Social Studies

Anthropology

46.200 Principles of Cultural Anthropology
 46.210 Prehistoric Archaeology
 46.220 Human Origins
 46.340 Native North America
 46.390 Socialization of the Child
 46.440 Language and Culture
 45.211 Principles of Sociology
 40.211 Principles of Economics I
 40.212 Principles of Economics II
 42.112 Origins of the Modern World
 42.113 The Modern World
 42.121 United States Historic Survey: Colonial Period to 1877
 42.122 United States Historic Survey: 1877 to the Present
 42.222 Business History of the United States
 41.101 World Physical Geography
 41.102 World Cultural Geography
 44.101 Elements of Political Science
 44.120 United States Government

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Economics

- 46.200 Principles of Cultural Anthropology
- 45.211 Principles of Sociology
- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 40.311 Intermediate Micro-Theory and Managerial Economics
- 40.312 Intermediate Macroeconomic Theory
- 40.313 Labor Economics
- 40.422 Contrasting Economics
- 40.423 History of Economic Thought
- 9 semester hours from the following eight courses:
 - 40.315 Business and Government
 - 40.316 Urban Economics
 - 40.410 Public Finance
 - 40.413 Money and Banking
 - 40.415 Environmental Economics
 - 40.424 Economic History of the Western World
 - 40.433 International Economics
 - 40.434 Economic Growth of Underdeveloped Areas
- Choose one from the following five courses:
 - 42.112 Origins of the Modern World
 - 42.113 The Modern World
 - 42.121 United States Historic Survey: Colonial Period to 1877
 - 42.122 United States Historic Survey: 1877 to the Present
 - 42.222 Business History of the United States
- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 44.101 Elements of Political Science
- 44.120 United States Government

Geography

- 46.200 Principles of Cultural Anthropology
- 45.211 Principles of Sociology
- 40.211 Principles of Economics I
- 40.212 Principles of Economics II

- 42.112 Origins of the Modern World
- 42.113 The Modern World
- 42.121 United States Historic Survey: Colonial Period to 1877
- Choose one of the following two courses:
 - 42.122 United States Historic Survey: 1877 to the Present
 - 42.222 Business History of the United States
- 44.101 Elements of Political Science
- 44.120 United States Government
- 48.101 General Psychology
- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 41.105 Environmental Issues and Choices
- 18 semester hours in geography
- 3 semester hours taken from economics, sociology, political science or history, or
 - 48.210 Life Span Psychology

History

- 46.200 Principles of Cultural Anthropology
- 45.211 Principles of Sociology
- 40.211 Principles of Economics I
- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 44.101 Elements of Political Science
- 44.120 United States Government
- 42.112 Origins of the Modern World
- 42.113 The Modern World
- 42.121 United States Historic Survey: Colonial Period to 1877
- 42.122 United States Historic Survey: 1877 to the Present
- 42.398 Research and Writing Skills
- Choose one from the following four courses:
 - 42.141 The Modern Far East
 - 42.142 Latin America: From European Colonization to the Present
- Choose from:
 - 42.143 Black Africa
 - 42.144 Islamic and Hindu Worlds: Middle East, India and Malasia
- 3 semester hours from any 300-400 level course in U.S. history
- 3 semester hours from any 300-400 level course in western civilization or European history covering the period through 1815.
- 3 semester hours from any 300-400 level course in European history covering

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the period since 1789.

Philosophy

- 46.200 Principles of Cultural Anthropology
- 45.211 Principles of Sociology
- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 42.112 Origins of the Modern World
- 42.113 The Modern World
- 42.121 United States Historic Survey: Colonial Period to 1877
- 42.122 United States Historic Survey: 1877 to the Present
- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 44.101 Elements of Political Science
- 44.120 United States Government
- 28.111 Introduction to Philosophy
- 28.212 Logic

Choose one course from the following two courses:

- 28.220 Ethics
- 28.290 Medical Ethics

Choose one course from the following two courses:

- 28.224 Descartes to Kant
- 28.351 Theory of Knowledge

One elective course from Philosophy

Political Science

- 46.200 Principles of Cultural Anthropology
 - 45.211 Principles of Sociology
 - 40.211 Principles of Economics I
 - 40.212 Principles of Economics II
- Choose one from the following four courses:
- 42.112 Origins of the Modern World
 - 42.113 The Modern World
 - 42.121 United States Historic Survey: Colonial Period to 1877
 - 42.122 United States Historic Survey: 1877 to the Present
- 41.101 World Physical Geography
 - 41.102 World Cultural Geography
 - 44.101 Elements of Political Science
 - 44.120 United States Government
 - 44.160 Nations, States and Governments
 - 44.210 Introduction to Political Theory
 - 44.280 Introduction to International Relations

and three courses selected from:

- 44.207 Ethics, Politics and Public Policy
- 44.363 Soviet and Post-Soviet Politics
- 44.366 Political Systems of Western Europe
- 44.376 Government and Politics of the Middle East
- 44.440 The President and Congress
- 44.448 The Judicial Process
- 44.452 State and Local Government Politics
- 44.487 International Law and Organization

Note: 44.207 Ethics, Politics and Public Policy can be used to satisfy the values requirement in general education requirements.

Psychology

- 46.200 Principles of Cultural Anthropology
 - 45.211 Principles of Sociology
 - 40.211 Principles of Economics I
 - 40.212 Principles of Economics II
 - 42.112 Origins of the Modern World
 - 42.113 The Modern World
 - 42.121 United States Historic Survey: Colonial Period to 1877
 - 42.122 United States Historic Survey: 1877 to the Present
 - 42.222 Business History of the United States
 - 41.101 World Physical Geography
 - 41.102 World Cultural Geography
 - 44.101 Elements of Political Science
 - 44.120 United States Government
 - 48.101 General Psychology
 - 48.160 Basic Statistics
 - 48.251 Psychological Foundations of Education
 - 48.281 Experimental Psychology: Methodology
 - 48.451 Laboratory Training in Group Processes
 - 48.476 Principles of Behavior Modification
- additional courses in Psychology totaling 6 semester hours.

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Sociology

- 46.200 Principles of Cultural Anthropology
- 45.211 Principles of Sociology
- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 42.112 Origins of the Modern World
- 42.113 The Modern World
- 42.121 United States Historic Survey: Colonial Period to 1877
- 42.122 United States Historic Survey: 1877 to the Present
- 42.222 Business History of the United States
- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 44.101 Elements of Political Science
- 44.120 United States Government
- Choose one from the following four courses:
- 45.133 Introduction to Social World and Social Welfare
- 45.211 Principles of Sociology
- 45.213 Contemporary Social Problems
- 45.236 Child Welfare
- Choose one from the following two courses:
- 45.216 Urban Sociology
- 45.462 Sociological Theory
- Choose one from the following two courses:
- 45.231 Marriage and Family
- 45.318 Social Stratification
- 6 semester hours taken from the preceding sociology courses not previously taken.

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Special Education

Administered by: Department of Communication Disorders and Special Education

College: Professional Studies

Campus address: 101B Navy Hall
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4119

Fax number: (717) 389-3980

TDD number: (717) 389-4119

Department chair: Carroll J. Redfern

Degree awarded: Bachelor of Science in Education - Special Education

Enrollment: 253

Departmental Faculty

Professors: Mary B. Hill, Kenneth P. Hunt, Ann L. Lee, Carroll J. Redfern, Joseph M. Youshock

Associate Professors: Arthur R. Crowell

Assistant Professors: Sheila D. Jones, Michael J. Karpinski, Cynthia N. Schloss, Philip Tucker

About the Program

The program in special education offers certification for teachers to teach mentally and/or physically handicapped individuals (learning disabled, mentally retarded, seriously emotionally disturbed and physically handicapped). Students may also acquire a concentration for the education of the deaf/hard of hearing.

Students enrolled in special education have the opportunity to student teach in the following settings: public schools, approved private schools, preschools, state centers, adjudicated environments and hospitals. Student teaching placements are in the following counties: Carbon, Columbia, Cumberland, Dauphin, Lackawanna, Lehigh, Snyder, Union and Sullivan.

Students entering the university who have declared special education as their major are advised by faculty in the Department of Communication Disorders and Special Education. They begin taking courses in the major in the first semester of the freshman year and generally enroll in at least or more one

special education course every semester thereafter.

Adjustments are made in the above sequence of courses which reflect the needs of students who desire to take less or more semester hours of work than the average student. Transfers (internal and external), re-admitted students, adult learners, and part-time students make it necessary to make adjustments in scheduling. Students who have the necessary requirements complete their student teaching the first semester and return to campus to complete their General Education requirements for graduation. Students who enroll in summer school could possibly graduate early or reduce the number of semester hours taken during the academic year. Students seeking dual certification (Special Education/Elementary Education or Early Childhood Education) often enroll in summer sessions.

Required Courses

General Education Requirements - Core courses designated by the departments as applicable to the general education requirements may be elected in partial fulfillment of that requirement. Those majoring in teaching mentally and physically disabled individuals are required to take a minimum of 54 semester hours in general education courses.

The following courses are required for teaching mentally and/or physically disabled individuals:

Choose one:

20.101 Composition I

20.201 Composition II (or any of the writing intensive literature courses)

Those testing out of 20.101 or 20.201 will schedule

20.104 Honors Composition

Choose one of the following two courses:

25.103 Public Speaking

25.104 Interpersonal Communication

48.101 General Psychology

48.210 Life-Span Psychology

50.101 General Biology I

Choose one of the following two courses:

53.141 Introduction to Statistics

48.160 Basic Statistics

Requirements for the Major - A total of 51 semester hours is required for a major in special education.

Professional Education Courses - Courses in professional education include:

05.321 First Aid Safety

Choose one of the following two courses:

60.251 Psychological Foundations in Education

48.251 Psychological Foundations in Education

Choose one of the following two courses:

60.393 Social Foundations of Education

60.394 Education in an Urban Society

Choose one of the following two courses:

62.302 Teaching of Science in the Elementary School

62.390 Teaching Social Studies in the Elementary School

62.371 Teaching Reading in the Elementary School

62.398 Teaching Mathematics in the Elementary School

Choose one of the following four courses:

62.373 Diagnostic and Remedial Reading

74.305 Introduction to Instructional Methods for the Deaf/Hard of Hearing (reserved for Deaf/Hard of Hearing area of concentration only)

60.375 Teaching the Reluctant Reader

60.370 Teaching Reading in Academic Subjects

Required Special Education Courses - Special Education courses include:

70.101 Introduction to the Exceptional Individual

70.202 Technology for Exceptionalities

70.206 Introduction to Early Interven-

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tion

70.240 Foundations in Special Education

70.250 Behavior Disorders

70.340 Educating Individuals with Moderate/Severe Disabilities

70.353 Assessment and Planning

70.357 Prevocational and Vocational Education for the Handicapped

70.401 Student Teaching With Exceptional Individuals

70.433 Language Arts for Students with Special Needs

70.450 Methods for Elementary Special Education

70.451 Methods for Secondary Special Education

70.461 Problems in Special Education

Elective Courses - A total of 15 semester hours is taken in elective courses for this major. These courses include:

70.255 Experience with Exceptional Individuals

70.356 The Mentally Gifted Individual

70.375 Individual Project

72.152 Introduction to Communication Disorders

74.153 Introduction to Sign Language

Engineering and Liberal Arts

College: Arts and Sciences

Campus address: 57 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4148

Program coordinator: Gunther Lange

Degree awarded:

Bachelor of Arts in Physics or Mathematics

Enrollment: 31

About the Program

The engineering and liberal arts program provides the opportunity for students to pursue a rewarding and challenging career in the high-demand field of engineering without forgoing the broader scope of a Bloomsburg University educational experience. This cooperative program of study leads to two baccalaureate degrees, one in liberal arts and sciences awarded by Bloomsburg University and one in an area of engineering from either The Pennsylvania State University or Wilkes University.

Candidates for these degrees spend three years at Bloomsburg University, where they study science, mathematics, pre-engineering, and a broad variety of liberal arts subjects, followed by two years at the University Park campus of Penn State or at Wilkes University in Wilkes-Barre, where they study engineering disciplines.

Students may pursue an engineering education in any of the following areas:

Aerospace Engineering (Penn State)

Agricultural Engineering (Penn State)

Ceramic Science and Engineering (Penn State)

Chemical Engineering (Penn State)

Civil Engineering (Penn State)

Computer Engineering (Penn State)

Electrical Engineering (Wilkes or Penn State)

Engineering Management (Wilkes)

Engineering Science (Penn State)

Environmental Engineering (Wilkes)

Industrial Engineering (Penn State)

Materials Engineering (Wilkes)

Mechanical Engineering (Wilkes or Penn State)

Metals Science and Engineering (Penn State)

Mining Engineering (Penn State)

Nuclear Engineering (Penn State)

Petroleum and Natural Gas Engineering (Penn State)

Required Academic Performance

Students wishing to complete their studies at The Pennsylvania State University must maintain a quality point average (QPA) of 3.0 overall and a 2.75 in required core courses. In a few majors, a 2.5 overall average may

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be sufficient for transfer, and these are subject to change from year to year.

For transfer to Wilkes University, students must maintain a QPA of 2.5 overall. Transfer candidates to the environmental engineering, materials engineering, and engineering management programs are required to have a 2.65 QPA in science, mathematics, and pre-engineering courses, while candidates to the electrical engineering program must maintain a 2.75 average in these technical courses.

Admission Procedures: To enter the program, individuals need only apply and be accepted for admission to Bloomsburg University. However, applicants should be aware that any engineering program requires the application of strong mathematical and problem-solving skills. It is expected that the student's high school mathematics background is sufficient for enrollment in 53.125, the initial course in the required calculus sequence, during the first semester of study.

Applicants for admission who previously were registered as degree candidates and established an academic record as degree candidates at The Pennsylvania State University prior to entering this cooperative program at Bloomsburg University will be considered readmission candidates and must meet additional enrollment criteria for readmission to The Pennsylvania State University.

Students should indicate a desire to follow this program of study at the time of admission to Bloomsburg University in order to ensure sufficient time to complete all of the required courses. Notification should be made to the director of academic advisement who, in turn, will notify the coordinator of the Engineering and Liberal Arts Program. The coordinator will assign each student an academic adviser who is a member of the Pre-Engineering Advisory Committee. Students should consult both their advisers and the coordinator for assistance in schedule planning. At the end of the second year of study, students become candidates for transfer if they have maintained a sufficiently high QPA.

Transferring to The Pennsylvania State University: In September of the third year of study, students should apply for transfer to

The Pennsylvania State University. All correspondence and the application should clearly indicate that the transfer is requested under a cooperative 3/2 program. Nov. 30 is the application deadline. Successful applicants will be offered provisional admission to Penn State for the following fall semester.

Completed applications should be supported by the following documentation:

An official transcript of the applicant's final secondary school grades; Two official transcripts of the applicant's Bloomsburg University academic record including all grades earned; A schedule of all courses to be taken in the third year; A letter of recommendation from the Pre-Engineering Advisory Committee.

At the end of the third year of study, two copies of the student's official Bloomsburg University transcript should be forwarded to the Admissions Office of The Pennsylvania State University. Students who have maintained the required quality point average, who have completed all required courses, and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Penn State.

Transferring to Wilkes University: At the beginning of the third year of study, students should apply for transfer to Wilkes University through the coordinator of the program at Bloomsburg University. Applications are available in the coordinator's office.

Completed applications should be supported by the following credentials:

An official transcript of the applicant's final secondary school grades; An official Bloomsburg University transcript of the applicant's grades including all grades earned during the first two years; A schedule of all courses to be taken during the third year.

The Pre-Engineering Advisory Committee reviews these credentials and submits a recommendation to the dean of admissions of Wilkes University. Successful applicants will be offered provisional admission to

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Wilkes University for the following summer.

At the end of the third year, a copy of the student's official Bloomsburg University transcript should be submitted to the coordinator. Students who have maintained the required quality point average, who have completed all the required courses, and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Wilkes University.

Receiving a Bloomsburg University Degree:

In January of the student's final year in engineering college, the student should send an official transcript of all courses taken to the registrar at Bloomsburg University. A letter indicating intent to graduate should be sent to the coordinator of the Engineering and Liberal Arts Program so that course evaluations can be made. The registrar, upon evaluation of the transcript, will arrange for a diploma to be awarded at the university's May graduation.

Required Courses

All students in this program must complete the following 49 semester hours at Bloomsburg University plus additional courses specific to their field of interest in engineering.

General Education Requirements - All candidates must satisfy the General Education requirements of Bloomsburg University and the specific requirements for the B.A. degree in either physics or mathematics. Students should consult the program coordinator each semester as they plan their schedules. With careful planning, it is possible to satisfy all of the requirements indicated during the student's three-year residence at Bloomsburg University

Requirements for the Major

Physics (11 semester hours)

54.211 General Physics I

54.212 General Physics II

54.310 Modern Atomic Physics
Chemistry (8 semester hours)

52.115 Fundamentals of Inorganic Chemistry

52.216 Chemical Principles and Measurements

Mathematics (18 semester hours)

53.125 Analysis I

53.126 Analysis II

53.225 Analysis III

53.226 Analysis IV

53.322 Differential Equations

53.314 Linear Algebra

Computer Science (3 semester hours)

56.116 Algorithmic Processes

Pre-Engineering (9 semester hours)

54.301 Mechanics: Statics

54.302 Mechanics: Dynamics

54.180 Computer Aided Design and Engineering Graphics

Program-Specific Course Requirements

Candidates planning to pursue an engineering degree at Wilkes University must take the following courses:

Choose one:

54.315 Electronics

54.400 Advanced Physics Laboratory

Choose one:

09.213 Science, Technology, Human Values

41.105 Environmental Issues and Choices

44.207 Ethics, Politics, and Public Policy

Candidates planning to pursue an engineering degree at Penn State must take: 25.103 Public Speaking

Candidates in certain engineering programs also must meet additional course requirements. These course requirements are as follows:

Aerospace, Electrical or Nuclear Engineering

Choose one:

53.491 Special Topics in Mathematics

53.492 Independent Study in Mathematics (Topic: Partial Differential Equations)

Chemical or Materials Engineering

52.131 Fundamentals of Organic Chemistry

52.232 Intermediate Organic Chemistry

Chemical or materials engineering students are excused from 54.302

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*Mechanics: Dynamics***Environmental Engineering**

Choose one set

52.131 Fundamentals of Organic Chemistry

52.232 Intermediate Organic Chemistry or

50.173 Anatomy and Physiology I

50.174 Anatomy and Physiology II

Engineering Management

Choose one:

53.141 Introduction to Statistics or

53.241 Probability and Statistics

40.211 Principles of Economics I

40.212 Principles of Economics II

Mining Engineering

51.101 Physical Geology

51.261 Mineralogy

Petroleum and Natural Gas Engineering

51.101 Physical Geology

51.102 Historical Geology

English

Administered by: Department of English

College: Arts and Sciences

Campus address: 118 Bakeless Center for the Humanities

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4427

Fax number: (717) 389-2094

Department chair: William Baillie

Degree awarded: Bachelor of Arts in English

Enrollment: 95

Departmental Faculty**Professors:** William M. Baillie, Lawrence B. Fuller, Ervene F. Gulley, Francis J. Peters, Glenn E. Sadler**Associate Professors:** S. Ekema Agbaw, M. Dale Anderson, Mary-Jo Arn, Mary G. Bernath, William D. Eisenberg, Ronald A. Ferdock, S. Michael McCully, Terrance J. Riley, Danny L. Robinson, Riley B. Smith**Assistant Professors:** Janice Broder, Edwin P. Moses, Marion B. Petrillo, David S. Randall, Sabah A. Salih, Louise M. Stone, Julie Vandivere**Instructors:** Patricia Comitini, Mary Beth Simmons**About the Program**

The department offers a program leading to a Bachelor of Arts in English and provides the English courses for Bachelor of Science in Education in two areas of concentration, English and Communication, which culminate in certification for teaching in secondary schools. The department also offers a minor in English. The discipline of English provides training in intensive reading, critical thinking, creative writing and language study.

Required Courses

General Education requirements of the university apply to this major.

Requirements for the Major - A total of 42 semester hours is required for a major in English. No course may be used to satisfy more than one requirement.

Required courses include:

20.203 Approaches to Literary Study

20.226 European Literature I

20.236 American Literature I

20.363 Shakespeare

Choose one from the following two:

20.246 British Literature I

20.247 British Literature II

Choose one from the following two courses:

20.256 Non-Western Literature I

20.257 Non-Western Literature II

Choose one from the following two courses

20.488 Seminar

20.489 Seminar

Choose one from the following two courses:

20.492 Literary Theory and Criticism

20.493 Bibliography and Literary Research

Choose one from the following four courses:

20.311 Structure of English

20.312 History of the English

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Language

20.411 Modern Linguistic Theory

20.413 Language in American Society

Choose two from the following seven-courses:

20.334 Studies in American Literature

20.335 Studies in American Literature

20.431 American Romanticism

20.432 American Realism

20.433 American Modernism

20.434 Contemporary American Literature

20.436 African-American Literature

Choose one from the following nine courses:

20.341 Medieval Literature

20.342 The Renaissance

20.344 The Neoclassical Age

20.345 Romantic and Victorian Literature

20.346 Studies in British Literature

20.347 Studies in British Literature

20.364 Chaucer

20.370 The English Novel

20.375 Renaissance Drama

Choose one from the following ten courses:

20.301 Creative Writing: Fiction

20.302 Advanced Composition

20.303 Creative Writing: Poetry

20.306 Theory and Practice of Writing

20.370 The English Novel

20.372 Modern Novel

20.374 Short Story

20.375 Renaissance Drama

20.377 Modern Drama

20.379 Modern Poetry

Choose two other 300-400 level courses.

Requirements for the Minor - The minor in English consists of 18 semester hours from courses selected as to observe the following

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

requirements: 9 hours from any three courses on the 100 or 200 level except 20.101, 10.104, 20.200 and 20.201; 9 hours from any three courses on the 300 or 400 level, and approval of the department chair.

Exercise Science

(Formerly Adult Health)

Administered by: Department of Health Physical Education and Athletics

College: Arts and Sciences

Campus address: E. H. Nelson Field House

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4356

Fax number: (717) 389-2099

Department chair: Jerry Medlock

Adult Health program director: Susan Hibbs

Degree awarded: Bachelor of Science in Adult Health (Exercise Science)

Enrollment: 89

Departmental Faculty

Professors: Linda LeMura, Jerry K. Medlock, Roger B. Sanders

Associate Professors: Charles W.

Chronister, Susan J. Hibbs, Ronald E.

Puhl, Burton T. Reese, Leon Szmedra,

Henry C. Turberville Jr.

Assistant Professors: Tamra Cash, Mary T.

Gardner (Director of Athletics), Joseph

B. Hazzard, Carl M. Hinkle, Thomas F.

Martucci, Swapan Mookerjee, Sharon L.

O'Keefe, David R. Rider, Ellen West

Instructors: Roch A. King, Sheila A. Kaercher

About the Program

The Department of Health, Physical Education and Athletics serves the student community by providing academic credit to fulfill the university's general education requirements. Credit is granted for participating in physical activities courses designed to be of lifelong benefit to the individual and in the areas of fitness and recreation.

An interdisciplinary bachelor's degree program is available in adult health (exerc-

cise science); an area of concentration available to elementary education majors. The graduate program in Exercise Science and Adult Fitness is also administered by the department. The department cooperates in several career concentrations including community recreation leader, gerontology, and outdoor leadership and program administration.

Students over 29 years of age must have medical clearance before participating in vigorous physical activity courses.

Required Courses

General Education Requirements - General Education requirements of the university apply to this major.

Requirements for the Major - A minimum of 44 semester hours are required for a major in adult health:

- 48.101 General Psychology
 - 45.211 Principles of Sociology
 - 50.173 Anatomy and Physiology I
 - 50.174 Anatomy and Physiology II
 - 50.205 Introduction to Nutrition
 - 50.231 Biology of Aging
 - 52.101 Introduction to Chemistry
- Choose one of the following six courses:
- 28.290 Medical Ethics
 - 28.292 Contemporary Moral Problems
 - 50.254 Social Implications of Biology
 - 05.298 Fitness and Wellness
 - 09.230 Human Sexuality
 - 05.321 First Aid Safety

Choose one of the following five courses:

- 05.411 Adapted Physical Education
- 05.370 Measurement and Evaluation
- 05.476 Exercise Physiology
- 05.477 Methods and Materials in Adult Physical Education
- 59.498 Internship in Exercise Science

Choose one of the following two courses:

- 93.344 Principles of Management
- 91.498 Introduction to Healthcare Administration

Choose one of the following three courses:

- 05.250 Lifeguarding
- 05.305 Aquatic Fitness Programming
- 05.350 Water Safety Instructor

Choose one of the following four courses:

- 48.253 Social Psychology
- 48.311 Adulthood and Aging
- 48.380 Physiological Psychology
- 48.476 Principles of Behavior Modification

Choose one of the following three courses:

- 05.430 Current Issues in Health Education
- 28.290 Medical Ethics
- 50.254 Social Implications of Biology

Requirements for the Minor - Students are required to complete a minor or area concentration. Contact a department adviser for details.

French

Administered by: Department of Languages and Cultures

College: Arts and Sciences

Campus address: 230 Old Science Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4750

Fax number: (717) 389-4946

Department chair: Jing Luo

Degree awarded: Bachelor of Arts in French

Enrollment: 12

Departmental Faculty

Professors: Brigitte L. Callay

Associate Professors: Patricia Dorame-Holoviak, Gilbert Darbouze, Brenda Keiser, Luke Springman

Assistant Professors: Solange Garcia-Moll, Amarilis Hidalgo-DeJesus, Jing Luo, Jesus Salas-Elorza

About the Program

The Department of Languages and Cultures offers language instruction in eight languages: Chinese, French, German, Italian, Latin, Russian, and Spanish. A student

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

interested in a teaching career may elect French or Spanish as an area of specialization leading to a Bachelor of Science in Education.

As part of the department's mission in general education, the languages and cultures curriculum serves to enhance the quality of the students' liberal arts education with an international and multicultural perspective. In addition to developing proficiency for communication with speakers of other languages, the program also offers courses in culture and civilization taught in English to support the goals of global/cultural awareness and international education.

Courses in culture, civilization, oral expression, literature, and phonetics are included in the area of concentration.

Students wishing to combine proficiency in languages and cultures with another major may elect a minor in either French or Spanish, as well as basic and intermediate courses in the other languages offered. Area concentrations in French, German, and Spanish are offered for students in early childhood education, elementary education, and secondary education.

Students who have studied a language elsewhere should consult the department chairperson for appropriate placement. Generally, the student should schedule courses as follows:

With one year of high school study or equivalent, schedule 10.101. With two years of high school study or equivalent, schedule 10.102. With three years of high school study or equivalent, schedule 10.203. With four years of high school study or equivalent, schedule 10.204.

With no previous language study, schedule special sections of 10.100 for beginners in French.

Education Majors - Students majoring in early childhood education and elementary education may elect an area of concentra-

tion in French. Students should consult their advisers in the Department of Languages and Cultures about course selection. It is recommended that courses in culture and civilization, oral expression, literature, phonetics, and foreign language in elementary school be taken to complete the area of concentration.

The area of concentration for students in early childhood education and elementary education is under revision, and students should inquire about new requirements.

Requirements for a major leading to the Bachelor of Science in Education are found in the section on Secondary Education. Students in this program should also include a course in child psychology and a course in anthropology. Students should inquire in the department about changes in the requirements.

Language Award Outstanding Academic Achievement - This award is presented to any graduating senior who: has a minimum QPA of 3.8 for all courses in the major (A student majoring in more than one language may be considered for an award in each language.); has a minimum QPA in all work at the university of 3.5; and is recommended by the majority of the faculty of the major language.

Individual Practice Audio tapes, videotapes and compact disks for language courses are available for individual practice in the language laboratory, located in 238 Old Science Hall. The language laboratory is equipped with the latest computer technology.

Programs Abroad - All language students are urged to seek opportunities to study abroad. An exchange and internship program with the University of Nancy's Faculté des Lettres and the Commercial Institute in Nancy, France, brings French students to Bloomsburg University.

It affords Bloomsburg University students in French, regardless of their major, to study at Nancy. French majors and/or business majors with a strong concentration in French, are especially encouraged to take part in this program.

Required Courses

General Education requirements of the uni-

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

versity apply to this major. Other than the General Education distribution requirements, the department does not restrict the choice of courses in this area, however, students are encouraged to choose general education courses in consultation with their advisers.

Requirements for the Major - A total of 36 semester hours is required for a major in French. Required courses are:

- 10.203 French III
- 10.204 French IV
- 10.205 Applied Phonetics and Pronunciation
- 10.206 Structure of the French Language
- 10.207 Conversation: French Daily Life and Customs
- 10.211 Foundations of French Culture and Civilization
- 10.402 Contemporary Issues in Francophone Media
- 10.422 Masterpieces of French Literature
- 10.423 Black Francophone Writers and Culture

Choose one of the following three courses with permission of the chairperson:

- 10.401 Advanced French Language
- 20.311 Structure of English
- 20.411 Modern Linguistic Theory

Electives should be chosen from French courses numbered above 10.204 with advisement, except 10.212, which does not count toward the major in French.

Requirements for the Minor - A minor is available in French. Students should consult the chairperson. It is recommended that students who major and/or minor in French also elect a curriculum in related fields such as a second foreign language, business, English, fine arts, history, philosophy, sociology, speech, and theater.

Finance and Business Economics

Administered by: Department of Finance and Business Law

College: Business

Campus address: 223 Sutliff Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4560

Fax number: (717) 389-3892

Department chair: David G. Heskell

Degree awarded: Bachelor of Science in Business Administration

Enrollment: 132

Departmental Faculty

Professors: Barbara E. Behr, Bruce L. Rockwood

Associate Professors: David G. Heskell, Karen J. Elwell, David G. Martin, W. Steven Smith

About the Program

The major in finance provides a perspective of the finance environment such as the functioning of major stocks and bonds markets, the banking system, and international financial markets. It will provide students with educational opportunities that will prepare them to pursue careers in the domestic as well as international financial fields.

Required Courses

General Education requirements of the university apply to this major.

Requirements for the Major - A total of 63 semester hours is required for a major in finance in the business administration degree program. Courses required for the degree program in business administration include:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Choose either:

- 40.246 Business and Economics Mathematics
- 53.123 Essentials of Calculus
- 40.346 Business and Economics Statistics
- 53.118 Applied Matrix Algebra
- 91.220 Financial Accounting
- 91.223 Managerial Accounting
- 92.150 Introduction to Computer and Information Science
- 93.344 Principles of Management
- 93.445 Managerial Communications
- 93.446 Business Policies and Strategies
- 96.313 Business Finance
- 97.310 Marketing: Principles and Practice
- 98.331 Business Law I

Finance - A total of 15 semester hours is required for a major in finance. Required courses include:

- 96.323 Money, Capital Markets and Financial Institutions
- 96.343 Investment Management
- 96.454 Financial Management Decisions

6 semester hours from:

- 96.333 Commercial Bank Operations (Management)
- 96.413 International Finance
- 96.423 Security Analysis and Portfolio Theory
- 96.440 Introduction to Options and Futures
- 96.463 Seminar in Finance
- 96.473 Seminar in Investments

Business Economics - A total of 18 semester hours is required for specialization in business economics. Courses include:

- 40.311 Intermediate Micro-Theory and Managerial Economics
- 40.312 Intermediate Macroeconomic Theory
- 40.313 Labor Economics

Choose one:

- 40.422 Contrasting Economics
- 40.423 History of Economic

Thought

- one additional economics course (3 semester hours)
- one business course (3 semester hours)

Elective Courses - Select courses in business and economics to complete a minimum of 63 semester hours. In selecting an elective, the student must have the proper prerequisites and avoid choosing courses below the level for which the student has already been prepared in the subject field.

Courses designated with a 91, 92, 93, 96, 97, or 98 prefix are business courses and those with a 40 prefix are economics courses. Additional courses permitted as electives include:

- 25.307 Business and Professional Speech
- 42.223 Economic History of the United States (a substitute for 42.224 and 40.423)
- 42.472 History of Labor in the United States
- 90.101 Introduction to Business (*Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.*)
- 90.341 Principles of Selling
- 90.431 Independent Study in Business
- 90.432 Internship in Business

Geography

Administered by: Department of Geography and Earth Science

College: Arts and Sciences

Campus address: 116S1 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4108

Fax number: (717) 389-3028

Department chair: Brian A. Johnson

Degree awarded: Bachelor of Arts in Geography

Enrollment: 75

Departmental Faculty

Professors: Norman M. Gillmeister, Brian A. Johnson, James T. Lorelli, Duane D. Braun

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Associate Professors: Joseph R. Pifer, Dale A. Springer, Lawrence H. Tanner

Assistant Professors: Shahalam M. Amin, John E. Bodenman, Sandra J. Kehoe-Forutan, Michael K. Shepard, Karen M. Trifonoff, Cynthia Venn

About the Program

The geography faculty strives to foster a spirit of learning, inquiry and curiosity among students culminating in the strengthening of their intellectual achievements. Students are provided with the necessary problem-solving skills that will contribute to their success in a rapidly changing world. These problem-solving skills are presented within the context of professional, social and ethical responsibilities. The geography program, moreover, emphasizes regional, national and global, as well as environmental, concerns.

The programs in Urban/Regional Planning and Environmental Planning are aimed at providing majors with a broad based background in the planning field that will qualify them to obtain entry-level positions in the public and private sectors or prepare them for entry into graduate programs in planning.

These programs include the incorporation of interdisciplinary courses that are vital to this broad based preparation. In addition the academic program plays a major role in preparing the students for a required internship that provides practical experience in dealing with diverse planning activities. This internship further enhances the employment potential of the graduate.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 30 to 60 semester hours is required for a major in geography.

Option I - Emphasis on General Geography - Requires 18 semester hours:

- 41.101 World Physical Geography
- 41.102 World Cultural Geography
- 41.221 Economic Geography
- 41.242 Map Skills
- 41.462 Techniques of Geographic

Measurement

41.492 Geography Seminar

18 semester hours to be selected from electives. The elective courses are divided into areas of specialization for your information. A minimum of 9 semester hours are to be selected from 300- and 400-level courses.

Physical:

- 41.125 Weather and Climate
- 41.303 Biogeography and Soil Resources

Human:

- 41.250 Elements of Planning
- 41.310 Population Geography
- 41.363 Urban Geography

Regional:

- 41.200 Geography of the United States and Canada
- 41.203 Geography of Australia or any regional geography course that may be offered

Environmental:

- 41.105 Environmental Issues and Choices
- 41.258 Environmental Conservation
- 41.301 Water Resources Management
- 41.302 Land Resources Management
- 41.304 Environmental Valuation
- 41.315 Outdoor Recreation Resources Management

Techniques:

- 41.264 Applied Cartography
- 41.342 Geographic Information Systems
- 51.320 Remote Sensing of the Earth

Special Topic: Title changes depending on topic

Optional Elective:

41.496 Internship in Geography - *Upon departmental approval a student may choose to undertake an internship of 3 to 12 semester hours of which a maximum of 3 semester hours may be applied to the required elective credits.*

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Option II - Emphasis on Urban and Regional Planning - Requires 21 semester hours in planning including:

- 41.250 Elements of Planning
- 41.350 Advanced Planning
- 41.497 Internship in Planning
- 41.498 Applied Planning Seminar
- 15 semester hours from the following eight courses:
 - 41.101 World Physical Geography
 - 41.221 Economic Geography
 - 41.258 Environmental Conservation
 - 41.302 Land Resources Management
 - 41.310 Population Geography
 - 41.315 Outdoor Recreation Resources Management
 - 41.363 Urban Geography
 - 51.105 Environmental Geology
- 6 semester hours from the following four courses:
 - 41.242 Map Skills
 - 41.264 Applied Cartography
 - 41.342 Geographic Information Systems
 - 51.320 Remote Sensing of the Earth
- 18 semester hours from the following six courses
 - 09.231 Technical Writing
 - 25.103 Public Speaking
 - 53.141 Introduction to Statistics
 - 56.110 Introduction to Computer Science
 - 44.101 Elements of Political Science
 - 44.452 State and Local Government Politics
- 3 semester hours from the following four courses:
 - 40.211 Principles of Economics I
 - 40.212 Principles of Economics II
 - 40.316 Urban Economics
 - 40.410 Public Finance
- 3 semester hours from the following five courses
 - 45.211 Principles of Sociology
 - 45.213 Contemporary Social

Problems

- 45.316 Urban Sociology
- 45.457 Sociology of Community
- 45.468 Social Service Planning

Option III - Emphasis on Environmental Planning - Requires 36 semester hours in planning including:

- 41.101 World Physical Geography
- 41.105 Environmental Issues and Choices
- 41.250 Elements of Planning
- 41.258 Environmental Conservation
- 41.301 Water Resources Management
- 41.302 Land Resources Management
- 41.350 Advanced Planning
- 41.497 Internship in Planning
- 41.498 Applied Planning Seminar
- 9 semester hours from the following five courses:
 - 41.303 Biogeography and Soil Resources
 - 41.304 Environmental Valuation
 - 41.315 Outdoor Recreation Resources Management
 - 51.100 Environmental Geology
 - 51.370 Hydrology
- 6 semester hours from the following four courses:
 - 41.242 Map Skills
 - 41.264 Applied Cartography
 - 41.342 Geographic Information Systems
 - 51.320 Remote Sensing of the Earth
- 15 semester hours from the following five courses:
 - 09.231 Technical Writing
 - 25.103 Public Speaking
 - 44.452 State and Local Government Politics
 - 53.141 Introduction to Statistics
 - 92.150 Introduction to Computer and Information Science
- 44.120 United States Government is strongly recommended

Requirements for the Minor - The minor in geography constitutes 18 semester hours and must include the following courses:

- 41.105 Environmental Issues and Choices
- 41.250 Elements of Planning
- 41.258 Environmental Conservation
- 41.301 Water Resources Management

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 41.302 Land Resources Management
3 semester hours from the following
three courses:
41.315 Outdoor Recreation Resources
Management
41.242 Map Skills
41.264 Applied Cartography

Geology

Administered by: Department of Geography
and Earth Science
College: Arts and Sciences
Campus address: 116S1 Hartline Science
Center
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4108
Fax number: (717) 389-3028
Department chair: Brian A. Johnson
Degree awarded: Bachelor of Science in
Geology
Enrollment: 21

Departmental Faculty

Professors: Norman M. Gillmeister, Brian A.
Johnson, James T. Lorelli, Duane D.
Braun
Associate Professors: Joseph R. Pifer, Dale
A. Springer, Lawrence H. Tanner
Assistant Professors: Shahalam M. Amin,
John E. Bodenman, Sandra J. Kehoe-
Forutan, Michael K. Shepard, Karen M.
Trifonoff, Cynthia Venn

About the Program

The primary goal of the faculty of the
geology-earth science program is to provide
students with a solid foundation in geology
and/or the earth sciences. This is accom-
plished by balancing classroom studies, lab-
oratory exercises, and field experience with
ancillary courses in chemistry, physics, and
mathematics.

The departmental program also supports
the university's aim of providing a strong lib-
eral arts background for our students. This
integration of science and liberal arts suc-
cessfully prepares graduates for entry-level

employment in the earth science profession
or for acceptance into highly competitive
graduate programs in the geological scienc-
es.

Required Courses

General education requirements of the uni-
versity apply to this major.

Requirements for the Major - 68 semester
hours is required for a major in geology. The
degree program in geology requires the fol-
lowing courses:

- 51.101 Physical Geology
- 51.102 Historical Geology
- 51.111 Physical Geology Laboratory
- 51.112 Historical Geology Laboratory
- 51.261 Mineralogy
- 51.262 Petrology
- 51.360 Introduction to Paleontology
- 51.265 Geomorphology
- 51.369 Structural Geology
- 51.468 Stratigraphy and Sedimentation
- 51.470 Groundwater Hydrology
- 51.493 Bibliography and Research
- 51.451 Field Techniques in Earth
Science or equivalent 4 to 6 semes-
ter hours field course

Choose one of the following two sets of
courses:

- 53.123 Essentials of Calculus and
- 53.141 Introduction to Statistics
or
- 53.125 Analysis I and
- 53.126 Analysis II

Choose two of the following three
courses:

- 52.115 Fundamentals of Inorganic
Chemistry
- 52.131 Fundamentals of Organic
Chemistry
- 52.216 Chemical Principles and
Measurements

Choose one of the following two sets of
courses:

- 54.111 Introductory Physics I and

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*To see the most current information on this
major, check the WWW site at [http://
www.bloomu.edu](http://www.bloomu.edu)*

- 54.112 Introductory Physics II
or
54.211 General Physics I and
54.212 General Physics II

Requirements for the Minor - A total of 20 semester hours is required for a minor in geology. A minor program in geology requires the following:

- 51.101 Physical Geology
51.102 Historical Geology
51.111 Physical Geology Laboratory
51.112 Historical Geology Laboratory
12 hours selected from the following 11 courses:
51.261 Mineralogy
51.262 Petrology
51.320 Remote Sensing of the Earth
51.355 Synoptic Meteorology
51.360 Introduction to Paleontology
51.265 Geomorphology
51.369 Structural Geology
51.370 Hydrology
51.468 Stratigraphy and Sedimentation
51.470 Groundwater Hydrology
51.475 Independent Study

German

Administered by: Department of Languages and Cultures

College: Arts and Sciences

Campus address: 230 Old Science Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4750

Fax number: (717) 389-4946

Department chair: Jing Luo

Degree awarded: Bachelor of Arts in German

Enrollment: 7

Departmental Faculty

Professors: Brigitte L. Callay

Associate Professors: Patricia Dorame-

Holoviak, Gilbert Darbouze, Brenda Keiser

Assistant Professors: Solange Garcia-Moll, Amarilis Hidalgo-DeJesus, Jing Luo, Jesus Salas-Elorza Luke Springman, Jorge A. Topete

About the Program

The Department of Languages and Cultures offers language instruction in eight languages: Chinese, French, German, Italian, Japanese, Latin, Russian, and Spanish. A student interested in a teaching career may elect French or Spanish as an area of specialization leading to a Bachelor of Science in Education.

As part of the department's mission in general education, the languages and cultures curriculum serves to enhance the quality of the students' liberal arts education with an international and multicultural perspective. In addition to developing proficiency for communication with speakers of other languages, the program also offers courses in culture and civilization taught in English to support the goals of global/cultural awareness and international education.

Courses in culture, civilization, oral expression, literature, and phonetics are included in the area of concentration.

Students wishing to combine proficiency in languages and cultures with another major may elect a minor in either French or Spanish, as well as basic and intermediate courses in the other languages offered. Area concentrations in French and Spanish are offered for students in early childhood education, elementary education, and secondary education.

Students who have studied a language elsewhere should consult the department chairperson for appropriate placement. Generally, the student should schedule courses as follows: With no previous language study, schedule special sections of FL (Foreign Language) 100 for beginners in French, German and Spanish, if schedule allows.

Language Awards

Outstanding Academic Achievement - This award is presented to any graduating senior who: has a minimum QPA of 3.8 for

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

all courses in the major (A student majoring in more than one language may be considered for an award in each language); has a minimum QPA in all work at the university of 3.5; and is recommended by the majority of the faculty of the major language.

Individual Oral Practice Tapes for language courses are available for individual practice in the language laboratory, located in 238 Old Science Hall.

Programs Abroad Students in German, regardless of major, are encouraged to participate in an exchange and internship program with the University of Jena.

The program brings German students to Bloomsburg and affords Bloomsburg students with a strong background in German the opportunity to study and pursue an internship at the University of Jena.

Required Courses

General education requirements of the university apply to this major. Other than the General Education distribution requirements, the department does not restrict the choice of courses in this area, however, students are encouraged to choose general education courses in consultation with their advisers.

Requirements for the Major - A total of 36 semester hours is required for a major in German. Required courses include:

- 11.203 German III
- 11.204 German IV
- 11.205 Applied Phonetics and Pronunciation
- 11.206 Grammar and Composition
- 11.207 Conversation: Daily Life and Customs in German-Speaking Countries
- 11.211 German Culture and Civilization I
- 11.331 Selected 20th Century Writers
- 11.402 Contemporary Issues in German Media
- 11.422 Masterpieces of German Literature

Choose one of the following two courses:

- 20.311 Structure of English
- 20.411 Modern Linguistic Theory

Electives should be chosen from German courses numbered above 11.204, with advisement.

Requirements for the Minor - A minor is available in German, as well as Spanish and French. Students should consult the chairperson. It is recommended that students also elect a curriculum in related fields such as a second foreign language, business, English, fine arts, history, philosophy, sociology, speech and theater.

Health Physics

Administered by: Department of Physics
 College: Arts and Sciences
 Campus address: 55 Hartline Science Center
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4152
 Fax number: (717) 389-3028
 Program coordinator: Jack C. Couch
 Degree awarded: Bachelor of Science in Health Physics
 Enrollment: 7

Departmental Faculty

Professors: Jack G. Couch, P. James Moser, M. Gene Taylor

Associate Professors: Peter C. Stine

Assistant Professors: Christopher Brackowski, Nathaniel Greene, Gunther L. Lange, Wilfred Reilly

About the Program

The Bachelor of Science in Health Physics provides a sound background of courses in physics, mathematics, chemistry and biology, as well as specialized courses in health physics. Modern laboratories introduce students to state-of-the-art instrumentation and advanced techniques of measurement. An internship course provides experience of the application of health physics in industrial, medical, or government environments. The program provides the qualifications needed for direct entry into the practicing pro-

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

fession or into graduate school for greater specialization in health physics.

Additionally, the University offers two degree programs in Physics, a program in Engineering and Liberal Arts, and a concentration in physics in Secondary Education.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - The bachelor of science program requires 68 semester hours for a major in health physics. Required courses:

- 54.211 General Physics I
- 54.212 General Physics II
- 54.310 Modern Atomic Physics
- 54.315 Electronics
- 54.320 Nuclear Radiations I
- 54.330 Radiation Physics
- 54.360 Health Physics
- 54.420 Nuclear Radiations II
- 54.460 Applied Health Physics
- 59.498 Internship in Natural Sciences and Mathematics
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III
- 53.241 Probability and Statistics
- 56.116 Algorithmic Processes for Computers
- 52.115 Fundamentals of Inorganic Chemistry
- 52.216 Chemical Principles and Measurements
- 50.110 Biology of Animals
- 50.120 Biology of Plants
- 50.411 Radiation Biology

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

History

Administered by: Department of History
College: Arts and Sciences

Campus address: 105 Old Science Hall
Bloomsburg University

400 E. Second Street
Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4156

Fax number: (717) 389-4946

Department chair: William Hudon

Degree awarded: Bachelor of Arts in History
Enrollment: 143

Departmental Faculty

Professors: William Hudon, James Sperry

Associate Professors: Richard Anderson,
Nancy Gentile-Ford, Michael Hickey,
Walter Howard, Jeanette Keith, Arthur W.
Lysiak

Assistant Professors: Jeffrey A. Davis, Woody
Holton, Douglas Karsner, Lisa M.
Stallbaumer

About the Program

The History Department fosters both broad based and specific objectives. Achievement of these goals enhances the university's academic climate and the department's professional effectiveness. The degree program prepares majors for the practical skills needed for employment as well as the knowledge and cultural understanding that is the mark of an informed citizen in a democratic society. The program also prepares students for graduate work and professional training, especially in the field of law. Introductory history courses provide the basic factual information which places national and international events in their proper setting. Advanced courses develop interpretive and analytical abilities as well as those oral and written skills applied to historical inquiry and the day-to-day problem-solving situations confronted by the educated student. The ability to complete research and work independently on specialized research projects and the maturity associated with independent inquiry are essential ingredients of advanced study. Current political and social issues are handled within a flexible academic program which features tradition-

al topical and/or time periods as well as issue-oriented courses which deal with current events. Diverse course offerings allow students the opportunity to study nations whose culture, values, and political goals differ from their own. The examination of earlier cultures, time periods, and emerging nations allow the student to place the evolution of civilization in a proper historical context. Lastly, history is among the humanities. Like a great painting, a piece of music or a gorgeous sunset, history is viewed as something that enriches one's life and has an existence separate from the practical skills and professional preparation associated with the discipline.

Required Courses

General Education Requirements - General Education requirements of the university apply to this major. Requirements for the Major

A total of 36 semester hours is required for a major in history with at least 15 semester hours drawn from 300 and 400 level courses. It is strongly recommended that student take 42.398 Research and Writing Skills in their junior year.

42.112 Origins of the Modern World

42.113 The Modern World

42.121 United States History Survey:
Colonial Period to 1877

42.122 United States History Survey:
1877 to the Present

42.133 The Ancient and Medieval
Worlds

42.398 Research and Writing Skills
Choose one from the following four
courses:

42.141 The Modern Far East

42.142 Latin America: From European
Colonization to the Present

42.143 Black Africa

42.144 Islamic and Hindu Worlds:
Middle East, India, and Malaysia

Any course, 3 semester hours, is
selected from an upper division
(300-400 level) course in American
history.

Any course, 3 semester hours, is
selected from an upper division
course (300-400 level) course in
Western civilization or European
history covering the period through

1815.

Any course, 3 semester hours, is
selected from an upper division
(300-400 level) course in European
history covering the period since
1789.

Electives in history: any two 300 or 400
level history courses.

Requirements for the Minor

This program requires 18 semester hours
of history courses with at least 6 semester
hours in 300 or 400 level courses. The mi-
nor includes:

6 semester hours, any two 100 level
history courses

6 semester hours, any two 200 or 300
level history courses

3 semester hours, any of the 300 or 400
level history courses

42.398 Research and Writing Skills

The program for the history minor pro-
vides the following features: at least one di-
rected exercise in independent historical
research (42.398); a minimal background in
those courses at the 100 level that are basic
to and required of history majors; flexibility
in framing a minor pertinent to the student's
academic interest; and at least one course
in addition to 42.398 at an advanced require-
ment level.

Honors Program

Administered by: Honors Advisory
Committee, Academic Affairs

Campus address: 7 Bakeless Center for the
Humanities

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4713

Fax number: (717) 389-4766

Program director: Dale Springer

Enrollment: 81

Course descriptions begin on page 150

Faculty credentials begin on page 242.

*To see the most current information on this
major, check the WWW site at [http://
www.bloomu.edu](http://www.bloomu.edu)*

Advisory Committee: Kip Armstrong, Julia Bucher, Janet Bodenman, Robert Campbell, Nancy Coulmas, James Dutt, Steve Hales, Jeanette Keith, David Martin, Julia Kipe-Nolt, Steve Markell, Lorraine Shanoski, Viola Supon, Eric Winters, Mike Knapp (student)

About the Program

The Bloomsburg University Honors Program offers opportunities for an enriched college experience to students seeking academic challenge.

The Honors Program's goals are:

- to challenge students to perform at the highest level of excellence;
- to encourage independent thinking and learning;
- to create a supportive environment that encourages the aspirations and achievements of students and fosters their dignity, self esteem and sense of initiative;
- to encourage creativity, intellectual independence, analytical thinking and problem solving, and the growth of communication skills through a strong emphasis on reading, writing and research;
- to provide opportunities for students to develop a broader perspective on national and global issues;
- to provide forums for symposia, experiential learning and independent study;
- to create a meaningful learning community;
- to develop students' leadership potential;
- to enable students to engage in a rigorous, coherent, integrated academic experience with a high degree of student-faculty interaction.

The Honors Program encourages students to explore opportunities for post-graduate work and professional study. The Hon-

ors program is proud of the high rate of acceptance of Bloomsburg honors students to professional and graduate programs.

Typically, honors classes are smaller, offering students opportunities to discuss in greater depth the subject being taught. Honors classes are often enriched through field trips, guest speakers, films and special projects.

New freshmen applying for admission to the program must have a minimum of 1100 SAT and rank in the top 20 percent of their high school class. Admittance to the program for students already at Bloomsburg is based on academic performance at Bloomsburg University.

The honors program awards merit scholarships on a competitive basis to entering freshmen. Many honors students also qualify for other merit scholarships, such as the Mitrani and Presidential awards.

Honors students at Bloomsburg take 25 hours of honors courses that include honors general education courses, honors upper division seminars and two semesters of honors independent study culminating in an honors thesis.

Required Courses

The student can take up to 34 hours of honors work but only 25 are required, and courses can be taken at any time during the student's enrollment at Bloomsburg.

To graduate with honors, the student must take at least one honors humanities, one honors math/science class with a laboratory component, one honors social science class, and one honors seminar plus 08.300 Introduction to Honors Research, plus two semesters of honors independent study.

Freshmen entering the program will automatically be placed in 20.104 Honors Composition for fall semester of their freshman year.

Honors curriculum - The student will be required to take 25 hours of honors credit distributed among the following classes, with additional requirements as indicated:

Choose one of the following two courses to fulfill general education requirements for humanities courses:

08.101 Honors Humanities I

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

08.201 Honors Humanities II

Choose one of the following two courses, with a laboratory component that may be exempted by the director:

- 08.110 Honors Math/Science I
- 08.210 Honors Math/Science II

Choose one of the following two courses to fulfill general education requirements for social science courses:

- 08.130 Honors Social Science I
- 08.230 Honors Social Science II

08.300 Introduction to Honors Research

Choose one of the following four courses to fulfill general education requirements in these areas:

- 08.301 Honors Seminar on Values
- 08.302 Honors Seminar on Diversity
- 08.303 Honors Seminar, Quantitative and Analytical Reasoning
- 08.304 Honors Seminar, Interdisciplinary Studies

Course numbers for the following two courses depend on the program in which the student is completing a degree. Business, Humanities and Social Sciences independent studies are scheduled under Code 09, while Biology, Math, and Professional Studies use their own course numbers. Consult an adviser.

Interdisciplinary Study - Humanities

Administered by: College of Arts and Sciences

College: Arts and Sciences

Campus address: 106 Waller Administration

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4410

Fax number: (717) 389-3026

Adviser: Scott Lowe

Degree awarded: Bachelor of Arts in the Humanities

About the Program

Interdisciplinary studies in the humanities, the natural sciences and mathematics and social sciences offer opportunities for students to follow a less conventional curriculum according to their preferences. A student fulfills 54 semester hours of General Education requirements and then chooses to complete the prescribed core courses in the humanities, the social sciences, or the natural sciences and mathematics. He or she completes a total of 48 semester hours in the area of his or her core curriculum, with free electives sufficient to meet the 128 semester hour requirement for graduation.

Students interested in the Broad Area Program should contact the program's adviser, Scott Lowe, in the College of Arts and Sciences.

Required Courses

General Education Requirements

General education requirements must total 54 hours for this major.

Requirements for the Major

The student completes a core of 33 semester hours, plus 15 hours of humanities electives to complete a total of 48 semester hours of study.

20.302 Advanced Composition

20.363 Shakespeare

26.102 Introduction to Theater Arts

25.321 Argumentation

28.111 Introduction to Philosophy

28.212 Logic Art History elective

Music history/literature/theory elective

History - choose two courses

Languages and Cultures option: Choose from: Intermediate foreign language course
Foreign literature course (in original or translation)
Foreign culture and civilization course

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Interpreting

(Studies in Hearing Loss and Area of Concentration in Education of the Deaf/Hard of Hearing)

Administered by: Department of
Communication Disorders and Special
Education

College: Professional Studies

Campus address: Navy Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4436

Fax number: (717) 389-3890

TDD: (717) 389-4864

Department chair: Carroll Redfern

Degree awarded: Bachelor of Science in
Interpreting

Enrollment: 84

Departmental Faculty

Professors: Carrol J. Redfern, Gerald W.
Powers, Samuel B. Slike

Assistant Professors: Joanne Jackowski

About the Program

This program provides specialized training for individuals seeking to become American Sign Language interpreters. The objective for the sign language interpreting curriculum is to prepare individuals for certification from the Registry of Interpreters of the Deaf as professional interpreters between deaf/hard of hearing and hearing consumers within the context of a variety of settings: legal, educational, social, or business. Individuals desiring to specialize in communication with the deaf have two options: a program leading to a bachelor of science in interpreting or a minor in sign language. Individuals seeking entrance to the program must complete the following courses prior to formal admission to the

program: 74.154 American Sign Language I and 74.155 American Sign Language II.

Required Courses

General Education Requirements apply to this major

Requirements for the Major in Interpreting
18 semester hours in American Sign Language training requirements

74.153 Introduction to Sign Language

74.154 American Sign Language I

74.155 American Sign Language II

74.254 The Deaf Culture

74.255 American Sign Language III

74.256 American Sign Language IV

36 semester hours in interpreting requirements

25.103 Public Speaking

25.215 Communication Theory

25.220 Intercultural Communication

72.152 Introduction to Communication Disorders

72.200 Introduction to Audiology

74.201 History, Education and Guidance of the Deaf/Hard of Hearing

74.301 Introduction to Interpreting for the Deaf

74.302 Interpreting English to American Sign Language

74.303 Transliterating English to Sign Language

74.304 Oral Interpreting/Transliterating

74.401 Sign to Voice Interpreting

74.415 Practicum in Interpreting

one additional course from the Code 25 course listing.

Elective Courses - Elective courses are to be chosen with the approval of an adviser and as required to meet the university's graduation requirement of 128 semester hours. Students may choose from the following free electives:

20.111 Language and Social Interaction

20.411 Modern Linguistic Theory

26.112 Fundamentals of Acting

28.220 Ethics

28.290 Medical Ethics

45.211 Principles of Sociology

45.213 Contemporary Social Problems

45.231 Marriage and Family

46.101 Introduction to Anthropology

46.200 Principles of Cultural Anthropology

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

46.440 Language and Culture
 48.101 General Psychology
 48.160 Basic Statistics
 48.211 Child Psychology
 48.321 Psychological Tests and Measure-

ments

70.101 Introduction to the Exceptional Individual

72.460 Psycholinguistics

74.260 Interpreting in the Educational Setting

Area of Concentration in Education of Deaf/Hard of Hearing

The undergraduate curriculum in education of the deaf/hard of hearing lays the foundation for the training and education needed to prepare classroom teachers and itinerant hearing therapists to work in educational settings with deaf/hard of hearing children and adults. Individuals seeking certification to teach in educational programs for the deaf/hard of hearing are first required to major in early childhood, elementary, secondary or special education or speech pathology/audiology. Students supplement the curriculum for their majors with an area of concentration in education of the deaf/hard of hearing that requires a minimum of 18 semester hours. All students in studies in hearing loss take general education courses, professional education courses, and courses in studies in hearing loss concurrently throughout the program with the concentration in education of the deaf/hard of hearing.

Certification to teach deaf/hard of hearing students in school programs is granted by the Pennsylvania Department of Education upon completion of a related graduate program. Admission to the master's program in this field at Bloomsburg University is very competitive.

Management

Administered by: Department of Management

College: Business

Campus address: 222 Sutliff Hall
 Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4385

Fax number: (717) 389-3892

Department chair: Minoo Tehrani

Degree awarded:

Bachelor of Science in Business

Administration

Enrollment: 400

Departmental Faculty

Professors: M. Ruhul Amin, Peter Venuto, Pamela M. Wynn

Associate Professors: Mainuddin Afza, Charles M. Chapman, Mark Larson, Howard Kinslinger, Steven Markell, Kyle Luthans, Minoo Tehrani

About the Program

The notion of enhancing excellence in teaching inspires the mission and vision of the Department of Management. It envisions providing education and training to enable its students to excel as leaders in a dynamic business environment. The talents, potential and skills of students are developed to integrate the accumulated knowledge of the field of business to effectively fulfill the role expectations of business leaders.

To fulfill these expectations, the department provides quality education and training experiences leading to excellence in the areas of strategic planning, managerial decision making, organizing, staffing, communicating, motivating, leading, controlling, managing diversity, managing operations and technology, managing global operations and managing social responsibility/business ethics issues. A minor in management is also available.

Required Courses

General Education Requirements - General education requirements of the university apply to this major. 20.101 Composition I and 20.201 Composition II are required and cannot be substituted for use in the management degree program.

Requirements for the Major - A total of 63 semester hours is required for a major in finance in the business administration degree

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

program. Courses required for the degree program in management include:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 53.141 Introduction to Statistics
- Choose either:
 - 40.246 Business and Economics Mathematics
 - 53.123 Essentials of Calculus
- 40.346 Business and Economics Statistics
- 91.220 Financial Accounting
- 91.223 Managerial Accounting
- 92.150 Introduction to Computer and Information Science
- 93.344 Principles of Management
- 93.445 Managerial Communications
- 93.446 Business Policies and Strategies
- 96.313 Business Finance
- 97.310 Marketing: Principles and Practice
- 98.331 Business Law I

A total of 15 semester hours is required from the following courses:

- 92.254 Management Information Systems
- 93.345 Human Resource Management
- 93.348 Operations Management
- 93.449 Organizational Behavior
- 93.457 Business and Society
- 93.456 International Management

Elective Courses Select courses in business and economics to complete a minimum of 63 semester hours. In selecting an elective, the student must have the proper prerequisites and avoid choosing courses below the level for which the student has already been prepared in the subject field. Select free elective courses as needed to meet the 128 semester hours required for graduation. Courses designated with a 91, 92, 93, 96, 97, or 98 prefix are business electives. Other electives include:

- 90.101 Introduction to Business (Note: 90.101 will not be allowed for credit as a business elective once a student has

completed 6 semester hours in business administration courses.)

- 90.341 Principles of Selling

Requirements for the Minor - Students majoring in disciplines other than management both within and outside the College of Business are provided a broad exposure to management principles and techniques. The minor is designed to prepare students with knowledge and skills necessary to be successful in management/supervisory roles in their major disciplines and/or occupation in a variety of business endeavors. General Education - as part of their general education, students undertaking the minor in management are required to take the following courses to provide adequate background for successful completion of the required management courses:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 53.141 Introduction to Statistics
- 20.101 Composition I
- 20.201 Composition II
- 25.103 Public Speaking

Minor in Management - The minor consists of 18 semester hours. The following courses are required:

- 93.344 Principles of Management
- 93.345 Human Resource Management
- 93.348 Operations Management
- 93.445 Managerial Communications
- 93.449 Organizational Behavior
- 93.456 International Management

Management Information Systems

Administered by: Department of
Computer and Information Systems
College: Business
Campus address: 224 Sutliff Hall
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4560
Fax number: (717) 389-3892
Department chair: James S. Dutt
Degree awarded: Bachelor of Science in
Management Information Systems
Enrollment: 157

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Departmental Faculty

Professors: Frank S. Davis Jr.

Associate Professors: Carl J. Chimi, James S. Dutt, Harold K. Frey, Gene M.

Gordon, Charles J. Hoppel

Assistant Professors: Patricia M. Boyne

About the Program

The Department of Computer and Information Systems in the College of Business offers two baccalaureate degree programs:

Computer and Information Science (CIS) and Management Information Systems (MIS).

While both programs involve learning how to develop information systems for the business environment, they differ significantly in emphasis.

The Management Information Systems (MIS) major provides both a broad background in business as well as an in-depth knowledge of the process of system development. Students gain a familiarity with the functions of management, accounting, marketing, and finance.

Specialized courses focus on problem solving techniques, structured programming, systems analysis and design, and the process of developing managerial computer applications.

The program stresses the importance of computer skills. Students learn a variety of programming languages and work on a number of different hardware platforms, including networked microcomputers, workstations, and multiuser minicomputers and mainframe systems.

The program prepares students for professional employment in the areas of system development and maintenance, information resource management, management of information systems, and end user computing support.

Admission - Students enrolled in other colleges within Bloomsburg University who wish to transfer into the MIS curriculum must have completed a minimum of 15 semester hours at the university.

Required Courses

General Education requirements of the university apply to this major. In addition to

mathematics and economics, MIS majors are required to take English 20.101 and 20.201 as general education selections.

Required Courses - A total of 27 semester hours in Computer and Information Systems courses is required for a major in MIS.

Required courses for the core curriculum of the business administration degree include:

40.211 Principles of Economics I

40.212 Principles of Economics II

Choose one of the following two courses:

40.246 Business and Economics Mathematics

53.123 Essentials of Calculus

40.346 Business and Economics Statistics

53.118 Applied Matrix Algebra

91.220 Financial Accounting

91.223 Managerial Accounting

92.150 Introduction to Computer and Information Science

93.344 Principles of Management

93.445 Managerial Communications

93.446 Business Polices and Strategies

96.313 Business Finance

97.310 Marketing: Principles and Practice

98.331 Business Law I

A total of 27 semester hours in Computer and Information Systems courses is required for a major in MIS. Courses include:

92.177 Structured Programming Methodology

92.251 Mini/Micro Programming Systems

92.252 Business Oriented Programming

92.254 Management Information Systems

92.256 Data and Information Structures

92.351 Systems Analysis and Design

92.352 Advanced Programming

92.354 Data Base Processing Systems

92.456 Managerial Computer Applications

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Elective Courses - An additional 9 semester hours are required in business and economics courses. Courses designated with a 40, 91, 92, 93, 96, 97, or 98 prefix are eligible. *Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.* Additional courses permitted as electives include:

- 25.307 Business and Professional Speech
- 42.223 Economic History of the United States
- 42.472 History of Labor in the United States
- 90.101 Introduction to Business
- 90.431 Independent Study in Business
- 90.432 Internship in Business

Free Elective Courses - An additional 8 to 11 semester hours in free elective courses are needed to meet the 128 semester hours required for graduation.

Internship - While an internship in MIS is not required for a degree, students are strongly encouraged to take 92.432 Internship in Computer and Information Systems. This course, which may be taken for a maximum of 6 semester hours, can be counted only as a free elective.

Marketing

Administered by: Department of Marketing
College: Business
Campus address: 218 Sutliff Hall
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4385
Fax number: (717) 389-3892
Department chair: Stephen S. Batory
Degree awarded: Bachelor of Science in Business Administration
Enrollment: 246

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Departmental Faculty

Professors: Mary K. Ericksen

Associate Professors: Stephen S. Batory, Morry Ghingold, Salim Qureshi, Robert N. Watts, Jr.

About the Program

The marketing curriculum provides specialized knowledge and skills to prepare students for entry-level marketing positions in sales, sales management, retail management, promotion, research, distribution and other areas. These positions can be obtained in either the profit or non-profit sector. In addition, students are prepared for graduate study.

Required Courses

General Education Requirements - General Education requirements of the university apply to this major. English 20.101 and 20.201, and Speech Communication 25.103 are required as general education courses. No substitutions are permitted for these courses.

Requirements for the Major - A total of 63 semester hours is required for a major in marketing under the business administration degree program.

Required courses for the core curriculum of the business administration degree include:

- 40.211 Principles of Economics I
- 40.212 Principles of Economics II
- 40.346 Business and Economic Statistics
- 53.118 Applied Matrix Algebra
- 91.220 Financial Accounting
- 91.223 Managerial Accounting
- 92.150 Introduction to Computer and Information Science
- 93.344 Principles of Management
- 93.445 Managerial Communications
- 93.446 Business Policies and Strategies
- 96.313 Business Finance
- 97.310 Marketing: Principles and Practice
- 98.331 Business Law I

Choose one of the following two courses:

- 40.246 Business and Economics Mathematics
- 53.123 Essentials of Calculus

A total of 21 semester hours is required from the following courses in marketing:

- 97.360 Advertising Management
 - 97.370 Sales Management
 - 97.430 Consumer Motivation and Behavior
 - 97.440 Marketing Research
 - 97.460 Marketing Management
 - 97.490 Contemporary Problems/Issues in Marketing
- 3 semester hours of a marketing elective.

Elective Courses Select courses in business to complete a minimum of 63 semester hours. In selecting an elective, the student is reminded to have the proper prerequisites and to avoid elected courses below that level for which the student has already been prepared in that subject field.

Courses designated with a 90, 91, 92, 93, 96, 97, or 98 prefix are business courses and those with a 40 prefix are economics courses. Additional courses permitted as electives include:

- 90.101 Introduction to Business (*Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.*)
- 97.350 Retail Management Concepts
- 97.410 International Marketing Management
- 97.432 Internship in Marketing

Free Electives Select free elective courses as needed to meet the 128 semester hours required for graduation.

Requirements for the Minor - The minor in marketing provides student both within and outside of the College of Business with a broad exposure to marketing theory and technique. The minor is designed for students to apply marketing practices successfully to their major discipline. The minor consists of 18 semester hours, 12 of which must be taken at Bloomsburg University. Required courses include:

- 97.310 Marketing: Principles and Practice
- 97.430 Consumer Motivation and Behavior
- 97.440 Marketing Research
- 97.460 Marketing Management

Choose two from the following eight courses:

- 97.320 Marketing for Nonprofit Organizations
- 97.350 Retail Management Concepts
- 97.360 Advertising Management
- 97.370 Sales Management
- 97.410 International Marketing Management
- 97.432 Internship in Marketing
- 97.480 Industrial Marketing Strategy
- 97.490 Contemporary Problems/Issues in Marketing

Mass Communications

Administered by: Department of Mass Communications

College: Arts and Sciences

Campus address: 1100 McCormick Center for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4836

Fax number: (717) 389-3983

Department chair: Dana Ulloth

Degree awarded: Bachelor of Arts in Mass Communications

Enrollment: 161

Departmental Faculty

Professors: Walter M. Brasch, Dana R.

Ulloth **Associate Professors:** William T.

Green, Maria Teresita G. Mendoza-Enright

Assistant Professors: Richard J. Ganahl, John Maittlen-Harris

About the Program

In mass communications, students prepare to work as professionals in public rela-

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

tions, advertising, journalism or telecommunications. The degree program balances a broad knowledge of the liberal arts and natural sciences with the professional and theoretical preparation needed by today's media professionals. Bloomsburg offers:

- Relevant course work in the competency areas of writing, professional skills and theoretical foundations.
- Internship experiences at off-campus sites necessary to complete the student's professional training.
- Professional experience with four campus media: *The Voice*, the competitive, weekly student newspaper; *Spectrum*, the nationally recognized, full-color regional magazine; BUTV, provides student-produced television programming; WBUQ-FM, student managed radio station featuring call-in and music programs.
- Active local chapters of the Association of Public Relations Students (APRS), the American Advertising Federation (AAF), the Society of Professional Journalists (SPJ) and the National Broadcasting Society Alpha Epsilon Rho (NBS-AERho).

Degree Program

To earn a Bachelor of Arts in Mass Communications, majors must complete the necessary semester hours in three competency areas: writing, professional skills and theoretical foundations.

Practica and Internships Students are required to participate in practica or internships during which they are expected to practice the technical aspects of their specialties. Semester hours earned are in addition to the core and specialty areas. Internships are available on and off campus; some are paid. Students are urged to take both an off-campus internship and an on-campus practicum to be as well prepared technically as possible. Some practica are available on

student productions such as *The Voice*, *Bloom News*, *Spectrum* magazine, and a range of other campus communications activities. Recommended Preparation High school students interested in communication-related careers should become involved in school media. These media can include newspapers, yearbooks, magazines, radio, video or television production and programs.

The committed student can gain valuable experience through volunteer efforts with community groups such as chambers of commerce, tourism offices, and other non-profit organizations.

Admission Requirements - Admission to the mass communications program is by application to the chair and is limited to approximately 60 students, who should have achieved a cumulative grade point average of 2.5 or higher. Acceptance into the program depends, however, not only on the QPA, but also on past experience and potential.

Students should exhibit strong writing, visual, and creative qualities and a record of interest and participation in media-related extracurricular activities. Students are encouraged to make a case for their admission in the light of previous experience even if they feel their QPAs may not alone justify admission. Students will be notified of their acceptance as mass communications majors as quickly as possible.

Students are expected to have declared their majors no later than the time they have accumulated approximately 72 semester hours.

Campus Media

Students have the opportunity to write for a number of university publications. These include the campus student newspaper, *The Voice*; the four-color regional magazine, *Spectrum*; the student yearbook, *The Obiter*; the annual student handbook, *The Pilot*; BUTV and WBUQ-FM.

The Voice is a student newspaper with a circulation of 4,500. About 40 to 50 students work on the paper each semester. They participate in all management decisions. Students enjoy full editorial control and operate all newspaper departments.

Spectrum is a full-color regional magazine

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

published twice a year within the department. *Spectrum* has earned numerous national awards, including the American Scholastic Press Association's "Outstanding Magazine in the Country."

The department operates three television studios for formal course work and to provide hands-on experience with modern broadcast equipment. In cooperation with BUTV/Radio Services, the department encourages students to participate in campus broadcast activities including student-produced programs, local telethons, charity drives, televised town council meetings and sporting events.

Bloom News is a weekly half-hour student-produced news program cablecast live for rebroadcast over local community channels. Students manage all editorial functions, studio production activities and all post-production work.

Students also staff a campus radio station, WBUQ-FM. The FM station has acquired the minimum local audience necessary for recognition by Arbitron, the country's major radio audience rating service. Students participate in station management, programming and as on-air personalities for student-produced music and talk programs.

In areas of advertising and public relations, students gain experience with *The Voice* and *Spectrum* magazine. The publications provide opportunities for sales management and account development.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 45 to 51 semester hours is required for a major in mass communications. The department's curriculum ensures better preparation for today's changing communications industry. Graduates are broadly trained for careers in public relations, advertising, journalism and telecommunications. It is organized around three competency areas: theoretical knowledge, writing proficiency and professional development.

Foundation Course - The introductory course provides a general survey of the role of the mass media in society and treats critical issues related to the interaction of society and media in a modern setting.

27.110 Mass Communications and the Popular Arts

Writing Proficiency - Almost every position in mass communications-related industries requires strong writing abilities. To help develop students' writing, the department prescribes 15 credits, of which six are specified.

27.230 Newswriting

27.334 Editing

Choose three from the following six courses:

27.340 Feature Writing

27.352 Publicity and Public Relations

27.366 Design in Advertising

27.371 Broadcast Journalism

27.440 Public Affairs Reporting

27.485 RTF Authorship Theory and Practice

Professional Skills - This content area provides the student an opportunity to develop the capability to operate equipment common to an industry, gain creative skills, and develop organizational and management abilities. The department specifies two courses and requires the student to choose three of the remaining courses.

27.241 Media Graphics

27.271 Media Operations

Choose three from the following 11 courses:

27.251 PR Theory & Practice

27.261 Principles of Advertising

27.297 Mass Communications Practicum

27.367 TV Acting and Directing

27.375 Broadcast Programming and Management

27.390 Film and Video Production

27.435 Journalism Workshop

27.446 Magazine Editing and Production

27.455 Public Relations Cases and Problems

27.466 Advertising Media and Campaigns

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27.480 Telecommunications
Workshop

Theoretical Analysis - The courses in this area provide the philosophical, theoretical, regulatory, and critical knowledge students need regarding mass communications and society.

27.310 Media Law

27.315 Social Foundations of the Mass
Media

27.360 Mass Media Processes and
Effects

27.420 Audience Analysis

Capstone Course - The capstone courses should be related to the student's specific areas of interest.

Choose one of the following two courses:

27.482 Mass Communications Seminar

27.497 Internship

Mathematics

Administered by: Department of
Mathematics and Computer Science
College: Arts and Sciences
Campus address: 1105 McCormick Center
for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4500

Fax number: (717) 389-3599

Department chair: James C. Pomfret

Degrees Awarded: Bachelor of Arts in
Mathematics, Bachelor of Science in
Mathematics

Enrollment: 73

Departmental Faculty

Professors: Paul C. Cochrane, JoAnne S.
Gronney, Paul G. Hartung, Stephen
Kokoska, Reza Noubary, James C.
Pomfret, Mehdi Razzaghi, John. H.
Riley, June L. Trudnak

Associate Professors: E. Dennis

Huthnance, Jr., Curt Jones, Zahira S.

Kahn, Clinton J. Oxenrider, Yixun Shi,

Erik Wynters, assistant chairperson

Assistant Professors: William C. Calhoun,

Helmut Doll, Scott Inch, Lisa Lister,

Robert Montante, Timothy Phillips

About the Program

The primary objective of the mathematics program is to provide a thorough background in both the theoretical and real world applications of mathematics. The curriculum and instructional strategies are designed to encourage and promote critical thinking and problem-solving skills and the articulation of mathematical ideas.

The Department of Mathematics and Computer Science offers three baccalaureate degree programs: Bachelor of Arts, Bachelor of Science in Mathematics, and Bachelor of Science in Computer Science (See section on Computer Science). In addition, the department offers the subject area curriculum supporting teacher certification in secondary education mathematics. The department also offers a minor in computer science, one in statistics, and another in mathematics.

The course sequence in all of the degree programs in mathematics is essentially the same through the first two years.

The bachelor of arts program in mathematics offers a more flexible curriculum designed to accommodate varied career objectives while the bachelor of science program is specifically applications-oriented with more required courses in mathematical analysis and science.

In the bachelor of science program, students select an area of concentration in their junior year to develop proficiency in an area of applied mathematics.

Many students choose a joint program in mathematics and computer science, mathematics and statistics or mathematics and an area of business or physical sciences. A student majoring in education who chooses an area of concentration in mathematics essentially follows the bachelor of arts program in mathematics.

The department strongly supports the implementation of mathematical and statistical software throughout all the mathemati-

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

cal programs. Students who complete a degree program in mathematics are prepared to continue their studies of mathematics on the graduate level or to enter industry in an area where mathematics is used.

For admission to the major in mathematics, a student should have a thorough preparation in high school mathematics. Students who complete the Advanced Placement Examination with a score of 3 or higher may earn university credit for the first calculus course, 53.125 Analysis I.

Required Courses

General Education Requirements - Advisement should be considered before selecting General education courses in this major.

Bachelor of Arts in Mathematics - Courses 53.311 and 56.305 may not be counted as requirements for the major. Required courses:

- 53.125 Analysis I
- 53.126 Analysis II
- 53.185 Discrete Mathematics
- 53.225 Analysis III
- 53.226 Analysis IV
- 53.241 Probability and Statistics
- 53.310 Introduction to Abstract Algebra
- 53.314 Linear Algebra
- 56.121 Computer Science I

At least one 3-semester-hours computer science course numbered 56.122 or above.

At least three 3-semester-hours mathematics courses at the 300 level including at least one from the classical core consisting of:

- 53.322 Differential Equations
- 53.331 Modern Geometry
- 53.341 Statistical Methods
- 53.360 Number Theory
- 53.411 Introduction to Group Theory
- 53.421 Advanced Calculus
- 53.422 Complex Variables
- 53.451 Introduction to Topology

In addition, at least 6 semester hours in a discipline to which mathematics is traditionally applied (as approved by the adviser). Courses 53.311 and 56.305 may not be counted as requirements for the major.

Bachelor of Science in Mathematics - A 9-semester-hours concentration in a special

interest area within mathematics or in a related discipline; areas of concentration available upon request. Courses 53.311 and 56.305 may not be counted as requirements for the major.

- 53.125 Analysis I
- 53.126 Analysis II
- 53.185 Discrete Mathematics
- 53.225 Analysis III
- 53.226 Analysis IV
- 53.241 Probability and Statistics
- 53.310 Introduction to Abstract Algebra
- 53.314 Linear Algebra
- 54.211 General Physics I
- 54.212 General Physics II
- 56.121 Computer Science I

at least one 3-semester-hours computer science course numbered 56.122 or above.

At least three 3-semester-hours mathematics courses at the 300 level including at least one from the classical core consisting of:

- 53.322 Differential Equations
- 53.331 Modern Geometry
- 53.341 Statistical Methods
- 53.360 Number Theory
- 53.411 Introduction to Group Theory
- 53.421 Advanced Calculus
- 53.422 Complex Variables
- 53.451 Introduction to Topology

Minor in Mathematics - The program requires 21 hours of mathematics courses. The quality point average of all courses applied to the minor in Mathematics must be at least 2.00 based on a 4.00 system. Required courses are

- 53.125 Analysis I
- 53.126 Analysis II
- 53.185 Discrete Mathematics
- 53.225 Analysis III

At least two courses (6 semester hours) chosen from the following list:

- 53.231 College Geometry
- 53.225 Analysis III
- 53.310 Introduction to Abstract Algebra

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- 53.314 Linear Algebra
- 53.322 Differential Equations
- 53.331 Modern Geometry
- 53.341 Statistical Methods
- 53.360 Number Theory
- 53.361 Coding and Signal Processing
- 53.381 Introduction to Operations Research
- 53.421 Advanced Calculus
- 53.422 Complex Variables
- 53.451 Introduction to Topology

Minor in Statistics - This program requires 18 semester hours of credit, at least 15 of which must be in the Department of Mathematics and Computer Science. Students within the Department of Mathematics and Computer Science may apply the following courses toward the minor:

- 53.341 Statistical Methods
- 53.342 Design and Analysis of Experiments
- 53.343 Applied Regression Analysis
- 53.461 Probability Models and Applications
- 53.462 Introduction to Mathematical Statistics
- 53.491 Special Topics in Mathematics

One course related to applications of statistics from other departments, with approval of adviser.

Students from departments other than mathematics and computer science may apply the following courses to the minor:

- 53.241 and courses listed above for students with the Department of Mathematics and Computer Science; or select courses from the following list (select one of):
- 53.141 Introduction to Statistics
- 45.260 Basic Social Statistics
- 48.160 Basic Statistics
- 40.346 Business and Economic Statistics
- 53.123 Essentials of Calculus

- 53.125 Analysis I
- 53.342 Design and Analysis of Experiments
- 53.343 Applied Regression Analysis
- 53.491 Special Topics in Mathematics
- 53.492 Independent Study in Mathematics

Courses outside the department recommended for the minor are:

- 40.400 Introduction to Econometrics
- 40.446 Business and Economic Statistics II
- 48.464 Advanced Experimental Design
- 50.351 General Ecology
- 82.306 Methods of Inquiry
- 45.466 Social Research

Medical Imaging

Administered by: School of Health Sciences

College: Professional Studies

Campus address: I05 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg PA 17815-1301

Telephone number: (717) 389-4130

Fax number: (717) 389-3028

Program Coordinator: James E. Cole

Degree Awarded: Bachelor of Science

Enrollment: 120

Program Advisers

Professors: James E. Cole

Assistant Professors: Casey A. Shonis

About the Program

The programs in allied health sciences encompass health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. These programs combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs enter their professions immediately. Others may select postgraduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfacto-

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

ry completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Medical imagers are allied health professionals who have expertise in the operation of imaging equipment and the preparation of patients for various diagnostic procedures. These procedures may include competencies in radiography, nuclear medicine, sonography, radiation therapy and cross sectional imagery. Additionally, many clinically educated radiographers pursue careers in managerial or teaching roles within their disciplines. To meet the varying needs of medical imagers, the program offers an assortment of academic pathways leading to a baccalaureate degree.

Students may enter the program as first-year freshmen or at an advanced entry level following clinical preparation in radiography. Students entering at this advanced level are awarded 20 to 60 semester hours for satisfactory completion of the AMA-approved program and the passing of the ARRT examination.

Johns Hopkins Hospital Option - This option provides the student with at least two clinical competencies that must be pursued at The Johns Hopkins Hospital in Baltimore, Md. The student will select two clinical certification programs offered at JHH following the pre-clinical years at Bloomsburg University. Although the management and education emphases are not selected in this option, some additional courses are required. For details, the student should contact an adviser.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major

Professional Courses

- 50.110 Biology of Animals or equivalent
 - 50.173 Anatomy and Physiology I
 - 50.174 Anatomy and Physiology II
 - 52.101 Introductory Chemistry
 - 54.107 Applied Physics for Health Sciences
 - 48.101 General Psychology
- Choose one from the following two

courses:

- 48.160 Basic Statistics
 - 53.141 Introduction to Statistics
- Choose one from the following two courses:
- 56.110 Introduction to Computer Science
 - 92.150 Introduction to Computer and Information Science

Emphasis Courses - Select an emphasis in either management or education, both require a total of 15 semester hours in courses:

Management Emphasis

- 90.101 Introduction to Business
- 91.220 Financial Accounting
- 93.344 Principles of Management
- 93.345 Human Resource Management
- 91.498 Special Topics: Intro to Health Care

Education Emphasis

- 60.204 Educational Computing and Technology
- 60.251 Psychological Foundations in Education
- 60.291 Principles of Teaching
- 60.311 Classroom Measurement and Evaluation
- 60.393 Social Foundations in Education

Medical Technology

Administered by: School of Health Sciences

College: Professional Studies

Campus address: 105 Hartline Science Center

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4130

Fax number: (717) 389-3028

Program Coordinator: James E. Cole

Degree Awarded: Bachelor of Science

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Enrollment: 55

Program Advisers

Professors: James E. Cole, Judith P. Downing, James E. Parsons
 Assistant Professors: Judith A. Kipe-Nolt
 Adjunct Faculty
 Abington Memorial Hospital, Abington, Pa.; Paul J. Cherney, M.D., Medical Adviser; Barbara J. Scheelje, M.T. (ASCP), Program Director
 Allegheny University Hospitals, Elkins Park, Pa.; Vivan Anagnoste, M.D., Medical Adviser; Phyllis Gotkin, Ph.D., M.T. (ASCP), Program Director
 Divine Providence Hospital, Williamsport, Pa.; Galal M. Ahmed, M.D., Medical Adviser; Loretta A. Moffatt, M.T. (ASCP), Program Director
 Geisinger Medical Center, Danville, Pa.; Peter J. Cera, M.D., Medical Adviser, Alvin Swartzentruber, M.T. (ASCP), Program Director
 Lancaster General Hospital, Lancaster, Pa.; James T. Eastman III, M.D., Medical Adviser; Nadine E. Gladfelder, M.T. (ASCP), Program Director
 Robert Packer Hospital, Sayre, Pa.; Joseph J. King, M.D., Medical Adviser; Brian D. Spezialetti, M.S., M.T. (ASCP), Program Director
 Pennsylvania Hospital, Philadelphia, Pa.; Michael Warhol, M.D., Medical Director; Caryn Lennon, M.T. (ASCP), S.H., Program Director
 Polyclinic Medical Center of Harrisburg, Harrisburg, Pa.; Julian W. Potok, D.O., Medical Adviser; Marcy Anderson, M.S., M.T. (ASCP), Program Director
 The Reading Hospital and Medical Center, Reading, Pa.; William K. Natale, M.D. J.D., Medical Adviser; Sharon K. Strauss, M.T., (ASCP), CLS (NCA), Program Director
 Sacred Heart Hospital, Allentown, Pa.; Francis V. Kostelnik, M.D., Medical

Adviser; Deborah Schwab, M.T. (ASCP), C.L.S. (NCA), Program Director
 Scranton Medical Technology Consortium, Scranton, Pa.; Mary A. Mehofer, M.D., Medical Adviser; Mary Gene Butler, M.S., M.T. (ASCP), Program Director
 Wilkes-Barre Hospital, Wilkes-Barre, Pa.; C. Warren Koehl Jr., M.D., Medical Adviser; Maria E. Nicoletti, C.L.S., M.T. (ASCP), S.H., Program Director
 York Hospital, York, Pa.; George A. Grinaway, M.D., Medical Adviser; Brenda L. Kile, M.A., M.T. (ASCP), Program Director

About the Program

The programs in allied health sciences encompass those health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. Programs in this area combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs may enter their professions immediately. Others may select postgraduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program of Study - The medical technology program consists of a minimum of 96 semester hours of coursework prescribed by the university, followed by one calendar year of clinical education in a medical technology program accredited nationally by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Students enrolling in the curriculum leading to the Bachelor of Science will be admitted under the same policy governing other applicants to Bloomsburg University. These requirements may be found under the section on Admission. Assistance with the admission application to the clinical year phase is offered by the university, but admission to that phase, as well as fees, are determined solely by the institution where the clinical work is done. The university cannot

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guarantee that a student will be accepted for the clinical education portion of the program. In general, students with the highest academic achievement, who interview well, and have a history of volunteer work are given priority.

Students who successfully complete all of the requirements and the clinical year earn a Bachelor of Science degree. All clinical year graduates become eligible to take the two certification examinations for medical technologists. Upon successfully completing one or both of these examinations, the student is awarded a certificate of registry and the designation Medical Technologist (M.T.) (ASCP) or Clinical Laboratory Scientist (C.L.S.) (NCA).

A student who fails to gain admission to a clinical program at the end of the junior year (3+1 program) or wishes to complete a degree prior to entering the clinical experience may remain at the university and complete the requirements for a baccalaureate degree. Ordinarily, a student can complete the degree requirements for a Bachelor of Arts in biology in one additional year; other curricula may demand more time. Many students in the medical technology program select an option in microbiology. This option is detailed in the section on Biology.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A minimum of 96 semester hours and 32 clinical hours are required for a major in medical technology.

Professional Education Courses

50.107 Medical Terminology

Choose one:

50.110 Biology of Animals

50.120 Biology of Plants

50.242 Biology of Microorganisms

50.271 Cell Biology

50.342 Medical Bacteriology

50.343 Immunology

Choose one:

50.233 Human Genetics

50.332 Genetics

Choose one:

50.371 Principles of Mammalian Physiology

50.475 Cell Physiology

52.115 Fundamentals of Inorganic Chemistry

52.131 Fundamentals of Organic Chemistry

52.216 Chemical Principles and Measurements

Choose one:

52.341 Biochemistry

52.232 Intermediate Organic Chemistry

54.107 Applied Physics for Health Sciences

53.141 Introduction to Statistics

56.110 Introduction to Computer Science

Clinical Experience - A total of 32 semester hours must be earned from the listing of courses in medical technology (Code 86) that are given at the clinical site.

Elective Courses - Students must select additional courses to complete the minimum program requirement of 96 semester hours. The following courses are recommended as electives:

50.364 Vertebrate Histology

50.442 Virology of Animals

50.455 Environmental Microbiology

50.470 Medical Parasitology

Music

Administered by: Department of Music
College: Arts and Sciences

Campus address: 215 Haas Center for the Arts

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4284

Department chair: Mark Jelinek

Degree awarded: Bachelor of Arts in Music

Enrollment: 21

Departmental Faculty

Professors: Stephen C. Wallace

Associate Professors: John H. Couch, Mark

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

R. Jelinek, Wendy L. Miller, Terry A. Oxley

Assistant Professors: W. Ann Stokes

About the Program

The goals of the Department of Music are to provide a balanced and diverse program of quality music activities, to provide a student-generated music performance element for the entire university community, and to achieve better understanding of the art of music and the principles guiding effective education in music. This goal is supported by a number of course offerings (classroom music courses in appreciation, skill development, music history, style and repertoire, harmony and application), maintenance of seven prominent performance ensembles appearing regularly on campus and through tours, and opportunities to study voice, piano, organ, and the standard orchestral string and wind instruments on a weekly private lesson basis. In addition, opportunities exist for solo work, recitals, and leadership roles.

Program offerings include: a Bachelor of Arts in Music - a liberal arts-oriented preparation for studio teaching and post-baccalaureate study; a choice of audio recording, performance or music history specializations; a minor in music - a 22-semester hour program packaged according to seven specialty areas in music; a music concentration for education majors; and certificate programs either in music (22 semester hours) or theater-music (18 semester hours). Selection of either the music major or minor program is highly encouraged in the freshman year.

Prospective performance music majors must audition by cassette or in person before acceptance as a music major into the applied music (performance) specialization.

A maximum of 6 semester hours may be earned in seven ensembles: Maroon and Gold Band, Concert Choir, Women's Cho-

ral Ensemble, University-Community Orchestra, Husky Singers, Studio Band, and Chamber Singers. Enrollment in an ensemble is based on invitation or successful audition. The ensembles are described as courses 35.106 through 35.112.

Private lessons in voice, organ, piano, strings, woodwinds, brass, and percussion are available to qualified students. Eight semester hours of private instruction may be earned in eight fall/spring semesters, 16 semester hours for music majors. (For voice, contact Nelson or Miller; for organ, Nelson; for piano, Couch; for class piano, Stokes or Couch; for woodwinds and percussion, Oxley; for brass, Wallace; and for strings, Jelinek and Stokes.)

Each performance ensemble carries both a lower-division and an upper-division course number; the latter indicates enrollment from the fourth semester of participation. The upper-division course number is always a 300-level number. Similarly, each applied studio instruction (private lesson) carries two division course numbers, the upper-division number indicating enrollment from the third semester of study.

A limited number of music scholarships are available.

Career Concentration - The audio recording techniques career concentration is a cross-discipline vocational preparation, available through the Department of Music in cooperation with the departments of mass communications and physics and private business. Internships are required.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 44 to 60 semester hours is required for a major in music. Required courses include:

- 35.101 Music Listening
 - 35.201 Sight Singing
 - 35.210 Music Theory I
 - 35.211 Music Theory II
 - 35.301 Music Theory IV
 - 35.321 Music History to 1750
 - 35.322 Music History-1750 to Present
 - 35.410 Music Theory V, Counterpoint
 - 35.411 Music Theory VI, Orchestration
- Demonstration of piano proficiency by examination and/or election of

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35.302 Piano Proficiency
6 semesters (4 semester hours) of ensemble

and one of the following options:

Music History and Literature - 16 semester hours:

35.430 Seminar in Music History I

35.431 Seminar in Music History II

9 semester hours through courses

35.324 American Music

35.325 Opera and Music Theater

35.327 Survey of Popular Music

4 semester hours of applied instrument or voice study.

Applied Music (Performance) - 16 semester hours:

one instrument or voice for 8

semesters. Selection of voice as the applied music area requires

16 semester hours in language courses:

16.109 Language for Singing

10.101 French I

10.102 French II

11.100 Foundations in German Language and Culture

11.101 German I

11.102 German II

14.101 Italian I

Audio-Video Recording - 44 semester hours (Early acceptance as a music major is necessary to complete the program in eight semesters):

harmony/theory for 11 semester hours

ear/perception/style for 11 semester hours

applied piano for 4 semester hours

applied performance ensemble for 4 semester hours

applied voice or instrument for 3 semester hours

recording specialization (internships) for 11 semester hours

Minor in Music - The minor provides an emphasis in areas designated applied voice, applied instrumental music, applied keyboard, music history-literature, theory (harmony and application), music skills (general music development), and audio recording techniques.

The minor in music is a 22-semester hour emphasis that may be selected by students

Interdisciplinary Study Natural Sciences and Mathematics

Administered by: College of Arts and Sciences

College: Arts and Sciences

Campus address: 106 Waller Administration Building

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4410

Fax number: (717) 389-3026

Adviser: Scott Lowe

Degree awarded: Bachelor of Arts in the Natural Sciences and Mathematics

About the Program

Interdisciplinary studies in the humanities, the natural sciences and mathematics and social sciences offer opportunities for students to follow a less conventional curriculum according to their preferences. A student fulfills 54 semester hours of General Education requirements and then chooses to complete the prescribed core courses in the humanities, the social sciences, or the natural sciences and mathematics. He or she completes a total of 48 semester hours in the area of his or her core curriculum, with free electives sufficient to meet the 128 semester hour requirement for graduation.

Students interested in the Broad Area Program should contact the program's adviser, Scott Lowe, in the College of Arts and Sciences.

Required Courses

General education requirements must total 54 hours for this major.

Requirements for the Major - The student completes a core of 38-41 semester hours, plus 9-11 hours of approved electives to com-

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plete a total of 50 semester hours of study. For mathematics requirements, electives within the broad area requirements are to be chosen from a list compiled by the adviser for the program.

53.125 Analysis I

53.126 Analysis II

Subject to the discretion of the Department of Mathematics and Computer Science and the adviser, student will take 53.113 Pre-Calculus before 53.125 Analysis I.

56.110 Introduction to Computer Science

54.211 General Physics I

54.212 General Physics II

Alternatively, 54.111 and 54.112

Introductory Physics I and II, subject to the discretion of the instructor and the adviser, considering that 54.211 and 54.212 General Physics I and II have as prerequisites (or concurrent registration) 53.125 and 53.126 Analysis I and II, respectively, and are requirements for certain advanced courses in physics and chemistry

50.110 Biology of Animals

50.120 Biology of Plants

52.115 Fundamentals of Inorganic Chemistry

52.131 Fundamentals of Organic Chemistry

51.101 Physical Geology

51.111 Physical Geology Laboratory

51.102 Historical Geology

51.112 Historical Geology Laboratory

Nursing

Administered by: Department of Nursing
College: Professional Studies
Campus address: 3109 McCormick Center
for Human Services
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4600
Fax number: (717) 389-3894
Department chair: M. Christine Alichnie
Degree awarded: Bachelor of Science in
Nursing
Enrollment: 225

Departmental Faculty

Professors: M. Christine Alichnie, Nancy A. Onuschak, Dorette E. Welk

Associate Professors: Robert L. Campbell, Mary A. Gavaghan, Annette Gunderman, Sharon Haymaker, Patricia B. Torsella

Assistant Professors: Jean E. Berry, Julia A. Bucher, Mary Ann Cegielsky, Carolyn M. Dalton, Sharon S. Kribbs, assistant chairperson, Cathy E. Livengood, Joan Miller, Carol Moore Sue Ross, Gloria J. Schechterly, Joan Stone

Instructors: Margie Eckroth-Bucher, Fredda A. Massari-Novak

About the Program

A total of 63 semester hours is required for a major in nursing.

The goals of the BSN program are to assist students to:

1. attain the competencies required of the generalist practitioner, including application of relevant knowledge, skills, values and other professional behaviors designed to help clients attain an optimal value of wellness.

2. value and use collaborative efforts with clients, support systems and a variety of providers to promote attainment of client goals and the delivery of health care.

3. value and engage in activities designed to enhance personal growth and promote professional role development.

The Bachelor of Science in Nursing (BSN) is awarded to those students who successfully complete the requirements for the

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

degree. Degree recipients (non-R.N.) are then eligible to take the NCLEX licensure examination administered by the Board of Nursing in the state of their choice.

Students must assume responsibility for their own travel to both inpatient and outpatient / community clinical agencies. Travel may vary from one mile to approximately 40 miles, depending on the nature of clinical experiences.

Specific policies govern admission, performance standards, good standing, retention and licensure.

Generic Students— Generic is a term used by the National League for Nursing and the Pennsylvania State Board of Nursing to designate students who are not registered nurses. Four types of candidates fall into the generic category: freshman candidates, external transfer candidates, internal transfer candidates, and second degree candidates.

Required Courses

General Education Requirements - A number of the prescribed courses in the physical sciences and social sciences, required as prerequisites for the nursing curriculum, may also apply toward General Education Requirements in Groups B and C.

Requirements for the Major - Generic Students

Prerequisite courses:

48.101 General Psychology

48.210 Life-Span Psychology

Choose one of the following:

45.211 Principles of Sociology

45.213 Contemporary Social Problems

46.200 Principles of Cultural Anthropology

50.173 Anatomy and Physiology I

50.174 Anatomy and Physiology II

50.240 Introductory Microbiology

52.101 Introductory Chemistry

52.108 Physiological Chemistry

Professional Courses

82.210 Professional Nursing

82.211 Nutrition

82.212 Pharmacology

82.213 Foundations of Nursing Practice

82.214 Health Assessment

82.215 Pathophysiology for Nursing Practice

82.306 Introduction to Nursing

Research (a statistics course, either Psychology 48.160 or Mathematics 53.141, is prerequisite)

82.310 Family Nursing

82.311 Adult Health I

82.312 Maternal and Child Health Nursing

82.410 Nursing V

82.411 Nursing VI

82.412 Nursing VII

82.413 Nursing Trends and Issues

Elective Courses - Additional courses must be taken as necessary to complete the minimum graduation requirement of 128 semester hours.

Requirements for the Major - R.N. Students

Prerequisite courses

48.101 General Psychology

48.210 Life-Span Psychology

Choose one of the following:

45.211 Principles of Sociology

45.213 Contemporary Social Problems

46.200 Principles of Cultural Anthropology

50.173 Anatomy and Physiology I

50.174 Anatomy and Physiology II

50.240 Introductory Microbiology

52.101 Introductory Chemistry

52.108 Physiological Chemistry

Professional Courses

82.211 Nutrition

82.212 Pharmacology

82.214 Health Assessment

82.215 Pathophysiology for Nursing Practice

82.305 Role Development for the Nurse Generalist (RN)

82.306 Introduction to Nursing

Research (a statistics course, either Psychology 48.160 or Mathematics 53.141, is prerequisite);

82.410 Nursing V

82.413 Nursing Trends and Issues

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Elective Courses - Additional courses must be taken as necessary to complete the minimum graduation requirement of 128 semester hours.

Advanced Placement - The faculty in the Department of Nursing have approved four mechanisms for petitioning for advanced placement or credit by examination:

College Level Equivalency Examination Program (CLEP). All students are eligible to pursue CLEP testing for Bloomsburg University credit. CLEP enables Bloomsburg University to grant course credit for scores earned on written examinations provided by the College Entrance Examination Board. Information is available from the Office of Counseling and Human Development.

Credit by Examination (faculty prepared examinations). Once students have been admitted to the university they may earn credit in selected science, general education or nursing courses by petitioning for the privilege of establishing credit through a comprehensive exam instead of through registration and class attendance. Eligibility to petition is based upon student presentation or evidence of adequate experience with the course content through experience other than college attendance or through independent study of the course content.

In the nursing department, the courses which the student may petition for credit by examination are 82.211 Nutrition, 82.212 Pharmacology, 82.214 Health Assessment and 82.215 Pathophysiology for Nursing Practice. Students wishing to petition for credit in departments other than nursing must contact the chairperson of the respective department. Study guides are available from course faculty (nursing, biological and allied health science, etc.) to facilitate review for these examinations.

NLN Mobility Profile II: 36 semester hours of advanced placement may be earned by R.N. students through the successful completion of four NLN Mobility Profile II tests. Study guides for the NLN Mobility Profile II tests may be obtained from the office of the Department of Nursing. These examinations must be completed by the time the R.N. is ready to enter the junior level nursing courses.

Transfer course credits. In accord with the university policy on evaluation of transfer

credits, college level courses completed at a two- or four-year college or university accredited by one of the regional accrediting associations in which grades of C or higher (C=73 percent) were earned are usually transferred for a degree student. A student applying to transfer courses must fulfill the provisions of residence requirements and graduation requirements.

Nursing Policies

Degree and Licensure

In accordance with the Professional Nursing Law (P.L. 317, No. 69, Jan. 1, 1986) a felonious act prohibits a person from obtaining licensure in Pennsylvania. In compliance with this legislation, the following guidelines are enforced by The Pennsylvania State Board of Nursing.

A license or certificate shall not be issued to an applicant who has been:

Convicted* of a felonious act prohibited by the act of April 14, 1972, (P.L. 233, No. 64) known as The Controlled Substance, Drug, Device, and Cosmetic Act;

Convicted* of a felony relating to a controlled substance by a U.S. court of law or by any other state, territory or country unless:

a. At least 10 years have elapsed since the date of conviction;

b. The applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations;

c. The applicant otherwise satisfies the qualifications contained in this act.

*Convicted includes a judgment, an admission of guilt, or a plea of nolo contendere. A person convicted of any felonious act may be prohibited from licensure by the Pennsylvania State Board of Nursing at any time.

Student Employment

In accordance with the Pennsylvania Professional Registered Nurse Rules and Regulations, students who are employed in health agencies may not be employed as registered or practical nurses unless they are currently licensed.

Accreditation

The Bachelor of Science in Nursing (BSN) program is accredited by the National League for Nursing and fully approved by the Pennsylvania State Board of Nursing.

Application Categories

Applications to the nursing program fall into two categories: freshman and transfers.

Freshman — A secondary school student or secondary school graduate without any postsecondary experience (formal education beyond secondary school).

Transfer Candidate — An applicant who was previously enrolled at Bloomsburg University or who was enrolled in a postsecondary educational program.

Admission Requirements and Process

Freshmen Candidates - Secondary school students should submit an application to the university's Office of Admissions early in their senior year. (See section on Admissions, Financial Aid, Fees) Secondary school graduates who have had no formal education beyond secondary school, must apply early in November to be considered for the spring semester or early in February to be considered for admission in the fall semester.

The following guidelines are used to evaluate freshman candidates for admission to the Bachelor of Science in Nursing program.

- a. 18 academic units from secondary school. These units must include a minimum of 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, plus 7 other academic units in grades 9 through 12.
- b. B average or above in secondary school.
- c. A or B in secondary school chemistry.
- d. 1100 SATs with a minimum of 550 in each portion.
- e. Rank in top 25 percent of secondary school class.

It is important that the candidate indicate nursing as the major. The Office of

Admissions uses these guidelines in accepting freshman students directly into the nursing program. Nursing faculty consult with the Office of Admissions as necessary regarding candidates for admission. An interview is not required, but the Department of Nursing faculty are available to talk with prospective candidates.

Transfer Candidates

External Transfers - The Student Admission, Progression, and Retention (SAPR) Committee generally reviews transfer applications biannually. Applications must be completed and sent to the Office of Admissions by September 15 for spring admission or by February 15 for fall admission. Only completed files are forwarded to the department on these dates.

- a. Candidates with college credits from institutions other than Bloomsburg University must apply directly to the Office of Admissions. The Office of Admissions reviews the application and evaluates the credits from the transcripts submitted and if the candidate meets the requirements for transfer into the university, the application is forwarded to the Department of Nursing. The department chairperson and the Student Admission, Progression, and Retention (SAPR) Committee review the application for admission to the baccalaureate nursing program. The minimum requirements beyond those for admission to the university are a QPA of 2.5, 16 or greater earned academic credits and evidence of a minimum grade of C in several prerequisite science courses. Grades attained in prerequisite science courses outweigh the overall QPA. The chairperson of the Department of Nursing makes the decision relative to admission based on the committee's recommendation and available positions. Notification of acceptance is forwarded by the Admissions Office.
- b. Candidates who are registered nurses must apply directly to the Office of Admissions. Official transcripts from all previously attended postsecond-

ary educational institutions including those colleges affiliated with the hospital schools must be included with the application. To gain admission to the nursing program, the candidate must be a graduate of a state-approved associate degree or diploma nursing program. The Office of Admissions reviews the application and evaluates any credits from the official transcripts submitted. If a candidate meets the admission guidelines for a registered nurse, his/her application is forwarded to the Department of Nursing. The minimum requirements and process from this point is the same as for other external transfer students.

- c. Individuals seeking a second bachelor's degree are considered for admission to the nursing program by the Nursing Department's chairperson. An appointment with the chairperson is encouraged prior to submitting an application to the Office of Admissions for review. The guidelines for freshman admission to the nursing major are followed for such applicants.

Internal Transfers - Students majoring in other academic disciplines at the university who wish to transfer into the nursing program must apply directly to the Department of Nursing's chairperson. They must meet the guidelines for freshman candidate admission as well as provide evidence of a QPA of 2.5. The candidate seeking transfer sends a letter to the chairperson of the Department of Nursing requesting admission into the nursing program. Upon receipt of the letter, the candidate is sent a "Student's Academic File Transfer Request" form which allows the candidate to obtain his/her academic file from the current department and deliver it to the Nursing Department. The record will then be reviewed by the Student Admission, Progression, and Retention (SAPR) Committee. From this point, the process is the same as for external transfers; however, notification of acceptance of internal transfer is sent from the chairperson of the Department of Nursing.

Performance Standards for Admission and Progression

Applicants and students enrolled in the Department of Nursing must possess the necessary intellectual, physical, emotional, social and communication skills to provide nursing care that is safe for the client, themselves and other health care providers. They must be able to provide safe nursing care in a wide variety of settings with diverse clientele. Students must meet these standards to qualify for and remain in the program. Where possible, reasonable accommodations will be provided to 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.

The core performance standards for this program are identified below along with examples of these standards. These examples are not inclusive of all expected abilities and should be used only for simple comparative purposes by applicants to and students currently enrolled in this program.

Issue — Standard and Examples of Nursing Activities (not inclusive).

Critical Thinking — Critical thinking sufficient for clinical judgement — Competent assessment of clients in a timely manner. Correct interpretation of assessment data, identification of necessary nursing interventions, design of appropriate nursing care plans, evaluating the effectiveness of interventions and revising planned interventions.

Cognitive — On-going capacity to learn new information and skills to provide safe nursing care. This includes the ability to comprehend, measure, calculate, analyze and evaluate diverse forms of information. Learn new skills and rationales for nursing care in a timely manner. Learn and adopt new methods of providing nursing care to reflect the dynamic nature of health care provision.

Interpersonal — Interpersonal abilities sufficient to interact with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds. Establish rapport and relate effectively with clients, their families and colleagues. Work effectively with these individual when they

are stressed physically and / or emotionally. Provide care socially and culturally acceptable to clients.

Communication — Communication abilities sufficient for interaction with others in verbal and written form — Follow verbal and written instructions. Clearly communicate with other health care providers by appropriately documenting the nursing interventions provided and the clients' responses. Provide effective client teaching. Consult with other health care providers in a professional manner

Mobility — Physical abilities sufficient to move oneself from room to room, along hallways and in small or confined spaces. — The ability to meet the physical demands of providing nursing care. Lifting, moving, carrying, pushing and supporting clients, equipment and other objects independently. Standing, bending, walking and sitting while working directly with clients and co-workers and documenting care.

Motor Skills — Gross and fine motor abilities sufficient to provide safe and effective nursing care — Perform vital signs, CPR, physical assessment, use equipment, hanging IVs and tube feedings, drawing up and giving injections. Writing or typing to document nursing interventions and patient care.

Tactile — Tactile dexterity sufficient for physical assessment — Perform palpation, functions of physical examination and / or those related to therapeutic intervention, e.g. insertions of a catheter, giving injections.

Visual — Visual ability sufficient for observation and assessment necessary in nursing care. — Reading charts, flowsheets, monitors, thermometers. Assessment of patient skin color, pupils, wound healing. Drawing up and administering medications.

Hearing — Auditory ability sufficient to monitor and assess health needs. Auscultation of blood pressure, breath sounds, heart sounds, bowel sounds. — Hearing alarms, call bells, cries for help by clients and staff. Converse with clients, families and co-workers. Understanding mechanically reproduced voices such as on audiotape.

Personal Behaviors — Maintains personal behaviors consistent with the American Nurses' Association, Code for Nurses — Demonstrates personal responsibility, accountability, integrity and honesty. Demon-

strates respect for clients and their rights. Avoids behavior inconsistent with professional standards such as chemical dependency and abuse, engaging in or supporting criminal behavior

Adapted from: Core Performance Standards Required for Nursing, Board of Directors of the Southern Council on College Education for Nursing (SCCEN), 1993. Accepted by Faculty Assembly, November 1995

Academic Good Standing Policy

Students in the baccalaureate nursing program must abide by both the university's academic good standing and retention policies and the academic good standing policy of the Department of Nursing. To progress and be retained in the nursing program, the student must:

1. Attain a grade of C or better in:
 - a. Prerequisite natural science courses: Anatomy and Physiology I, Anatomy and Physiology II, Introductory Chemistry, Physiological Chemistry, and Introductory Microbiology
 - b. Prerequisite social sciences courses: General Psychology, Life Span Psychology, and Principles of Sociology or Contemporary Social Problems or Principles of Cultural Anthropology
 - c. All Code 82 nursing courses
2. Obtain a cumulative QPA of 2.50 (after 30-32 semester hours) to enroll in nursing courses in the sophomore year.

A student who does not meet the identified requirements for departmental academic good standing is required to satisfy the identified deficiencies by repeating the course before further progress in the nursing program can be attempted. A student may repeat nursing courses only once. The university policy on the repetition of academic courses applies to the Department of Nursing.

The department reserves the right and the responsibility to develop procedural guidelines for the implementation of this academic good standing policy.

Recommendations concerning academic progression and retention are made to the

Department of Nursing chairperson by the Student Admission, Progression, and Retention Committee. Based on these recommendations, students who do not attain academic good standing after one academic period on probation will be required to take a departmental leave of absence.

Departmental Academic Probation

Students who fail to meet the requirements of the policy for departmental academic good standing are evaluated by the Committee on Student Admission, Progression, and Retention and are immediately placed on departmental academic probation. The department chairperson is responsible for notifying students who have been placed on probationary status.

Students must satisfy any identified academic deficiencies by repeating the course(s) before they can attempt any further progress in the nursing program.

Nursing courses may only be repeated once. University policy that pertains to the repetition of academic courses applies to the Department of Nursing.

A student who does not attain academic good standing after one academic period on probation will be required to take a departmental academic leave of absence.

Departmental Academic Leave of Absence

A student who does not maintain departmental good standing requirements after one semester on probation or a total of three semesters on probation is automatically required to take a leave of absence from the department. The department chairperson notifies students of such actions.

A student on a departmental academic leave of absence is ineligible to attend any course offered by the Department of Nursing. When on departmental academic leave,

a position will be guaranteed for the student for no more than one calendar year. If at the end of one calendar year the student is not ready to return from departmental academic leave of absence, that student will be considered to be withdrawn from the program.

A student seeking reinstatement from a departmental academic leave of absence must do so in accordance with the departmental transfer policy.

Statute of Time Limitation

Once a student has begun the first required 82.____ departmental course, all required 82.____ departmental courses must be completed within five calendar years.

Departmental Retention

Because of the nature of nursing, the nursing faculty reserves the right to counsel, suspend or dismiss those students who, in their judgement, do not satisfy the requirements of scholarship, health and personal suitability for nursing and licensure. Health Policy

Based on the requirements of the Pennsylvania State Board of Nursing and contractual agreements with agencies that provide clinical practice sites, the Department of Nursing requires students to have a yearly physical examination, specific diagnostic tests, and immunizations. Dental and eye examinations also are required upon admission. The University Student Health Center is responsible for student medical records. These records serve as verification of satisfactory health which is required for progression in the baccalaureate nursing program.

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Office Information Systems

Administered by: Department of Business Education and Office Information Systems

College: Business

Campus address: 217 Sutliff Hall

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4109

Fax number: (717) 389-3892

Department chair: Roger Ellis

Degree awarded: Bachelor of Science in Business Administration

Enrollment: 35

Departmental Faculty

Professors: Donna J. Cochrane, John J. Olivo, Jr.

Associate Professors:

Roger W. Ellis, Ellen M. Clemens, Nancy A. Dittman, Dennis O. Gehris

Assistant Professors: Janice C. Keil

About the Program

Office Systems is a relatively new field of study that focuses on the impact of technology on the end-user. Office Systems is one component of business information systems. The program in Office Systems at Bloomsburg is modeled after the Office Systems Research Association Curriculum, which has been endorsed by business, industry, and educational institutions of higher learning.

This program provides the student with the skills and knowledge to manage human resources, technology, and the environment and to update procedures in today's highly competitive business world.

Currently, only 68 universities in the nation offer a degree in Office Systems, and the program at Bloomsburg University is considered a national model.

Required Courses

General Education Requirements - General education requirements of the university apply to this major. The following general education courses are required:

20.101 Composition I

20.201 Composition II

25.103 Public Speaking

40.211 Principles of Economics I

53.141 Introduction to Statistics

40.212 Principles of Economics II

Choose one of the following two courses:

40.246 Business and Economic Mathematics

53.123 Essentials of Calculus

Requirements for the Major - A total of 81 to 84 semester hours is required for a major in Office Information Systems. This total reflects program requirements and general education courses. Required courses include:

90.101 Introduction to Business

90.333 Business Communications and Report Writing

91.220 Financial Accounting

91.223 Managerial Accounting

92.150 Introduction to Computer and Information Science

93.344 Principles of Management

93.446 Business Policies and Strategies

93.449 Organizational Behavior

94.221 Office Systems Concepts

94.302 Business Document Generation

94.330 Telecommunications

94.401 Information Resource Management

94.403 Office Systems Management

94.405 Training and Development in Office Systems

96.313 Business Finance

97.310 Marketing: Principles and Practice

98.331 Business Law I

Electives and Free Electives - Students must choose 15 semester hours in elective courses from General Business, Accounting, Computer and Information Systems, Management, Office Systems, Finance, Marketing, and Business Law. Students must choose 12 semester hours in general education elective courses.

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Philosophy

Administered by: Department of Philosophy
College: Arts and Sciences

Campus address: 218 Bakeless Center for the Humanities

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4246

Department chair: Richard Brook

Degree awarded: Bachelor of Arts in Philosophy

Enrollment: 17

Departmental Faculty

Professors: Oliver J. Larmi, Richard J. Brook

Associate Professor: Scott C. Lowe

Assistant Professors: Steven D. Hales, Wendy Lee-Lampshire

About the Program

The Department of Philosophy offers a broad range of courses designed to provide both a general acquaintance with the issues and methods of philosophy as well as a solid foundation for advanced work in the discipline. In all of its courses, the department seeks to encourage students to develop their thinking skills, by engaging them with the best minds of the past and present, by challenging them to examine and to criticize the arguments of others, and by leading them to question their own values and commitments.

Regardless of topic or level of difficulty, philosophy courses provide a unique opportunity to acquire and to practice a variety of valuable skills, such as the ability to solve problems, to communicate effectively, and to assess the strength and cogency of opposing arguments and proposed plans of action.

The five-member department offers both a major and a minor in philosophy, and also supports the university's liberal arts mission

by including courses that satisfy various general education requirements (i.e., in the humanities division and in the area of values, ethics, and responsible decision making). Students who complete a major or a minor in philosophy are well prepared to pursue advanced work in the discipline or to apply their philosophical skills in multiple career settings such as law, medicine, business, or government.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 30 semester hours is required for a major in philosophy. The following courses are required:

Choose one of the following two courses:

28.212 Logic

28.213 Logic and Computing

28.221 Plato and Aristotle

28.224 Descartes to Kant

Choose one of the following two courses:

28.228 Existentialism

28.229 20th Century Philosophy

Elective Courses - Six elective courses must also be selected in addition to the required courses for this degree program. Two courses must be from the 300 or above level sequence:

28.303 Philosophy of Science

28.304 Philosophy of the Social Sciences

28.305 Philosophy of Law

28.306 Philosophy of Religion

28.307 Contemporary Political Philosophy

28.308 Feminist Philosophy

28.351 Theory of Knowledge

28.352 Contemporary Philosophy of Mind

Requirements for the Minor - A total of 18 semester hours is required for a minor in philosophy. Required courses are:

28.111 Introduction to Philosophy

28.220 Ethics

Choose one of the following three courses:

28.212 Logic

28.110 Critical Thinking

28.213 Logic and Computing

Course descriptions begin on page 150

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Choose three elective courses, including one from:
 28.221 Plato and Aristotle
 28.224 Descartes to Kant
 28.228 Existentialism
 28.229 20th Century Philosophy
 or one systematic course (a 300 level or above course)

Physics

Administered by: Department of Physics
 College: Arts and Sciences
 Campus address: 55 Hartline Science Center
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4107
 Fax number: (717) 389-3028
 Department chair: P. James Moser
 Degrees Awarded: Bachelor of Arts in
 Physics, Bachelor of Science in Physics
 Enrollment: 16

Departmental Faculty

Professors: Jack G. Couch, P. James Moser,
 M. Gene Taylor
Associate Professors: Peter C. Stine
Assistant Professors: Christopher
 Bracikowski, Nathaniel Greene,
 Gunther L. Lange, Wilfred Reilly

About the Program

The Bachelor of Arts in Physics provides a background suitable for direct entry into employment by industry or government. It meets the specifications for qualification as a physicist of the Civil Service Commission. This degree also provides the qualifications necessary for admission to graduate study in most colleges and universities offering master of science and doctor of philosophy degrees in physics and in other specialized interdisciplinary fields.

Students may combine the physics degree with an engineering degree through the engineering/liberal arts program offered by Bloomsburg University in cooperation with The Pennsylvania State University or Wilkes University (See Engineering and Liberal Arts).

The Bachelor of Science in Physics pro-

vides the opportunities and qualifications of the Bachelor of Arts degree, with greater emphasis on the area of specialization.

Additionally, the university offers a degree program in Health Physics.

Requirements for the Bachelor of Science in Education with a concentration in physics are found in the section on Secondary Education.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - The bachelor of arts program requires 54 semester hours for a major in physics. The bachelor of science program requires 71 semester hours for a major in physics.

Bachelor of Arts in Physics - Required courses:

- 54.211 General Physics I
- 54.212 General Physics II
- 54.302 Mechanics: Dynamics
- 54.310 Modern Atomic Physics
- 54.314 Electricity and Magnetism
- 54.400 Advanced Physics Laboratory
- 12 semester hours chosen from other physics courses numbered above 300
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III
- 53.322 Differential Equations
- 56.116 Algorithmic Processes for Computers
- 52.115 Fundamentals of Inorganic Chemistry
- 52.216 Chemical Principles and Measurements

Bachelor of Science in Physics - Required courses:

- 54.211 General Physics I
- 54.212 General Physics II
- 54.302 Mechanics: Dynamics
- 54.310 Modern Atomic Physics
- 54.314 Electricity and Magnetism
- 54.315 Electronics

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

- 54.318 Optics
- 54.400 Advanced Physics Laboratory
- 54.422 Thermodynamics
- 54.450 Introduction to Quantum Mechanics
- 12 semester hours chosen from other physics courses numbered above 300
- 53.125 Analysis I
- 53.126 Analysis II
- 53.225 Analysis III
- 53.322 Differential Equations
- 56.116 Algorithmic Processes for Computers
- 3 semester hours chosen from:
 - 53.226 Analysis IV
 - 53.314 Linear Algebra
 - 56.373 Numerical Methods in Computing
 - 52.115 Fundamentals of Inorganic Chemistry
 - 52.216 Chemical Principles and Measurements

Requirements for the Minor in Electronics -

These courses must be taken in sequence:

- 54.211 General Physics I
- 54.212 General Physics II
- 54.315 Electronics
- 54.316 Digital Electronics
- 54.317 Computer Electronics

Political Science

Administered by: Department of Political Science

College: Arts and Sciences

Campus address: Bakeless Center for the Humanities

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4422

Fax number: (717) 389-2094

Department chair: Richard Micheri

Degree awarded: Bachelor of Arts in Political Science

Enrollment: 95

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Departmental Faculty

Associate Professors: George Agbango, James W. Percy

Assistant Professors: Gloria Cohen-Dion, Richard Micheri

About the Program

The department offers courses in all the major subfields of political science for students who wish to acquire a thorough understanding of the art, science, theories, processes, and structures of governments and politics. Introductory courses are designed for both majors and non-majors. The importance of government and politics (locally, regionally, nationally, and internationally) clearly points to political science as a critical element in the liberal education of any university student.

Advanced courses are offered for students who wish to pursue in-depth study and specialized subject matter to serve as a foundation for careers in politics, law, public administration, community service, international relations, criminal justice, communications, or teaching.

All courses attempt to develop the student's ability to read carefully, communicate effectively, think critically, analyze logically, and research thoroughly. A balance is sought between abstract concepts and theories on the one hand and concrete structures, processes, and applications on the other.

Field work and internships give students an opportunity to apply what they have learned in the classroom to the realities of contemporary society. The department also offers a career concentration in Public Administration, which prepares students for entry-level managerial positions in the public sector.

This career concentration is interdisciplinary and students need not be political science majors to enroll. Contact Dr. Agbango for information at (717) 389-4516.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 30 semester hours is required for a major in political science; required courses total 12 semester hours and include the following

four courses in political science:

- 44.120 United States Government
- 44.160 Nations, States, and Governments
- 44.210 Introduction to Political Theory
- 44.280 Introduction to International Relations

Elective Courses total of 18 semester hours in Political Science, 12 semester hours of which must be accrued from upper division courses, i.e., at the 300 level or above.

Requirements for the Minor - A total of 18 semester hours is required for a minor in political science. There are no required courses. Students should consider building a minor around one of the four subfields of political science, namely, U.S. Government, Comparative Government, International Politics, and Political Theory.

Psychology

Administered by: Department of Psychology
 College: Arts and Sciences
 Campus address: 2103 McCormick Center for Human Services
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4469
 Department chair: Michael Gaynor
 Degree awarded: Bachelor of Arts in Psychology
 Enrollment: 314

Departmental Faculty

Professors: John S. Baird, Jr., Winona J. Cochran, Stephen L. Cohen, Michael W. Gaynor, Alex J. Poplawsky, Constance J. Schick, Eileen C. Astor-Stetson,
Associate Professors: Brett L. Beck, Julie M. Kontos, L. Richard Larcom, Joseph G. Tloczynski, John E. Waggoner
Assistant Professors: Kambon Camara, Marion Mason

About the Program

The Department of Psychology is committed to providing a strong undergraduate program for psychology majors and psychology minors and to providing support courses

for the university's general education curriculum. All classes for the major are taught by faculty who have earned doctorates in their specialty.

Students in the major are expected to demonstrate a firm grounding in basic statistics and in experimental methodology and research, thus allowing them to excel in advanced theory and content courses. A degree in psychology from Bloomsburg University gives quality students an appropriate background for graduate study and research in all areas of the discipline and also offers qualified students a broad range of career possibilities with the potential for employment in settings such as : hospitals, clinics, counseling centers, nursing homes, community human services agencies, educational institutions, research organizations, or businesses.

Required Courses

General Education Requirements - General education requirements of the university apply to this major.

Requirements for the Major - The program of study in psychology requires a minimum of 36 semester hours from the courses specified below:

Freshman/Sophomore years: Core courses (18 semester hours) (Note: 48.281 and 48.282 must be taken concurrently.)

- 48.101 General Psychology
- 48.160 Basic Statistics
- 48.281 Experimental Psychology: Methodology
- 48.282 Experimental Psychology: Applications

Choose two from the following four courses:

- 48.211 Child Psychology or
- 48.212 Adolescence
- 48.253 Social Psychology
- 48.311 Adulthood and Aging

Junior/Senior years: Content courses (12 semester hours)

Choose two from the following three

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courses:

- 48.360 Cognitive Psychology
- 48.375 Psychology of Learning
- 48.380 Behavioral Neuroscience

Choose one of the following two courses:

- 48.335 Abnormal Psychology
- 48.436 Theories of Personality

Choose one of the following eight courses:

- 48.321 Psychological Tests and Measurements
- 48.340 Community Psychology
- 48.350 Psychology of Sex and Gender
- 48.356 Psychology of Motivation
- 48.451 Laboratory Training in Group Processes
- 48.453 Organizational Psychology
- 48.463 Personnel Psychology
- 48.476 Principles of Behavior Modification

Senior year: Capstone courses (6 semester hours):

two courses from:

- 48.341 Theory and Practice of Academic Psychology
- 48.401 History of Psychology
- 48.406 Psychology Seminar
- 48.464 Advanced Experimental Design
- 48.466 Independent Study in Psychology
- 48.497 Practicum in Psychology

Requirements for the Minor - A minimum of 18 semester hours in psychology as specified:

- 48.101 General Psychology

Choose one from the following four courses:

- 48.160 Basic Statistics
- 40.346 Business and Economics Statistics
- 45.260 Basic Social Statistics
- 53.141 Introduction to Statistics
- 48.281 Experimental Psychology: Methodology

9 semester hours of Psychology courses, 6 of which must be at the 300 or 400 level.

ROTC — Air Force

Administered by: United States Air Force

Address: AFROTC Det 752

Wilkes University

Wilkes-Barre PA 18766-0001

Telephone number: 1-800-945-5378, ext. 4860

Fax number: (717) 831-7886

Department chair: Lt. Col. Christopher Greco

Instructors

Co-adjutant instructors in Aerospace

Studies: Lt. Col. Christopher Greco, chairperson; Capt. Steven S. Manley; Capt. L. Douglas Werder

About the Program

The Air Force Reserve Officer Training Corps (AFROTC) program at Bloomsburg University permits students to earn commissions as officers in the

United States Air Force while pursuing a university degree. Students may enroll in either the four-year or two-year program. Students with three years remaining until graduation may re-enroll concurrently in the freshman and sophomore Aerospace Studies courses and can complete the four year program in three years.

General Military Course (4-Year Program Only) - The first two years of the four-year program constitute the General Military Course (GMC). GMC courses are open to any university student. Students enrolling in these courses do not incur any military service obligation, with the exception of Air Force scholarship recipients who incur a commitment at the beginning of their sophomore year. The GMC curriculum consists of four one-semester hour aerospace studies courses, plus a non-credit leadership laboratory each semester that introduces students to U.S. Air Force history and environment, customs, courtesies, drill and ceremonies and leadership skills.

Professional Officer Course (2 and 4-Year Programs) - The final two years of the four-

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

year program comprise the Professional Officer Course (POC). It consists of four-three credit aerospace studies courses, plus a non-credit leadership laboratory each semester. POC cadets earn a \$150-per-month, tax-free subsistence allowance during the academic year and incur a military obligation. To be accepted into the POC, students must pass a physical examination and an officer qualification test, as well as meeting certain academic standards. Four-year cadets must also complete a four-week field training program; two year applicants must complete a six-week field training program, both of which are administered the summer before POC entry. In addition, all POC cadets must complete a course in mathematical reasoning prior to being commissioned.

Uniforms - All uniforms, equipment and textbooks required for AFROTC are supplied by the U.S. Air Force. All cadets are required to pay a nominal deposit that will be refunded when the cadet returns all uniform items in satisfactory condition at the completion of or withdrawal from the AFROTC program.

Scholarships - The U.S. Air Force offers many 2 to 5-year full and partial tuition scholarships for which qualified students may compete if they enroll in AFROTC. All scholarship awards are based on individual merit, regardless of financial need, with most scholarship recipients determined by central selection boards. Scholarship selection boards for students already in college are held in January and July each year. Since scholarship applicants must meet certain academic, physical fitness and medical requirements to be considered by the scholarship boards, contact the aerospace studies department early, preferably two to three months before boards convene, to apply. High School students wishing to compete for AFROTC college scholarships must complete and submit an application by December 1 of their senior year.

Commissioning - Students who satisfactorily complete the POC curriculum requirements are commissioned as second lieutenants in the U.S. Air Force and will serve on active duty in a career specialty they have chosen, consistent with USAF needs. Qualified students may compete for duty as pilots, navigators, missile operations, space

operations, nurses, engineers, meteorologists, computer analysts, lawyers, security police or any of a number of other career fields.

For information, call the Aerospace Studies Department at Wilkes University at 1-800-WILKES-U, ext. 4860/4861 or write P.O. Box 111, Wilkes-Barre, PA 18766. For registration information, contact the Bloomsburg University Registrar's Office.

Courses Offered

General Military Courses - The general military courses (GMC) constitute a two-year program for freshmen and sophomores and are designed to provide general knowledge of the role, organization, missions, and historical development of U.S. Air Power. Students enrolled in the GMC, who are not on Air Force scholarships, incur no military obligations.

61.110 / 61.120 Survey of the United States Air Force I/II (1) - Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. 61.151 is mandatory for AFROTC cadets and it complements this course by providing cadets with followership experiences.

61.151 Leadership Laboratory (0) - The first two years of the Leadership Laboratory include a study of Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of the Air Force officer and learning about the opportunity available to commissioned officers.

61.210 / 61.220 Historical Views of Air Power I/II (1) - Facilitates the transition for Air Force ROTC cadet to Air Force ROTC candidate. 61.151 is mandatory for AFROTC cadets and it complements this course by providing cadets with their first opportunity for applied leadership experiences in class.

AFROTC Field Training

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

61.230 AFROTC Field Training (1-4) (4 Week)
- Provides leadership and officership training in a military environment, which demands conformity to high physical and moral standards. Prerequisites: 61.110, 61.120, 61.210, 61.220 and interview by professor of aerospace studies.

61.330 AFROTC Field Training (1-4) (6 Week)
- Provides leadership and officership training in a military environment, which demands conformity to high physical and moral standards. Prerequisite: interview by professor of aerospace studies.

Professional Officers Courses - The Professional Officer Courses (POC) constitute a four-semester program, normally taken during a student's junior and senior years, leading to commissioning as an Air Force officer. The POC concentrates on concepts and practices of management and leadership, national defense policy, and communication skills.

61.151 Leadership Laboratory (0) - The last two years of Leadership Laboratory consists of activities classified as advanced leadership experiences.

61.310 / 320 Air Force Leadership and Management (3) - Study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics and communication skills required of an Air Force junior officer. Prerequisite: AFROTC approved membership in the POC or permission of the instructor.

61.410 / 421 National Security Forces in American Society I/II (3) - Examines the national security process, regional studies, advanced leadership ethics and Air Force doctrine. 61.151 is required for all AFROTC cadets and complements this course by providing advanced leadership experiences. Prerequisite: AFROTC approved membership in the POC or permission of the instructor.

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

ROTC — Army

Administered by: United States Army
Campus address: Army ROTC
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-2123
Fax number: (717) 389-2523
Department chair: Capt. Daniel Zalewski

Instructors

Co-adjunct instructors: Capt. Daniel Zalewski, SFC Charles A. Thomas, SFC Tommy Lovett

About the Program

Bloomsburg University students can qualify for a commission in the U.S. Army, Army Reserve, or National Guard through the on-campus Reserve Officers' Training (ROTC) program while simultaneously pursuing a degree. Students take the first two years of the ROTC incurring no military obligation. Opportunities also exist for attending Airborne, Air Assault, and Northern Warfare Schools.

Army ROTC provides a four-year curriculum open to both men and women regardless of academic major or area of study. All equipment, clothing and books are provided free of charge. The program is divided into two parts, the Basic Course and the Advanced Course. The Basic Course consists of four courses given during the freshman and sophomore years. During this period, classes include such subjects as military history and organization, traditions, leadership development, time management and adventure training.

The Advanced Course consists of four courses given during the junior and senior years. This portion of the curriculum concentrates on practical application of leadership skills such as tactics, training, ethics, and continued leadership development.

Students receive academic credit for all ROTC courses. The basic program does not require the student to make any commitment to the U.S. Army and allows the student to develop an understanding of the role of the commissioned officer within the Army. Coursework provides training in lead-

ership and management skills which help the individual develop the ability to communicate effectively, think analytically, and make independent and responsible decisions.

Two, three, and four year academic scholarships are available. Benefits include full tuition and fees, a flat fee for books, and \$150 a month during the academic year. Students enrolled in the advanced program also receive the \$150 a month regardless of whether or not they were awarded a scholarship. During the summer between the junior and senior year, students attend a six-week camp where they are paid at a rate equal to half the basic pay of a second lieutenant.

Veterans can receive constructive credit for the first two years of ROTC and are eligible to enter directly into the Advanced Course. There are a variety of options available to qualify students for the Advanced Course who did not take ROTC their first two years. Students belonging to the Army Reserve or National Guard are also eligible for the Simultaneous Membership Program.

Army ROTC also offers a ranger team for students who wish to gain more experience in outdoor activities such as orienteering and survival skills.

Students who successfully complete the ROTC curriculum receive a commission as a Second Lieutenant in the U.S. Army, Army Reserve, or National Guard. Time served on active duty varies, dependent upon the type of program the student elects. Students can be guaranteed Reserve or National Guard duty if they desire.

For more information about the ROTC program, call 389-2123 or 389-2523.

Courses Offered

Basic Course - Freshman and Sophomore Years - Note: Leadership laboratories consist of adventure/survival training, land navigation, first aid, and dismounted drill exercises which cannot be conducted in the classroom.

67.110 Introduction to Military Science (1) - Provides an overview of the organization of the ROTC program. Introduces skills such as rappelling, marksmanship, military customs, preparing military correspondence, and practical field training. One 75-minute class per week,

6 evening laboratories per semester

67.120 Introduction to Military Issues (1) - Provides a background in basic skills essential to leaders. One 75-minute class per week, 6 evening laboratories per semester

67.210 Applied Leadership and Management I (1) - Provides an overview of the Army rank structure and a specific survey of the junior officer's duties and responsibilities within that rank structure. . One 75-minute class per week, 7 evening laboratories per semester

67.220 Applied Leadership and Management II (1) - Presents the fundamentals of small unit leadership and mission planning techniques, to include the reverse planning process and problem-solving techniques. One 75-minute class per week, 6 evening laboratories per semester

67.230 ROTC Basic Camp (4) - Sophomore summer semester course offered in lieu of the Basic Course for students who want to enter the Advanced Program. The camp is six weeks in duration and students are paid at the rate of half the basic pay for a second lieutenant.

Advanced Course - Junior and Senior Years - Note: Students gain further practical leadership training during the leadership laboratories while performing in leadership positions and conducting training.

67.310 Advanced Military Science I (3) - Provides a detailed study of the leadership techniques and the principles introduced in 67.220. One 3-hour class per week, seven laboratories per semester

67.320 Theory and Dynamics of the Military Team (3) - Practical application of the skills learned in 67.310. One 3-hour class per week, six laboratories per semester

67.330 ROTC Advanced Camp (6) - A six-week practical application and evaluation phase required of each cadet prior to commissioning.

67.410 Advanced Leadership and Management I (3) - Presents advanced leadership and man-

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To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

agement skills required of a manager in a military environment.

67.420 Advanced Leadership and Management II (3) - Acquaints students through a series of case studies and role playing simulations with the high ethical standards required of a manager and leader. Students learn the basic procedures of military law and their application in a military environment. One 3-hour class per week, six laboratories per semester

Interdisciplinary Study - Social Sciences

Administered by: College of Arts and Sciences

College: Arts and Sciences

Campus address: 106 Waller Administration
Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4410

Fax number: (717) 389-3026

Adviser: Scott Lowe

Degree awarded: Bachelor of Arts in the
Social Sciences

About the Program

Interdisciplinary studies in the humanities, the natural sciences and mathematics and social sciences offer opportunities for students to follow a less conventional curriculum according to their preferences.

A student fulfills 54 semester hours of General Education requirements and then chooses to complete the prescribed core courses in the humanities, the social sciences, or the natural sciences and mathematics.

He or she completes a total of 48 semester hours in the area of his or her core curriculum, with free electives sufficient to meet the 128 semester hour requirement for graduation.

Students interested in the Broad Area

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Program should contact the program's adviser, Scott Lowe, in the College of Arts and Sciences.

Required Courses

General education requirements must total 54 hours for this major.

Requirements for the Major - The student completes a core of 33 semester hours, plus 15 hours of social sciences electives to complete a total of 48 semester hours of study.

40.211 Principles of Economics I

40.212 Principles of Economics II

41.101 World Physical Geography

41.102 World Cultural Geography

44.101 Elements of Political Science

44.120 United States Government

45.211 Principles of Sociology

Choose one:

46.101 Introduction to Anthropology

46.200 Principles of Cultural Anthropology

48.101 General Psychology

Psychology elective

Sociology elective

Sociology and Sociology/Criminal Justice

Administered by: Department of Sociology
and Social Welfare

College: Arts and Sciences

Campus address: 2106 McCormick Center
for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4237

Fax number: (717) 389-2094

Department chair: I. Sue Jackson

Degree awarded: Bachelor of Arts in

Sociology or Sociology/Criminal Justice

Enrollment: 320

Departmental Faculty

Professors: Christopher Armstrong, Leo G. Barrile, James H. Huber, Frank Lindenfeld, Anne K. Wilson

Associate Professors: David E. Greenwald,
I. Sue Jackson, Charles W.
Laudermilch, Dale L. Sultzbaugh
Assistant Professors: Martin Needleman,
Neal Slone

About the Program

Designed to give students a firm liberal arts education in sociology, this program exposes students to the theoretical concepts and research methods of the field, introduces them to computer data analysis, and prepares them for graduate study. The program provides students the opportunity to explore the causes of social problems with respect to race, class, gender, crime, the political economy, age, health, work, punishment, victimization, and deviance. Students are encouraged to think critically about the structure and dynamics of social groups, institutions, ideology, and the society.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 36 semester hours is required for a major in sociology; a total of 42 semester hours is required for a major in sociology/criminal justice.

Core courses:

- 45.211 Principles of Sociology
- 45.260 Basic Social Statistics
- 45.462 Sociological Theory
- 45.466 Social Research

Sociology Major - Students also must select eight additional courses, 24 semester hours, from Code 45 courses; four of these must be drawn from 300 and 400 level courses. The sociology internship and social work courses may not be counted as part of these eight courses.

Option in Criminal Justice - Students who wish to channel their education in sociology more specifically toward a career in criminal justice may choose the option in criminal justice. Through the sociology/criminal justice sequence, students are exposed to justice, enforcement, and corrections systems, investigation, and victim's services. A total of 42 minimum semester hours is required for this option; this includes the four core courses stipulated for the major in sociology. A GPA of 2.3 is required to remain

in the criminal justice option. The Sociology Internship Program (45.496) accounts for 6 to 15 semester hours. Internships provide first-hand experience in the field and can be at local, state or federal agencies, or private institutions. Required courses are:

45.242 Juvenile Delinquency

Choose one: of the following five courses:

45.244 Introduction to Criminal Justice

44.244 Introduction to Criminal Justice

45.342 Penology

45.343 Victimology

45.496 Sociology Internship Program

Choose three of the following four courses:

45.133 Introduction to Social Work and Social Welfare

45.334 Social Work Practice with Individuals and Families

45.213 Contemporary Social Problems

45.215 Racial and Ethnic Minority Groups

Choose one of the following two courses:

45.443 Sociology of Deviant Behavior

45.318 Social Stratification

45.316 Urban Sociology

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Social Welfare

Administered by: Department of Sociology
and Social Welfare

College: Arts and Sciences

Campus address: 2106 McCormick Center
for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4237

Fax number: (717) 389-2094

Department chair: I. Sue Jackson

Degree awarded: Bachelor of Arts in Social
Welfare

Enrollment: 95

Departmental Faculty

Professors: Christopher Armstrong, Leo
G. Barrile, James H. Huber, Frank
Lindenfeld, Anne K. Wilson

Associate Professors: David E. Greenwald,
I. Sue Jackson, Charles W.
Laudermilch, Dale L. Sultzbaugh

Assistant Professors: Martin Needleman,
Neal Slone

About the Program

The Department of Sociology and Social Welfare offers a baccalaureate degree in social welfare which is accredited by the Council on Social Work Education.

The primary program objective is to prepare students for the beginning level of professional social work practice with individuals, families, groups, organizations, and communities. The curriculum integrates basic social work knowledge with a liberal arts perspective.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 46

to 54 semester hours is required for a major in social welfare. For information about admission criteria and details on the course sequence, please see Dale L. Sultzbaugh, director of the social welfare program.

Required courses for this degree program include:

- 40.211 Principles of Economics
- 44.120 United States Government
- 45.133 Introduction to Social Work and Social Welfare
- 45.297 Introductory Practice Experience in Social Welfare
- 45.334 Social Work Practice with Individuals and Families
- 45.450 Social Work Practice with Small Groups
- 45.452 Social Work Practice with Organizations and Communities
- 45.453 Social Welfare Policy
- 45.497 Social Welfare Internship
- 45.498 Integrative Methods Seminar in Social Work and Social Welfare
- 45.211 Principles of Sociology
- 45.215 Racial and Ethnic Minority Groups
- 45.260 Basic Social Statistics
- 45.462 Sociological Theory
- 45.466 Social Research
- 48.101 General Psychology
- 48.210 Life-Span Psychology
- One additional three credit course in psychology.
- 50.101 General Biology I

Spanish

Administered by: Department of
Languages and Cultures

College: Arts and Sciences

Campus address: 230 Old Science Hall
Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4750

Fax number: (717) 389-4946

Department chair: Jing Luo

Degree awarded:

Bachelor of Arts in Spanish

Enrollment: 29

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Departmental Faculty

Professors: Brigitte L. Callay

Associate Professors: Patricia Dorame-Holoviak, Gilbert Darbouze, Brenda Keiser, Luke Springman

Assistant Professors: Solange Garcia-Moll, Amarilis Hidalgo-DeJesus, Jing Luo, Jesus Salas-Elorza

About the Program

The Department of Languages and Cultures offers language instruction in eight languages: Chinese, French, German, Italian, Latin, Russian, and Spanish. A student interested in a teaching career may elect French or Spanish as an area of specialization leading to a Bachelor of Science in Education.

As part of the department's mission in general education, the languages and cultures curriculum serves to enhance the quality of the students' liberal arts education with an international and multicultural perspective. In addition to developing proficiency for communication with speakers of other languages, the program also offers courses in culture and civilization taught in English to support the goals of global/cultural awareness and international education.

Courses in culture, civilization, oral expression, literature, and phonetics are included in the area of concentration. Students wishing to combine proficiency in languages and cultures with another major may elect a minor in either French or Spanish, as well as basic and intermediate courses in the other languages offered. Area concentrations in French, German, and Spanish are offered for students in early childhood education, elementary education, and secondary education.

Students who have studied a language elsewhere should consult the department chairperson for appropriate placement. Generally, the student should schedule courses as follows:

With no background in the language, schedule 12.100

With one year of high school study or equivalent, schedule 12.101.

With two years of high school study or equivalent, schedule 12.102.

With three years of high school study or

equivalent, schedule 12.203.

With four years of high school study or equivalent, schedule 12.204.

With no previous language study, schedule special sections of 12.100 for beginners in Spanish.

Education Majors - Students majoring in early childhood education and elementary education may elect an area of concentration in Spanish. Students should consult their advisers in the Department of Languages and Cultures about course selection. It is recommended that courses in culture and civilization, oral expression, literature, phonetics, and foreign language in elementary school be taken to complete the area of concentration.

The area of concentration for students in early childhood education and elementary education is under revision, and students should inquire about new requirements.

Requirements for a major leading to the Bachelor of Science in Education are found in the section on Secondary Education. Students in this program should also include a course in child psychology and a course in anthropology. Students should inquire in the department about changes in the requirements.

Language Awards

Outstanding Academic Achievement - This award is presented to any graduating senior who: has a minimum QPA of 3.8 for all courses in the major (A student majoring in more than one language may be considered for an award in each language.); has a minimum QPA in all work at the university of 3.5; and is recommended by the majority of the faculty of the major language.

Annual Spanish Section Award - This award is presented to a senior who: excels in the Spanish language has rendered language-related service to the department and the university is recommended by the majority of the faculty in the Spanish section

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Individual Oral Practice Tapes for language courses are available for individual practice in the language laboratory, located in 238 Old Science Hall.

Programs Abroad Students in Spanish, regardless of their majors, may participate in summer internships in Puerto Rico. Students are also encouraged to participate in the summer study abroad program at the University of Salamanca, Spain or to the exchange program for students in Spanish between Bloomsburg University and the University of Puerto Rico. Students also are encouraged to participate in other summer study abroad programs organized by the department and in accredited programs sponsored by other State System institutions and by other colleges and universities. The department chairperson should be consulted regarding study abroad plans.

Required Courses

General education requirements of the university apply to this major. Other than the General Education distribution requirements, the department does not restrict the choice of courses in this area, however, students are encouraged to choose general education courses in consultation with their advisers.

Requirements for the Major - The following courses are required:

- 12.203 Spanish III
 - 12.204 Spanish IV
 - 12.205 Phonetics: Theory and Practice
 - 12.206 Structure of the Spanish Language
 - 12.207 Conversation: Hispanic Daily Life and Customs
 - 12.211 Spanish Culture and Civilization
 - 12.214 The Hispanic World Today
 - 12.331 Selected 20th Century Writers
 - 12.402 Issues in the Hispanic Media
 - 12.421 Hispanic Prose
- Choose one:
- 20.311 Structure of English

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Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

20.411 Modern Linguistic Theory

Electives should be chosen from Spanish courses numbered above 12.204 with advisement.

Requirements for the Minor - A minor is available in Spanish. Students should consult the chairperson. It is recommended that students who major and/or minor in French and Spanish also elect a curriculum in related fields such as a second foreign language, business, English, fine arts, history, philosophy, sociology, speech, and theater.

Speech Pathology and Audiology

Administered by: Department
Communication Disorders and Special
Education

College: Professional Studies
Campus address: 101B Navy Hall
Bloomsburg University
400 E. Second Street
Bloomsburg, PA 17815-1301
Telephone number: (717) 389-4119
TDD number: (717) 389-4110
Fax number: (717) 389-3980

Department chair: Carroll J. Redfern
Degree awarded: Bachelor of Science in
Speech Pathology and Audiology
Enrollment: 150

Departmental Faculty

Professors: Diane H. Angelo, Carroll J. Redfern, G. Donald Miller, Richard M. Angelo, Ronald R. Champoux, Julia M. Weitz

Associate Professors: Shaheen N. Awan, Robert J. Lowe, Vishakha W. Rawool

About the Program

The preprofessional curriculum in communication disorders prepares students for admission to graduate education in speech pathology and audiology. The department makes no recommendation for any type of certification based on the completion of the undergraduate preprofessional curriculum. A core of required courses is prerequisite to graduate school admission and is based on

the American Speech-Language-Hearing Association (ASLHA) accreditation/certification requirements.

Courses in the undergraduate preprofessional curriculum in speech pathology and audiology are open to all university students (majors and non-majors) who are interested in hearing science, speech science, normal language and communication development and/or disorders.

Courses in the curriculum can be elected by students in teacher preparation (i.e., early childhood, elementary, secondary or special education or education of the hearing impaired) who want to gain competencies related to the special problems of teaching children with speech, language, and hearing impairments.

The curriculum offers a general education course concerning the processes, functions, and pathologies of human communication.

The preprofessional curriculum provides the student with a broad general education background. The primary emphasis is on general education with a few introductory courses pertaining to the profession of speech pathology and audiology. No professional courses or experiences are offered at the undergraduate level (i.e., student teaching).

Admission to the graduate programs in audiology and speech pathology is competitive and limited. Graduates of the master's degree program in speech pathology and audiology are eligible for certification in speech correction granted by the Pennsylvania Department of Education, the Certificate of Clinical Competence in Audiology or Speech Pathology issued by the American Speech-Language-Hearing Association (ASLHA), and licensure in audiology or speech pathology issued by the Commonwealth of Pennsylvania.

Required Courses

General education requirements of the university apply to this major.

Requirements for the Major - A total of 51 semester hours is required for a major in speech pathology and audiology.

Required Courses

The following courses in speech pathology and audiology are required:

- 48.160 Basic Statistics
- 50.366 Anatomy and Physiology: Head, Neck and Thorax
- 54.106 The Science of Sound
- 70.101 Introduction to the Exceptional Individual
- 70.202 Technology for Exceptionalities
- 72.152 Introduction to Communication Disorders
- 72.200 Introduction to Audiology
- 72.220 Phonetics
- 72.240 Normal Language Acquisition
- 72.300 Auditory Training and Speech Reading
- 72.310 Speech Science
- 72.320 Assessment and Remediation of Language Disorders
- 72.330 Assessment and Remediation of Speech Disorders
- 72.340 Applied Behavioral Analysis for Speech and Language
- 72.430 Fundamentals of Audiology
- 72.450 Clinical Observation
- 72.460 Psycholinguistics

Elective Courses - A total of 23 semester hours in general elective courses must be selected with the approval of the adviser.

Theatre Arts

Administered by: Department of Communications Studies and Theatre Arts

College: Arts and Sciences

Campus address: 1103 McCormick Center for Human Services

Bloomsburg University

400 E. Second Street

Bloomsburg, PA 17815-1301

Telephone number: (717) 389-4184

Fax number: (717) 389-3516

Department chair: Howard Schreiber

Degree awarded: Bachelor of Arts in Theatre Arts

Enrollment: 29

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Departmental Faculty

Professors: Mary Kenny Badami, Dale A. Bertelsen, Howard N. Schreier

Associate Professors: Karen Anselm, Michael Collins, Harry C. Strine, James E. Tomlinson

Assistant Professors: Janet Reynolds Bodenman, Timothy B. Rumbough, Kara Shultz, Janice M. Youse

About the Program

The division of theatre arts is committed to providing a strong undergraduate program for its majors and minors in the study and practice of theatre, to supporting to the university's general education curriculum, and to enhancing the cultural life of the campus community. All courses are taught by professionals in the field.

Students in the major are expected to demonstrate a working knowledge of historical and contemporary theories and practices in dramatic literature, design, and performance. A degree in theatre arts provides successful students with a solid background for achievement in graduate studies and career possibilities as performers, artists, managers, and technicians in professional theatre and related fields such as film and television.

A bachelor of science in education with a concentration on theatre is also available.

The Bloomsburg Players - The Bloomsburg Players is the theatre division's cocurricular producing and support organization. Membership includes majors and minors: students with professional ambition as well as those who share a love of the art and process as an avocation.

Required Courses

General education requirements of the university apply to this major. Recommended general education courses include:

30.101 Introduction to Art

35.101 Music Listening

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Requirements for the Major - A total of 42 semester hours is required for a major in theatre arts, including 27 semester hours in required courses. Courses include:

26.102 Introduction to Theatre Arts

26.108 Theatre Practicum (must be taken for a total of 6 semesters)

Choose one of the following two courses:

26.112 Fundamentals of Acting

26.316 Play Directing

Choose one of the following seven courses:

26.211 Theatre Production/Stagecraft

26.345 Costume Construction

26.215 History of the Theatre

26.321 Theatre and Stage Management

26.341 Fundamentals of Theatre Design

26.416 Modern Theatre

26.490 Seminar: Theatre (a seminar in script analysis)

When students acquire junior standing, they must declare an emphasis area. Emphasis areas include performance, design technology or general:

Performance - 15 semester hours:

Choose the course not previously taken from the required course listing:

26.112 Fundamentals of Acting

26.316 Play Directing

26.200 Experimental Movement

26.451 Advanced Acting

26.490 Seminar: Theatre (a seminar in stage make-up and a seminar in advanced scene study)

Design Technology - 15 semester hours:

Choose the course not previously taken from the required course listing:

26.211 Theatre Production/Stagecraft

26.345 Costume Construction

26.251 Theory of Stage Lighting and Design

26.311 Scene Design

26.414 Costuming for the Stage

26.490 Seminar: Theatre (a seminar in technical problems).

General - 15 semester hours: Choose the course not previously taken from the required course listing:

26.112 Fundamentals of Acting

26.316 Play Directing

Choose the course not previously taken from the required course listing:
 26.211 Theatre Production/
 Stagecraft
 26.345 Costume Construction
 26.219 Children's Theatre
 one course each selected from the
 Performance and Design Technology
 emphasis areas.

09.171 Introduction to Women's
 Studies
 25.494 Gender Issues in Communica-
 tion
 28.308 Feminist Philosophy
 46.260 Men and Women
 20.388 Constructing Gender
 20.288 Reading Through Culture: A
 Feminist Project
 20.287 Black Women Writers
 42.327 The American Woman
 09.497 Women in the Global Economy

Women's Studies

Administered by: College of Arts and
 Sciences
 Campus address: 117 Bakeless Center for
 the Humanities
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-2728
 Fax number: (717) 389-2094
 Program Coordinator: Janice Broder

About the Program

The Women's Studies minor is an inter-
 disciplinary minor consisting of 18 semes-
 ter hours, including an introductory course,
 a capstone seminar and four other courses
 including one that fulfills a diversity stan-
 dard.

Selected courses may be offered in Anthro-
 pology, Biological and Allied Health
 Sciences, Communication Studies, Curricu-
 lum and Foundations, Economics, English,
 History, Philosophy, Political Science, Psy-
 chology and Sociology/Social Welfare.

The minor encourages students to con-
 sider women's contributions to scholarship
 and culture and to consider issues connect-
 ed with gender, race, class and ethnicity.

Required Courses

Requirements for the Minor - Select from
 the following course offerings:
 45.320 Sociology of Women
 09.230 Human Sexuality
 48.350 Psychology of Sex and Gender
 44.377 Feminist Political Theory
 42.469 Women and Gender in Europe-
 an Intellectual History I
 44.470 Women and Gender in Europe-
 an Intellectual History II

Health Services

College: Professional Studies
 Campus address: 105 Hartline Science
 Center
 Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301
 Telephone number: (717) 389-4130
 Fax number: (717) 389-3028
 Program Coordinator: James E. Cole
 Degree awarded: Associate of Science in
 Health Services
 Enrollment: 3

About the Program

The programs in allied health sciences
 encompass those health areas in which in-
 dividuals support, aid and increase the effi-
 ciency and effectiveness of other health pro-
 fessionals by becoming a contributing mem-
 ber of a health care team. Programs in this
 area combine natural science and liberal arts
 education with clinical instruction. In gen-
 eral, students who complete any of the pro-
 grams may enter their professions immedi-
 ately. Others may select postgraduate edu-
 cation in health care. Central to most allied
 health programs, especially the clinical por-
 tion, is satisfactory completion of the clini-
 cal standards, often referred to as the Essen-

Course descriptions begin on page 150

Faculty credentials begin on page 242.

*To see the most current information on this
 major, check the WWW site at [http://
 www.bloomu.edu](http://www.bloomu.edu)*

tials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program of Study

This advanced entry degree program is available to health workers who have obtained a clinical education from an accredited health agency and who desire additional education in communicative and interpersonal skills. Its initiation was encouraged by the fact that many certified health workers are now being strongly encouraged to continue their education in a collegiate setting.

The role of the health worker has expanded to include greater responsibility in the hospital and nursing home setting as well as a more substantial commitment to improving community health. The program attracts medical laboratory technicians, licensed practical nurses, histologic technicians, and laboratory assistants, i.e., those workers who have satisfactorily completed the equivalent of one year's clinical education.

Most students in the program take courses on a part-time basis and require more than two years to complete the curriculum.

Candidates for the associate degree must have satisfactorily completed 22 semester hours of coursework, maintained a minimum QPA of 2.0, and have proof of satisfactory completion of a clinical program. Awarding of this associate degree is contingent upon the student being accepted for candidacy and completion of the program while maintaining good academic standing.

Transfer credits from accredited institutions are accepted, but at least 15 semester hours must be taken at Bloomsburg University.

Required Courses

The following courses are required:

- 20.101 Composition I
- 20.201 Composition II
- 50.107 Medial Terminology
- 50.173 Anatomy and Physiology I
- 50.174 Anatomy and Physiology II
- 50.205 Introduction to Nutrition
- 50.240 Introductory Microbiology
- 91.498 Special Topics: Introduction to Health Care

52.101 Introductory Chemistry

Choose one:

- 53.101 Mathematical Thinking
 - 53.111 Finite Mathematics
 - 53.113 Pre-Calculus
 - 53.114 College Algebra
 - 53.118 Applied Matrix Algebra
 - 53.123 Essentials of Calculus
 - 53.141 Introduction to Statistics
- 48.101 General Psychology
- 48.210 Life-Span Psychology
- 48.211 Child Psychology
- 48.251 Psychological Foundations of Education
- 48.311 Adulthood and Aging
- 45.211 Principles of Sociology
- 25.103 Public Speaking
- 56.110 Introduction to Computer Science

Professional Clinical Courses - Proof of certification or licensure as a health worker - 12 semester hours for this certification.

Course descriptions begin on page 150

Faculty credentials begin on page 242.

To see the most current information on this major, check the WWW site at <http://www.bloomu.edu>

Course Descriptions

Descriptions of undergraduate courses offered by Bloomsburg University appear in numeric order in the following section, subdivided by the department which administers the courses. The descriptions are current as of April 1, 1997, and are subject to change.

To obtain the most current information, students should check with the departments that administer the respective courses, or with the university's World Wide Web site at

<http://www.bloomu.edu>

Official documents relating to program requirements, course descriptions and course syllabi are maintained at the Office of the Provost and Vice President for Academic Affairs.

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Developmental Instruction

Administered by Department of Developmental Instruction

01.099 Intensive English Seminar (Summer) (6) - Designed for entering international students who score at least at the ACTFL level 1+ on a departmentally-administered oral placement test, but who have low TOEFL scores or who wish to improve English skills preparatory to enrollment in other classes. Provides 90 hours of conversation and acculturation in the company of native English speakers, together with some practice, writing and grammar. Credit does not apply toward graduation.

01.011 Reading I (Summer) (3) - Designed to improve a student's reading ability to a level where he/she can compete at the next level. Instruction given in a laboratory and lecture format. Weekly contacts provide individualized prescriptions. Two semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation.

01.025 Reading II (3) - Course presents major components of the reading process and emphasizes basic reading skills. Three semester hours towards full-load status; grade counted in QPA. Does not apply toward graduation. A prerequisite for College Reading and Study Skills for students scoring below the established cutoffs on the Nelson Denny Reading Test.

01.041 Writing I (Summer) (3) - Fundamentals of standard written English for students who test extremely low on SAT-V and whose writing samples confirm need. Emphasis on language activities such as conferencing, revising and editing of papers and reading response journals to improve basic skills in context and reduce anxiety about writing. Numerous and varied short writing assignments. Grade counted in the QPA. Does not apply toward graduation.

01.060 Writing II (3) - Required of students whose SAT-V scores fall below a standard set by the university and whose writing samples confirm need. Students refine basic writing skills in context of varied writing assignments that address given rhetorical situations. Assignments call for specific evidence and responsible generalization from that evidence. Classwork may include conferencing, collaborative

work, student presentations, reading and discussion as well as writing. Grade counted in QPA. Does not apply toward graduation.

01.071 Pre Algebra (Summer) (3) - Geared for students with inadequate arithmetic skills. Study skill techniques and problem-solving strategies explored. Emphasizes basic computer literacy and uses computer-assisted instruction. Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation.

01.080 Introductory Algebra (3) - Recommended for students with minimal algebraic skills as evidenced by student preparation and results obtained in diagnostic tests. A program designed for each student may include operations of rational numbers, ratio, proportion, percent, geometric concepts, basic algebraic concepts and skills. Concepts may include beginning linear equations. Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation.

01.090 Intermediate Algebra (3) - Emphasizes intermediate algebraic skills necessary if success is to be obtained in College Algebra. Topics include linear equations and functions, exponents and polynomials, factoring, rational expressions, and quadratic equations. Provides concepts and skills necessary for college-level math courses that build on a limited algebraic background. Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation.

01.095 Introductory Science (Summer) (3) - Acquaints the student with scientific terminology and methodology; familiarizes the student with the study skills unique to the mastery of science; prepares the student for subsequent courses in science; and makes the student more comfortable with the nature and characteristics of science. Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation.

01.100 College Study Skills (1) - Designed to provide, formulate, and apply the methods and models of learning strategies. Principle focus on content area reading and study skills. Outside readings and discussion focus on the nature of learning and the individual's responsibility to learning. Product and process discussed and compared to various approaches to learning. Applies toward graduation. Us-

ally restricted to the summer freshmen program or offered upon special request.

01.120 College Reading and Study Skills (3) - Develops the complex reading and study skills essential for college learning. Focuses on content area reading and study strategies, reading flexibility, and critical reading skills. Outside readings focus on the nature of learning and the individual's responsibility to learning. Students may be required to use the reading lab for computerized vocabulary lessons and speed reading exercises. Student may not take both College Study Skills and College Reading and Study Skills. Applies toward graduation.

Health, Physical Education and Athletics

*Administered by Department of Health,
Physical Education and Athletics*

05.112 Varsity Athletics (1) - Open to any student who is a member in good standing of a Bloomsburg University athletic team. Course is graded pass/fail.

05.149 Aquatics (1) - Provides an opportunity for nonswimmers to make a proper physical and mental adjustment to water. Introduces basic skills as provided by the American Red Cross with specific emphasis on becoming safe in, on, or about a body of water.

05.150 Aquatics (1) - Contains same content as 05.149 but adapted for beginning skills.

05.151 Intermediate Aquatics (1) - Reviews basic aquatic skills; introduces advanced skills and swimming strokes with emphasis on form and efficiency, elementary rescue, and aquatic games.

05.155 Swimnastics (1) - Assists students to attain and maintain physical fitness through water activities.

05.200 CPR and Safety (1) - Designed for completion of Red Cross CPR certification and to develop a safety awareness expertise for accident prevention. Fee may be required.

05.214 Fencing (1) - Lecture aspect covers a study of the history of fencing, the weapons and equipment involved, rules of the sport, and safety procedures. Emphasis on learning and practicing the skills, and practice bouts; includes a tournament.

05.217 Bicycling (1) - An introductory course for novice cyclists who have access to a variable speed bicycle. Local touring is part of the course. Local bicycle rentals are available.

05.219 Tennis (1) - A beginning course that teaches basic stroke execution, strategy, and court etiquette.

05.221 Jazz Dance (1) - Develops fundamentals of jazz dance.

05.222 Creative Dance (1) - Develops the individual's capability for communication of thoughts, feelings and ideas through the medium of dance. Acquaints students with the basic elements of dance and guides them toward technique mastery with emphasis on expressive or creative movement.

05.224 Fitness Dance (1) - Attempts to provide a method of cardiovascular endurance in a particular interest area.

05.225 Beginning Ballet (1) - Develops the fundamentals of beginning ballet dancing. Elements, skills and the language of ballet will be introduced. This history and popularity of this art form along with the personal and creative benefits from ballet are included.

05.226 Jogging/Walking (1) - Explores the relationship of physical activity (jogging/walking) to the components of wellness and healthy lifestyles. Also provides sound exercise principles for successful, personalized fitness programs.

05.228 Gymnastics (1) - A co-ed introductory course that works primarily on floor exercise and includes instruction on a variety of apparatus including: the balance beam, pommel horse, parallel bars.

05.229 Water Polo (1) - Develops the skills, understanding and appreciation of water polo as a recreational aquatic sport. Provides activity and instruction in individual fundamentals and their incorporation into a team concept. Recommended for students with basic swimming ability.

05.230 Weight Training and Fitness (1) - Develops knowledge and skill in and appreciation of weight training and conditioning programs.

05.231 Archery (1) - Course develops knowledge of, skill in, and appreciation of target archery as a recreational requirement.

05.232 Bowling (1) - Students learn the mechanics of bowling in this beginner's course that meets off-campus. Students begin with appropriate ball selection, learn acceptable styles, practice proper etiquette, and bowl under the instructor's close supervision. Fee required.

05.233 Badminton (1) - Deals with the strokes, strategies, and game of badminton from a beginner's viewpoint. Also valuable to the intermediate player.

05.234 Golf (1) - An introductory course that develops basic skills. Rules, techniques, etiquette, and an emphasis on skill practice are stressed. Fee may be required.

05.235 Riflery (1) - Develops the skills, safety, understanding, and appreciation of riflery as a recreational pursuit.

05.236 Volleyball (1) - Develops the skills, understanding, and appreciation of volleyball as a recreational activity as well as a vigorous, competitive sport.

05.237 Modified Physical Education (1) - Independent and small group instruction for students who are unable to take part in other activities due to physical handicaps. Not offered on a regular basis.

05.238 Racquetball-Handball (1) - An introductory course that teaches history, etiquette, strokes, serves, and strategy in singles and doubles.

05.239 Square Dancing (1) - Develops skill in square and folk dances. Covers the sociological, physiological, and psychological values of square dancing. Students acquire a repertoire of western square dance moves and dance techniques.

05.240 Slimnastics and Fitness (1) - Develops an awareness and understanding of physical self and capabilities; teaches students how to improve their physical condition. Includes exercise and body mechanics.

05.241 Judo Self-Defense (1) - Provides a better understanding of the sport and a competency of judo and self-defense techniques. Should be used as an elective within the physical education service program requirements.

05.242 Physiological and Medical Aspects of Athletic Coaching (3) - Presents basic anatomical and physiological factors affecting move-

ment, endurance, strength, and conditioning in sports; studies equipment, training, treatment of injuries, safety problems, and medical research relating to athletics.

05.243 Backpacking (1) - Reviews backpacking equipment and first aid procedures; includes how to select trails, menus, and cooking methods; teaches safety procedures; discusses how to adjust to the seasons, and how to protect the environment.

05.244 Orienteering (1) - Practical application of the knowledge and skills needed to satisfactorily follow a designated course through the wilderness with use of a watch, a compass, and a map.

05.245 Canoeing (1) - Offers instruction in the basics of canoeing, including skills that can be used recreationally in one's lifetime. Lake and river canoeing will be taught and experienced.

05.246 Beginning Skin and Scuba Diving (1) - Provides basic instruction in the use of snorkel, mask, fins, and scuba units and an understanding of the physics of diving with a great emphasis on safety.

05.247 Rock Climbing (1) - Provides rock climbing experiences for the beginning rock climbing enthusiast. Introduces basic knowledge, skills, and practical application of climbing. Serves as a foundation for further experiences in this area of recreation.

05.248 Basic Sailing (1) - A beginning course that includes terminology, maneuvering under normal and severe weather conditions, seamanship, boating, and safety. Swimming ability required.

05.249 Synchronized Swimming (1) - Provides background in fundamental skills, strokes, and movement progressions involved in developing a basic routine.

05.250 Lifeguarding (2) - Provides an opportunity to attain an American Red Cross Lifeguarding Certificate. CPR is taught as part of this course.

05.251 Techniques of Coaching and Officiating Baseball (3) - Classroom-laboratory provides an overview of baseball administration, organization, fundamental skills, drills, and techniques of umpiring.

05.252 Techniques of Coaching and Officiating Basketball (3) - Instruction in techniques

of coaching, player-coach relationship, team strategy, program organization, and officiating.

05.253 Techniques of Coaching and Officiating Football (3) - Instruction in techniques of coaching, player-coach relationship, program organization and administration, and officiating.

05.254 Techniques of Coaching and Officiating Field Hockey (3) - Instruction in techniques of coaching and officiating all the phases of field hockey.

05.256 Techniques of Coaching and Officiating Cross Country, Track and Field (3) - Analysis of technique and the development of personal skills. Knowledge provided for development of a track program. Discusses rules, starting, officiating, scoring, and facility use.

05.257 Techniques of Coaching and Officiating Wrestling (3) - Gives prospective coaches an insight into problems and situations that may be encountered; prepares the individual to teach as well as coach wrestling.

05.260 Techniques of Coaching and Officiating Swimming (3) - Presents techniques of coaching, swimming, diving; covers rule interpretations and duties of officials.

05.265 Basketball (1) - Provides activity and instruction in the development of individual offensive and defensive fundamentals and their incorporation into a team concept. Reviews basic strategy and current trends at all competition levels.

05.270 Exercise and You (2) - Studies appropriate physiological functions, exercise physiology, mechanical implications, and fitness measurement. Reviews procedures and practical application through programmed exercise. (3 contact hours).

05.271 Intermediate Archery (1) - Provides the opportunity for the student to develop shooting skills.

05.272 Intermediate Bowling (1) - Attempts to develop advanced skill and knowledge of bowling. Fee required.

05.273 Intermediate Golf (1) - Provides instruction in the techniques and strategy involved in improving the individual skills of the student. Fee may be required.

05.274 Intermediate Tennis (1) - Focuses on

improving tennis skills.

05.275 Intermediate Volleyball (1) - Studies the development and history of volleyball. Attempts to improve fundamental skills, team play, and strategy through participation.

05.276 Intermediate Judo (1) - Provides an opportunity to develop higher levels of skill competencies in judo.

05.277 Advanced Sailing (1) - Intended for students who have sailing experience. Includes maneuvering, race tactics, sail tune, severe weather conditions, docking, and anchoring. Prerequisites: Sailing and swimming ability.

05.290 Special Topics (1-3) - Topics announced in the scheduling bulletin prior to each semester.

05.298 Fitness and Wellness (3) - Provides learners with the tools for lifelong healthful living. Personal health profiles, mental health, personal fitness programs, stress management, nutritional, and environmental health topics are explored. Successful completion of course fulfills one credit of the physical education requirement.

05.305 Aquatic Fitness Programming (2) - Develops fitness management leadership skills in an aquatic setting; covers physiological principles of exercise applied to swimming, and other water activities. No prior swimming experience necessary.

05.306 Psychology of Sport (3) - Aims to familiarize the student with psychological components of human performance related to sport and exercise. Focuses on sport participation and includes psychological assessment, intervention techniques and a brief introduction to the predominant research methods used in sport psychology. Course has particular value to coaches, teachers, psychologists and exercise specialists and other sport-affiliated professions.

05.308 Exercise and Mental Health (3) - Provides a strong base of knowledge of theory, research and practice in exercise and mental health. Also provides prospective fitness and exercise professionals (adult health majors) with essential information and suggestions of practical value in leadership roles in exercise, wellness, health promotion, corporate fitness, cardiac rehabilitation, commercial fitness and other areas.

05.309 Decisions for Healthy Behavior (3) - Survey of a variety of health topics including human sexuality, mental health, substance abuse, fitness, nutrition, cancer, death, and dying.

05.311 Methods, Materials in Elementary School Physical Education (3) - Provides principles and procedures to meet the needs and interests of elementary-age children in the area of physical education.

05.320 Health and Safety in the Elementary School (3) - Covers health knowledge, training, and health appraisal techniques for teaching elementary school health; the elementary school health program; and safety education in the elementary school.

05.321 First Aid Safety (3) - Provides training in first aid and safety. Red Cross standard, advanced, and cardiopulmonary resuscitation certifications may be earned. One credit may be applied to the Fitness and Recreational Skills area.

05.330 Introduction to Coaching (3) - An overview of basic theories and coaching applications in sport philosophy, sport psychology, sport pedagogy, first aid and sport management resulting in American Coaching Effectiveness Program Certificate.

05.331 Recreation Education (3) - Presents discussion of, and practice in, recreation activities used in school and playground situations. Emphasizes techniques of leadership, recreation planning, legal liability, and trends in recreation programming.

05.333 School Camping and Outdoor Education (3) - Acquaints students with the scope of organized camping and the acquisition of and practices in the basic skills required of individuals involved in camping and outdoor education training. Requires field experiences.

05.334 Women in Sport (3) - Surveys aspects of the historical and contemporary role of women in sport. Encourages an awareness in students regarding the differences between sport for men and women in various contexts, including social, psychological and biophysical. By examining the past and current practices and cultural norms in light of evolving research findings, students are expected to increase their understanding of issues germane to sport. Approved as a cultural diversity

course.

05.350 Water Safety Instructor (2) - Reviews the nine basic swimming strokes and advanced lifesaving skills; provides opportunity to analyze stroke mechanics, teaching methods, and provisions. An American Red Cross Water Safety Instructor Certificate is awarded after satisfactory completion. Prerequisites: A valid American Red Cross Advanced Lifesaving Certificate; 17 years old prior to start of course, sound physical condition, and a Red Cross Swimmer's Certificate or ability to perform swimmer course skills.

05.370 Measurement and Evaluation in Human Performance (3) - Acquaints future adult health majors with techniques of evaluating and measuring the progress of physical fitness and exercise testing components. Includes descriptive statistics, knowledge tests, grading, physical performance tests and tests of sport skills. Prerequisite: 53.114 College Algebra or consent of the instructor.

05.397 Adult Health Development Program (3) - An intergenerational and multicultural health program that trains students to work one-on-one with older adults to promote health and well-being.

05.411 Adapted Physical Education (3) - Reviews the study and practice in techniques used by teachers to recognize and meet problems of persons with special needs.

05.420 Techniques in Health and Physical Education for Special Education Teachers (3) - Presents principles and procedures for meeting physical, emotional, and social needs of the mentally disabled.

05.430 Current Issues in Health Education (3) - Assesses major problems which concern communities today: drugs, sexually transmitted diseases, pollution, alcohol, and suicide.

05.450 ECG Interpretation/Exercise Testing (3) - Provides students with both theoretical and practical knowledge of exercise testing in a research/clinical environment. Students gain knowledge in basic electrocardiogram interpretation for the normal and the diseased heart. A survey of cardiorespiratory structure and function will be provided. Prerequisite: 50.174 or equivalent or permission of the instructor.

05.451 Kinesiology: The Analysis of Human

Motion (3) - Introduces students to the fundamentals of human movement. After a survey of the musculoskeletal system, students will engage in a detailed analysis of the primary articulations. The fundamentals of biomechanics will be examined to provide students with an appreciation of movement. Prerequisites: 50.173 and 50.174.

05.452 Cardiac Rehabilitation (3) - Provides student with both a theoretical and practical knowledge of cardiac rehabilitation. Students study the etiology, epidemiology, patient differences, logistical and administrative considerations, treatments, as well as the education of the cardiac patient.

05.476 Exercise Physiology (4) - Study of adult physiological functions under stress and the adjustment and regulatory activities of the body during exercise; development of a working knowledge of assessments, motor characteristics, and physical performance.

05.477 Methods and Materials in Adult Physical Education (3) - Emphasizes the academic and technical knowledge necessary to conduct health and fitness programs in public and private agencies. Students are prepared to assume leadership and management positions within the health and fitness industries.

05.498 Internship in Exercise Science (6-15) - Provides the student with a practical on-site work experience in which technical skills and abilities are applied. Site is selected by the student with the approval of the major director. Required experience is designed to be the culminating experience of undergraduate course work and facilitates the transition from the role of student to employee. Prerequisites: 50.173, 50.174, 05.476, 05.477.

Honors Courses

*Administered by Honors Advisory Committee,
Academic Affairs*

08.101 Honors Humanities I (3) - Allows freshman and sophomore level students to focus on a specific topic or related topics in the humanities for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education require-

ment for humanities.

08.110 Honors Math and Science I (3) - Allows students to focus on a specific topic or related topics in math or science for in-depth study and analysis, including laboratory experience. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education requirement for math/natural science.

08.130 Honors Social Science I (3) - Allows students to focus on a specific topic or related topics in the social sciences for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education requirement for social science.

08.201 Honors Humanities II (3) - Allows freshmen and sophomore level students to focus on a specific topic or related topics in the humanities for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education requirement for humanities.

08.210 Honors Math and Science II (3) - Allows students to focus on a specific topic or related topics in math or science for in-depth study and analysis, including laboratory experience. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education requirement for math/natural science.

08.230 Honors Social Science II (3) - Allows students to focus on a specific topic or related topics in the social sciences for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic, and the expression of those ideas in written and oral form. Fulfills general education requirement for social science.

08.300 Introduction to Honors Research (1) - Serves as an introduction to research and includes guest lectures from library staff, university faculty across the disciplines and from other university personnel concerned with undergraduate research. Required of all honors students before beginning honors research. The student chooses an honors mentor and begins planning research. In the pass/fail course, the student must produce a proposal for honors thesis research that meets the approval of the Honors Advisory Committee.

08.301 Honors Seminar on Values (3) - Features study of a selected topic that will change with each offering. Upper-division seminar focuses on values and ethical issues and may be taught by professors from any of the colleges or Arts and Sciences divisions. Seminar fulfills the general education requirement for values courses.

08.302 Honors Seminar on Diversity (3) - Features study of a selected topic that changes with each offering. Upper division seminar focuses on diversity issues and may be taught by professors from any of the colleges or Arts and Sciences divisions. Seminar fulfills the general education requirement for diversity courses.

08.303 Honors Seminar on Quantitative and Analytical Reasoning (3) - Features study of a selected topic that changes with each offering. Upper division seminar focuses on diversity issues and may be taught by professors from any of the colleges or Arts and Sciences divisions.

08.304 Honors Interdisciplinary Seminar (3) - Features study of a selected topic that changes with each offering. Upper division seminar focuses on diversity issues and may be taught by professors from any of the colleges or Arts and Sciences divisions.

Interdisciplinary Studies

Administered by College of Arts and Sciences

09.100 University Seminar (1) - Promotes a successful transition to college life for new freshmen through the presentation of critical information about the university's academic program.

09.111 Introduction to the Peoples of the Third World (3) - Examines the peoples of the Far

and Middle East, Africa, and Latin America; their art, literature, philosophy, cultural geography, and history, sketching their importance in the world.

09.211 History of Natural Scientific Thought (3) - Reviews the historical development of the natural sciences and mathematics, the nature of scientific and mathematical thought and methods, characteristics of these disciplines and their significance to human progress.

09.213 Science, Technology, and Human Values (3) - Compares the interaction of science and technology with human values. Studies past, present, and future technological developments and their impact on personal and social values.

09.230 Human Sexuality (3) - Presents an overview of the role of sexuality in the life of humans. Considers anthropological, biological, psychological, and sociological aspects of sexuality. Addresses values, ethics, and responsible decision making. Additional cost for field components and student projects. Two hours lecture and one and one-half hours discussion per week.

09.231 Technical Writing (3) - Presents the principles of technical writing in the physical, natural, and social sciences and in technology and industry. Promotes effectiveness in communicating technical information to specialized and general audiences. Uses seminar approach involving class participation and individualized instruction.

09.311 Seminar in American Studies I (3) - Provides a thorough appreciation of our varied heritage and research materials and resources available for deepening the knowledge of this growing area of inquiry.

09.312 Seminar in American Studies II (3) - continuation of 09.311.

09.401 History and Policies of USSR (3) - Combines the study of the history of the USSR with the approaches of political science. Usually offered during summer session. Involves students in a tour of areas of the USSR.

09.431 Socialism: Theory and History (3) - Provides an historical and theoretical study of the socialist idea and its various attempted realizations from biblical times to present.

09.487 THIS Internship Experience (9) - In-

ternship provides outstanding students with enriching academic experience as an intern in the executive or legislative branches of state government or with state boards, agencies, or commissions.

09.488 THIS Research Project (3) - The student intern completes an individualized directed project involving substantial analysis and research. The project is related to the internship experience.

09.489 THIS Academic Seminar (3) - Student interns participate in a seminar coordinated by the resident director. The seminar is structured to integrate the student's work experience with a rigorous academic component and an exposure to multiple facets of state government.

09.491 Honors Independent Study in Humanities I (1-3) - An independent study course in which, under the guidance of a faculty mentor, the student completes the initial project(s) in the first stage of his/her proposed honors work.

09.492 Honors Seminar in the Humanities (3) - Allows for continued in-depth study of a particular research project of the student's choice and provides honor students the opportunity to discuss with peers and interested faculty concepts in the humanities related to the project and to the student's major field. Seminars organized around general themes selected by the humanities honors committee and announced in advance.

09.493 Honors Independent Study in the Humanities II (1-3) - Independent study in an area previously approved as part of the student's overall honors program.

09.495 Honors Seminar in the Natural Sciences and Mathematics (1) - Offers a cross-disciplinary perspective to students in the honors program with emphasis on student presentation and discussion of important topics in a student's area of expertise.

09.496 Honors Independent Study in the Social Sciences I (1-3) - Involves the student's selection of an honors adviser and project, initial exploratory reading, and a proposal for a major Honors Independent Study Project. Reserved for students who qualify for and wish to pursue an honors course of study in their last two years. Usually taken in the junior year.

09.497 Honors Seminar in the Social Sciences (3) - Allows for continued in-depth study of a particular research project and provides honor students the opportunity to discuss with peers and interested faculty concepts in the social sciences which relate to the research project and the student's major field. Focus of the seminar is interdisciplinary.

09.498 Honors Independent Study in Sciences II (3) - Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply theoretical and descriptive knowledge acquired in multiple humanities disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

47.498 Social Sciences Internship (1-9) - Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply theoretical and descriptive knowledge acquired in multiple social sciences disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

59.498 Natural Sciences and Mathematics Internship (1-9) - Internship provides on-site work experience and training program to give selected intern an opportunity to apply the theoretical and descriptive knowledge acquired in multiple natural sciences and mathematics disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

French

Administered by Department of Languages and Cultures

10.100 Foundations of French Language and Culture (3) - Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the Francophone world. Language laboratory activities required.

10.101 French I (3) - Seeks to develop the four language skills and acquaint students with elements of Francophone culture. For students with no more than two years of French. Practice in the language laboratory required.

10.102 French II (3) - Continuation of 10.101. Prerequisite: 10.101 or equivalent.

10.203 French III (3) - Continuation of devel-

opment of the four language skills. Emphasis on reading. Study of Francophone culture. Practice in the language laboratory. Prerequisite: 10.102 or equivalent.

10.204 French IV (Fall) (3) - Continuation of 10.203. Emphasis on culture and oral communication skills. Practice in the language laboratory. Prerequisite: 10.203 or equivalent.

10.205 Applied Phonetics and Pronunciation (3) - Analyzes French sound system. Drills on pronunciation and intonation. Selections of prose, poetry, and songs for imitation. Not offered every semester. Prerequisite: 10.102 or equivalent.

10.206 Structure of the French Language (3) - Thorough study of grammar and syntax and use of idioms through applied exercises. Introduction to French morphology. Not offered every semester. Prerequisite: 10.204 or equivalent.

10.207 Conversation: French Daily Life and Customs (3) - Prepared and free speaking activities about everyday life and customs in Francophone countries. Not offered every semester. Prerequisite: 10.204 or equivalent or concurrently with 10.204 with consent of the chairperson.

10.211 Foundations of French Culture and Civilization (Fall) (3) - Reviews major developments of French culture from an historical point of view. Taught in English; knowledge of French unnecessary. Special projects for French majors. Approved as a diversity course.

10.212 France Today (3) - Presents major aspects of life in France today. Taught in English; knowledge of French unnecessary. Special projects for French majors. Not offered every semester. Approved as a diversity course.

10.281 - 10.289 Special Topics (1-3) - Provides knowledge and training in fields usually not covered in regular courses. Content determined by instructor and varies each time course is offered. Topics may include French for travelers, French gastronomy, Quebec culture. Not offered every semester.

10.290 French Studies Abroad (1-6) - Prerequisite: Minimum two semesters of French or equivalent or consent of the chairperson.

10.295 Art and Culture of France (3) - Provides a study-tour of France with attention to French

art as seen in relation to its social and cultural environment. Visits to places of artistic and cultural interest in and around Paris and the provinces. Not offered every semester. Prerequisite: Consent of the instructor.

10.309 Commercial French (3) - Acquisition of French business language and terminology in reading, writing, and speaking. Includes cultural content of Francophone culture. Provides an introduction to business correspondence. Not offered every semester. Prerequisite: 10.204 or equivalent.

10.331 Selected 20th Century Writers (Fall) (3) - Students study French for reading and cultural knowledge; selected modern works. Prerequisite: 10.204 or equivalent.

10.401 Advanced French Language (3) - Presents a thorough review of phonology, morphology, syntax, and semantics. Practical application in advanced speaking including activities with development of cultural proficiency. Not offered every semester. Prerequisite: 10.206 or consent of the chairperson.

10.402 Contemporary Issues in Francophone Media (3) - Presents further development of language fluency through discussion of current topics and issues selected from Francophone newspapers and magazines. Not offered every semester. Prerequisite: 10.207 or equivalent.

10.409 Commercial French II (3) - Studies French business life aiming at preparing students for internships in business in France, Quebec or a branch of a French company in the U.S. Reviews business correspondence and cultural content. Not offered every semester. Prerequisite: 10.309.

10.422 Masterpieces of French Literature (3) - Studies the most significant writers and playwrights of France. Not offered every semester. Prerequisite: 10.206 or consent of the chairperson.

10.423 Black Francophone Writers and Culture (3) - Presents major aspects of life in Black Francophone countries and major writers in those countries. Taught in French. Not offered every semester. Prerequisite: 10.204 or consent of the chairperson.

10.490 Independent Study in French (1-9) - Provides for individual study of a particular aspect of French civilization, language or literature under faculty supervision. Prerequisites:

Consent of the instructor and the chairperson.

German

Administered by the Department of Languages and Cultures

11.100 Foundations in German Language and Culture (3) - Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the German-speaking world. Language laboratory activities required.

11.101 German I (3) - Develops the four language skills and acquaints students with elements of German-speaking cultures. For students with no more than two years of German. Requires practice in the language laboratory.

11.102 German II (3) - Continuation of 11.101. Reading and writing given additional emphasis. Prerequisite: 11.101 or equivalent.

11.121 German Authors of the 20th Century I (3) - Examines works of major German authors such as Hesse, Brecht, Mann, Kafka, Durren-matt, and Boll. Taught in English; knowledge of German unnecessary. Readings in German and special projects for German majors. Not offered every semester.

11.122 German Authors of the 20th Century II (3) - Continuation of 11.121. Taught in English; knowledge of German unnecessary. Readings in German and special projects for German majors. Not offered every semester.

11.203 German III (3) - Development of the four language skills. Basic grammar reviewed and new grammatical concepts presented. Reading and study of the culture given additional emphasis. Not offered every semester. Prerequisite: 11.102 or equivalent.

11.204 German IV (3) - Continuation of 11.203. Emphasizes culture and communication. Not offered every semester. Prerequisite: 11.203 or equivalent.

11.205 Applied Phonetics and Pronunciation (3) - Analysis of the German sound systems. Drills on pronunciation and intonation. Selections of prose, poetry and songs for imitation. Prerequisite: 11.102 or two years of high school German. Not offered every semester.

11.206 Grammar and Composition (3) - In-depth study of German grammar. Stresses application of grammatical principles in con-

trolled and free written composition. Not offered every semester. Prerequisite: 11.204 or equivalent.

11.207 Conversation: Daily Life and Customs in German-Speaking Countries (3) - Emphasizes student participation in prepared and free-speaking activities on daily life in German-speaking cultures. Outside readings and oral reports assigned. Grammar reviewed when necessary. Not offered every semester. Prerequisite: 11.204 or equivalent or concurrently with 11.204 with consent of the chairperson.

11.211 German Culture and Civilization I (3) - Provides an understanding of the geography, government, customs, education, arts, and history of the German-speaking countries, as well as a vivid sense of the current scenes in these countries. Taught in English; knowledge of German not required. Special projects for German majors. Not offered every semester. Approved as a diversity course.

11.212 German Culture and Civilization II (3) - Continuation of 11.211. Taught in English; knowledge of German not required. Not offered every semester. Approved as a diversity course.

11.281-11.289 Special Topics (1-3) - Provides knowledge and training in fields not usually covered in regular courses. Content is determined by instructor and varies. Not offered every semester.

11.290 German Studies Abroad (1-6) - Pre-requisite: Minimum of two semesters of German or consent of the chairperson.

11.309 Commercial German (3) - Acquisition of German commercial language and terminology in reading, writing, and speaking. Background of business life in Germany today, in German culture and society. Not offered every semester. Prerequisite: 11.206 or equivalent.

11.331 Selected 20th Century Writers (3) - Current German writers for reading and cultural knowledge. Development of the four skills continues. Not offered every semester. Prerequisite: 11.204 or equivalent.

11.402 Contemporary Issues in German Media (3) - Further language development, especially of conversation, through discussion of current topics and issues selected from German language newspapers and magazines. Not offered every semester. Prerequisite: 11.207 or

equivalent.

11.403, 11.503 Workshop (3) - Presents selected materials for practical use. Offered on demand only. Prerequisite: 11.206 or 11.207 or consent of the instructor.

11.420 Seminar: Mass Culture and High Culture (3) - Readings and discussion of cultural issues from 1870 to 1933. Background in culture, society, and methods of cultural critique. Not offered every semester. Prerequisite: 300 level German or consent of the instructor.

11.422 Masterpieces of German Literature (3) - Examines selected masterpieces of German literature from the Middle Ages to the present with excursions in historic and socio-cultural contexts. Prerequisite: 11.206 or permission of the instructor. Not offered every semester.

11.490 Independent Study in German (1-9) - Provides for individual study of a particular aspect of German civilization, language, or literature under supervision of a faculty member. Prerequisite: Consent of the instructor and the chairperson.

Spanish

Administered by Department of Languages and Cultures

12.100 Foundations in Spanish Language and Culture (3) - Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the Spanish-speaking world. Language laboratory activities required.

12.101 Spanish I (3) - Develops the four language skills; acquaints students with elements of Hispanic culture. For students with no more than two years of Spanish. Requires practice in language lab.

12.102 Spanish II (3) - Continuation of 12.101. Reading and writing given additional emphasis. Prerequisite: 12.101 or equivalent.

12.203 Spanish III (3) - Continued development of skills and culture. Increased emphasis on reading and writing.

12.204 Spanish IV (3) - Continuation of 12.203. Prerequisite: 12.203 or equivalent.

12.205 Phonetics: Theory and Practice (3) - Seeks to improve student's ability to communicate effectively in spoken Spanish. Provides a detailed study of Spanish sound and intona-

tion patterns through group and individual practice. Attends to individual pronunciation problems. Not offered every semester. Prerequisite: 12.102 or equivalent.

12.206 Structure of the Spanish Language (3) - Study of Spanish grammar and syntax through applied exercises and introduction to Spanish morphology. Not offered every semester. Prerequisite: 12.204 or equivalent.

12.207 Conversation: Hispanic Daily Life and Customs (3) - Emphasizes student participation in prepared and free-speaking activities about everyday life and customs in Spanish-speaking countries. Not offered every semester. Prerequisite: 12.204 or equivalent or concurrently with 12.204 with consent of the chairperson.

12.208 Conversation for Health Professionals (3) - Emphasizes development of speaking and comprehension for communication with Spanish-speaking health care clients. For health services students and other interested persons. Not offered every semester. Prerequisite: 12.204 or equivalent.

12.211 Spanish Culture and Civilization (Fall) (3) - Provides an understanding of Spain through geography, education, customs, fine arts, and history. Taught in English; knowledge of Spanish not required. Special projects for Spanish majors. Approved as a diversity course.

12.212 Spanish-American Culture and Civilization (Spring) (3) - Provides an understanding and appreciation of the present and past life of the Spanish-American Republics. Studies Aztec, Maya, and Inca cultures using films and outside readings. Taught in English; knowledge of Spanish language not required. Approved as a diversity course.

12.214 The Hispanic World Today (3) - Provides an understanding and appreciation of the present Spanish-speaking world, in both Spain, Spanish-American countries, and Spanish-speaking groups in the U.S. through geography, history, economics, politics, education, customs, and fine arts. Taught in Spanish for Spanish majors and other interested people. Not offered every semester. Prerequisite: 12.204 or consent of the instructor.

12.281-12.289 Special Topics (1-3) - Provides knowledge and training in fields not usually covered in regular courses. Content is deter-

mined by instructor and varies. Topics may include Spanish for Travelers and Women in Spanish Literature. Not offered every semester. Prerequisite: Varies according to the nature of the topic.

12.290 Spanish Studies Abroad (1-6) - Prerequisite: Minimum two semesters of Spanish or consent of the chairperson.

12.306 Structure and Composition (3) - Review of syntax and structure with application in composition. Not offered every semester. Prerequisite: 12.206 or consent of the instructor.

12.309 Commercial Spanish (3) - Acquaints students with basic skills in Spanish trade correspondence and commercial reading. Emphasizes vocabulary and commercial idioms. Stresses elementary knowledge of commercial life and methods. For business students and others who desire to enhance their knowledge of Spanish. Not offered every semester. Prerequisite: 12.204 or an equivalent proficiency.

12.331 Selected 20th Century Writers (3) - Reading and discussion of selected modern works. Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency.

12.402 Issues in the Hispanic Media (3) - Provides for further development of language fluency through discussion of a variety of topics and current issues in Hispanic media. Practice in advanced conversation emphasized. Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency.

12.421 Hispanic Prose (3) - Reading and discussion of prose works by selected Spanish and Spanish American writers, concentrating on 20th century authors. Taught in Spanish. Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency.

12.422 Hispanic Theater and Poetry (3) - Reading and discussion of plays and poetry by selected Spanish and Spanish American writers, concentrating on 20th century authors. Taught in Spanish. Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency.

12.430 Short Story (3) - Acquaints students with the short story as an expression of culture by Spanish, Spanish American, Chicano, and Puerto Rican authors and sensitizes students to cultural values in the Hispanic world. Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency.

12.490 Independent Study in Spanish (1-9) - Provides for individual study of a particular aspect of Hispanic civilization, language, or literature under the supervision of a faculty member. Prerequisites: Consent of the instructor and the chairperson.

Russian, Italian, Japanese, Chinese, Latin

Administered by Department of Languages and Cultures

13.101 Russian I (Fall) (3) - Develops the four language skills and studies elements of Russian culture. Requires practice in the language laboratory. Also offered in spring on demand.

13.102 Russian II (Spring) (3) - Continuation of 13.101. Prerequisite: 13.101 or equivalent.

13.103 Russian III (3) - Continued development of four skills. Emphasis on reading and culture. Not offered every semester. Prerequisite: 13.102.

13.104 Russian IV (3) - Continuation of 13.103. Not offered every semester. Prerequisite: 13.103

13.290 Independent Study in Russian (1-9) - Individual study of a particular aspect of Russian civilization, language, or literature under faculty supervision. Prerequisite: Consent of the instructor and the chairperson.

14.101 Italian I (3) - Develops the four language skills and studies the Italian culture. Stresses basic grammar. Not offered every semester.

14.102 Italian II (3) - Continuation of 14.101. Emphasizes reading and writing. Not offered every semester.

Japanese - The sequence of courses in Japanese is not offered every semester. Students should inquire in the Department of Languages and Cultures. 16.101, 16.102, 16.103, 16.104 Self-Instructional Learning Program in Japanese I (3) Japanese II (3), Japanese III (3) and Japanese IV (3) - self instructional learning.

16.105 Chinese I (3) - Basic elements of Mandarin Chinese, with emphasis on spoken language. Introduces the Chinese culture. Requires practice sessions in language lab.

16.106 Chinese II (3) - Continuation of 16.105.

Begin study of the Chinese characters. Requires practice sessions in language laboratory. Prerequisite: 16.105 or equivalent.

16.211 Chinese Culture and Civilization I (Fall) (3) - Chinese culture and civilization in historical perspective, with emphasis on art and philosophy. Taught in English. Approved as a diversity course.

16.212 Chinese Culture and Civilization II (Spring) (3) - Chinese culture and civilization today, with focus on art, political philosophy, customs, and new directions. Taught in English. Approved as a diversity course.

16.400 Study Abroad (1-8) - By consent of the chairperson.

18.101 Latin I (3) - Develops reading and writing skills; emphasizes correct classical pronunciation. Introduction to Roman culture and civilization. Not offered every semester.

18.102 Latin II (3) - Continuation of 18.101. Develops reading and translation skills; teaches classical references through selected readings. Not offered every semester. Prerequisite: 18.101 or equivalent.

For Music Majors.

16.109 Language for Singing (1) - Practice and acquisition of correct pronunciation in French, German, and Italian for voice majors and students singing in choirs. Spanish upon demand. Not offered every semester.

English

Administered by Department of English

When 20.203 is listed as a prerequisite, any 100-level or 200-level literature course may be substituted as the prerequisite.

20.101 Composition I (3) - Study and practice of the principles of composition to improve proficiency in writing skills.

20.104 Honors Composition (3) - Similar to 20.101 but offered only to freshmen exempted from 20.101 on the basis of admission criteria. Study and practice in short and long essays and in research-supported writing. Students who successfully complete 20.104 are exempt from a second writing course requirement.

20.111 Language and Social Interaction (3) -

A study of varieties of language, verbal and non-verbal, and their communicative and social functions.

20.112 Practical Grammar and Usage (3) - A study of grammatical forms, rules, and accepted usage of current written standard English, with practical application to improve diction, sentence structure, and style.

20.131 The Bible as Literature (3) - Examination of literary types found in the Old and New Testaments and their profound influence on Western culture.

20.151 Introduction to Literature (3) - Exploration of literature as experience and the techniques by which it communicates in short story, novel, drama, and poetry.

20.152 Literature and Society (3) - Readings selected for consideration of purposes, characteristics, issues, and values of specific areas (such as business, psychology, or science) from a humanistic perspective.

20.153 Folklore (3) - A survey of such traditional forms of oral literature as epic, ballad, folksong, folktale, and superstitions examined in terms of origin, transmission, and influence on literature.

20.154 Folklore of the American West (3) - A study of folklore genres, including legends, tall tales, ballads, and customs of Native Americans, English, French, and Spanish of the Trans-Mississippi West.

20.156 Popular Literature (3) - Study of one type of popular literature (such as detective fiction, science fiction, literature of terror, or popular drama) and examination of its forms, conventions, and ideas. Course content varies with each presentation of the course.

20.200 Writing Proficiency Examination (3) - A series of compositions written under examination conditions on topics provided by the staff. Faculty consultations and a writing laboratory are available for students in the course. Not for English majors. Prerequisite: 20.101.

20.201 Composition II (3) - Intermediate-level study and practice in composition, reinforcing and expanding basic writing skills. Instruction in short and long essays and in research-supported writing. Prerequisite: 20.101 or consent of department chairperson.

20.203 Approaches to Literary Study (3) - An

introduction to writing about literature; a consideration of research techniques and types of literary analysis. Satisfies requirement for Composition II. Required for all English majors. Prerequisite: 20.101 or 20.104; open to all students. When 20.203 is listed as a prerequisite, any 100-level or 200-level literature course may be substituted as the prerequisite.

20.226 European Literature I (3) - Major Continental literary works in translation from the classical Greek period through the Renaissance, including Biblical backgrounds.

20.227 European Literature II (3) - Major Continental literary works in translation from the 17th century to the present.

20.236 American Literature I (3) - Survey of American literature from its colonial beginnings through the Civil War.

20.237 American Literature II (3) - Survey of American literature from the Civil War through the modern era.

20.246 British Literature I (3) - Survey of British literature from Beowulf through Samuel Johnson.

20.247 British Literature II (3) - Survey of British literature from the Romantics through the modern era.

20.256 Non-Western Literature I (3) - Study of a literature or literatures outside the traditions of European-American cultures. Approved for diversity requirement.

20.257 Non-Western Literature II (3) - Study of a literature or literatures outside the traditions of European-American cultures, differing from 20.256 by either the literature(s) or the works studied. Approved for diversity requirement.

20.280 Poetry (3) - Exploration of the nature of poetry in terms of its aims, forms, and substance.

20.287 Black Women Writers (3) - Introduces students to a wide range of black women writers from the United States, Caribbean and Africa. Approved for diversity requirement.

20.288 Feminist Reading of Culture (3) - Teaches students to "read" culture through a wide range of "texts," including television and film, and to analyze sexism, racism, classism and homophobia. Approved for diversity re-

quirement.

20.300 Writing Children's Literature (3) - Approaches to and practice in writing children's books for publication. Consideration of various literary types and techniques with discussion of field research in writing nonfiction, fiction, and poetry for children. Prerequisite: 20.384 or 20.385 or consent of the instructor.

20.301 Creative Writing: Fiction (3) - Original creative work in fiction; critical analysis by the instructor and the class in group discussion.

20.302 Advanced Composition (3) - Advanced study of writing nonfiction prose: form, style, audience, editing, evaluation. Prerequisite: 60 semester hours.

20.303 Creative Writing: Poetry (3) - Lecture and discussion concerning the fundamental theory and techniques of poetry writing together with writing and evaluation of poems in a workshop situation. Prerequisite: 20.280 or 20.379 or consent of the instructor.

20.306 Theory and Practice of Writing (3) - Introduction to new theories of writing and the teaching of writing including both study of and practice in the methods the theories require. Recommended for secondary education students in English, but open to all students interested in advanced work in writing. Prerequisite: 45 semester hours.

20.311 Structure of English (3) - Study of the sound patterns, morphology, word formation processes, semantics, and syntax of modern English, and of children's acquisition of their first language. Prerequisite: 45 semester hours.

20.312 History of the English Language (3) - Survey of the major developments in the English language from its Anglo-Saxon origins to the present. Prerequisite: 60 semester hours or consent of the instructor.

20.334, 20.335 Studies in American Literature (3) - Major American writers instrumental in shaping and interpreting the American experience. Writers vary with each presentation of the course. Prerequisite: 20.203.

20.341 Medieval Literature (3) - Major works of the Old and Middle English periods (the former in translation) that relate to a common theme, period, or genre (such as drama or metrical romance), generally excluding the

works of Chaucer. Prerequisite: 20.203.

20.342 The Renaissance (3) - The poetry and nondramatic prose of the 16th and 17th centuries (to 1660), excluding the works of Milton. Prerequisite: 20.203.

20.344 The Neoclassical Age (3) - The prose, poetry, and drama of the period from 1660 through the end of the 18th century.

20.345 Romantic and Victorian Literature (3) - The poetry and prose of the late 18th and 19th centuries.

20.346, 20.347 Studies in British Literature (3) - Major writers instrumental in shaping and interpreting the British experience. Writers vary with each presentation of the course. Prerequisite: 20.203.

20.363 Shakespeare (3) - Study of Shakespeare's plays with emphasis on Shakespeare as poet and playwright and attention to conditions of the Elizabethan theater and history of the Shakespearean text. Prerequisite: 20.203.

20.364 Chaucer (3) - Chaucer's major poetry (with practice in speaking and reading Middle English) including consideration of the medieval social and intellectual contexts of his work. Prerequisite: 20.203.

20.365 Milton (3) - The poetry and prose of John Milton considered in the contexts of his age, his puritanism, and his learning. Prerequisite: 20.203.

20.370 The English Novel (3) - History and development of the novel in England from its inception to the end of the 19th century. Prerequisite: 20.203.

20.372 Modern Novel (3) - Major modern novels, with emphasis on developments in fictional art. Writers vary with each presentation of the course. Prerequisite: 20.203.

20.374 Short Story (3) - The history, characteristics, and techniques of the modern short story. Prerequisite: 20.203.

20.375 Renaissance Drama (3) - The plays of Shakespeare's predecessors and contemporaries and those of later Jacobean and Caroline dramatists. Prerequisite: 20.203.

20.377 Modern Drama (3) - Major Continental, English, and American plays from Ibsen to the present with emphasis on contemporary attitudes, themes, and style. Prerequisite:

20.203.

20.379 Modern Poetry (3) - A survey of contemporary poetry and poetic movements. Prerequisite: 20.203.

20.384 Literature for Children (3) - Studies the development of literature for children, including consideration of criteria for selecting literature for the classroom and library and methods for presenting literary works in an elementary classroom. Prerequisite: 60 semester hours.

20.385 Literature for Young Adults (3) - Critical discussion of literature aimed at young adult readers or popular with them, by such writers as S.E. Hinton, Robert Cormier, Judy Blume, and Paul Zindel. Consideration of literary works for the secondary classroom with attention to the subject of censorship. Prerequisite: 60 semester hours.

20.386, 20.387 Studies in Contemporary Literature (3) - Study of a topic, author, or movement significant in post-World War II literatures. Course content will vary. Prerequisite: 20.203.

20.388 Gender/Race/Class (3) - Analyzes identity-construction and cultural processes in constructing categories of gender, race and class. Approved for diversity requirement. Prerequisite: 20.203 or permission of instructor.

20.411 Modern Linguistic Theory (3) - A survey of modern developments in linguistics, including transformational-generative grammar; applications of theory to patterns of language acquisition; current adaptations of theory for presentation as grammar in schools. Prerequisite: 60 semester hours.

20.413 Language in American Society (3) - Review of social, political, and philosophical perspectives on the historical development and current status of English and other languages in American society. Prerequisite: 60 semester hours.

20.431 American Romanticism (1820-1865) (3) - An advanced course in the significant literary and cultural movements and writers of the period 1820-1865. Special emphasis given to the works of Irving, Cooper, Emerson, Hawthorne, Poe, Thoreau, Melville, Douglass, Whitman and Dickinson. Prerequisite: 45 semester hours, including 20.203.

20.432 American Realism (1865-1914) (3) -

Study of American literature between the Civil War and 1914. Content varies, but will include Twain, Howells, James, Wharton, Crane and Dreiser. Prerequisite: 45 semester hours, including 20.203.

20.433 American Modernism (1914-1945) (3) - Consideration of significant fiction, drama and poetry written between 1914 and 1945, with emphasis on writers and texts reflecting the social, political, intellectual and artistic diversity of the period. Prerequisite: 45 semester hours, including 20.203.

20.434 Contemporary American Literature (3) - Consideration of significant fiction, drama and poetry since World War II, with emphasis on writers and texts reflecting the social, political, intellectual and artistic diversity of the period. Prerequisite: 45 semester hours, including 20.203.

20.436 African-American Literature (3) - A detailed study of one of the three major areas in African-American literature: the African-American novel, the Harlem Renaissance or African-American Writers. Prerequisite: 45 semester hours, including 20.203.

20.481 Special Topics (3) - Study of a topic in literature; topic varies with each presentation of the course.

20.488, 20.489 Seminar (3) - An opportunity to explore, at an advanced level, a literary or linguistic subject not offered in regularly scheduled courses. Content determined by the instructor. Prerequisite: 60 semester hours.

20.492 Literary Theory and Criticism (3) - Study of traditional literary criticism from Aristotle to the present, as well as of contemporary trends in literary theory, at an advanced level. Prerequisite: 60 semester hours.

20.493 Bibliography and Literary Research (3) - Investigation of methods of literary scholarship and study of book history and production with practice in preparing specialized bibliographies and planning scholarly projects. Prerequisite: 60 semester hours .

20.494 Rhetoric of Literature (3) - Study of major rhetorical devices, the nature and range of rhetorical designs; identification of these language devices in drama, prose, and poetry; and discussion of their effects on the reading audience. Prerequisite: 60 semester hours.

20.495 Independent Study in English (3-6) - Prerequisite: 60 semester hours.

20.496 Literary Study Abroad (3) - A travel-study course for English majors and non-majors, concentrating on a writer or literary problem in the perspective of the relevant disciplines. Includes meetings with writers and scholars and the use of on-site resources. Area of emphasis determined by the instructor.

20.497 English Internship (1-12) - A work-study program. Open to English majors; others by departmental consent. Prerequisite: 60 semester hours completed.

Communication Studies

*Administered by Department of
Communications Studies and Theatre Arts*

25.103 Public Speaking (3) - Introduces students to the essentials of effective oral communication and techniques for acquiring it, and provides practical experience wherein these principles and techniques may be applied.

25.104 Interpersonal Communication (3) - Introduces students to the process of interpersonal communication. Students explore the role of conversations and relationships to enhance their participating in daily interactions and their critical awareness of the process.

25.108 Forensic Practicum(0-1) - Participation in forensics: debate or individual speaking events. Grades are awarded each semester. May be repeated for maximum of 3 semester hours of credit. First semester register for 25.108.01. Second semester register for 25.108.02. Participation for two semesters for one semester hour of credit.

25.205 Understanding Social Influence (3) - Highlights major trends in the study and practice of influence-seeking communication from the ancient Greek sophists to the contemporaries and the post modern.

25.206 Oral Interpretation of Literature (3) - Provides practice in skills necessary for conveying intellectual and emotional meanings in poetry and prose read to an audience.

25.207 Investigating Communication (3) - Introduces students to topics that communication scholars study, research questions that are typically posed, planning and design of stud-

ies, various methodologies, analysis of results and how to report these results in a meaningful manner.

25.210 Organizational Communication (3) - Explores the theoretical and the practical aspects of how communication patterns develop in organizations and what effect these patterns have on various organizational processes and outcomes.

25.215 Communication Theory (3) - Surveys the dominant theories of interpersonal relationship management, both general theories and those specific to particular interests.

25.218 Discussion (3) - Presents a survey of and practice in types and patterns of public discussion and study of informal discussion characteristics and application.

25.220 Intercultural Communication (3) - Explores communicating in cultural contexts and general principles for communication across cultures with the goal of becoming competent communicators. Approved for diversity requirement.

25.306 Computer Applications for Professional Communicators (3) - Introduces students to how computers are used in the field of communication. Students learn how to design and present effective electronic presentations, the theory and procedures of desktop publishing and how to use the Internet. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.307 Communication for Business Professionals (3) - Studies business and professional communication, salesmanship (selling skills and methods), conference, and interviewing. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.309 Gender Issues in Communication (3) - Presents a broad range of theories concerning the nature of differences in communication behavior between the sexes and the presumed origins of such differences. Examines communication theories about relationships between the sexes in families and other intimate associations, in business roles and in society at large. Primary focus is on contemporary U.S. society, but some historical and cross-cultural contrasts will be explored. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215

or permission of the instructor.

25.313 Communication and Conflict (3) - Analyzes the role of communication in the generation, process and management of destructive and constructive conflict on interpersonal, small group, organizational and societal levels. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.315 Persuasion (3) - Examines the way people use symbols to influence other people. Provides practice in presenting and evaluating persuasive messages. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.321 Argumentation (3) - Examines basic principles of argument and evidence. Provides practice through presentation and refutation of arguments in debates on controversial issues. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.406 Evaluating Communication (3) - Provides an intensive examination of the philosophy, theory and practice of rhetorical criticism — the analysis, interpretation and evaluation of communication designed to influence human thought and/or action. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.407 Interviewing (3) - Students explore the interview as a specific communication event, with its own rules, procedures and strategies. Acquaints students with a variety of interviewing contexts, such as selection, performance appraisal, informational, helping, sales, and health care, by blending current theory and research with practical skills and applications. Students prepare and conduct interviews and receive feedback on oral and written performances. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.413 Community Leadership (3) - Identifies the communication skills that leaders need to influence the information environment and the collective action of organizational members. Special attention is given to the flexibility necessary for functional leadership in a diverse society. By developing communication skills, students are empowered to accept lead-

ership positions in personal, business, community, government and media contexts. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.417 Evaluating Media Influence (3) - Develops and applies a media perspective for criticism. Examines the ways in which the structural and formatting tendencies of communication technologies privilege different perceptual modes, behaviors and lifestyles. Students explore and examine the ways in which each medium of communication structures and formats experiences and understandings. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.419 Communication in the Family (3) - By promoting awareness of family communication issues and practices and providing training in relationship enhancement, the course offers students the knowledge and skills necessary to build, adjust and maintain more functional family interaction processes. Considers the communication processes within the family as well as the extent to which they influence or are influenced by larger social systems. Special attention given to the diversity of family experience. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.423 Communication Training in Organizations (3) - Advanced presentation skills for students exploring career opportunities as communication trainers in an organization or as independent training consultants. Includes information about such topics as needs assessment and task analysis, theories of adult learning, systems for developing instructional objectives, preparation and presentation of workshop sessions and evaluation of outcomes. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.424 Corporate Communication (3) - Advanced writing skills for students exploring career opportunities as a publicist or corporate writer in an organization, or as an independent communication consultant. Includes information about organizational planning, audience analysis, professional guidelines and writing standards, qualitative and quantitative research, design and layout of publications and use of computers in publication and presenta-

tion. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.425 Communication in Relationships (3) - Acquaints students with the theories and methods used to examine the processes of communication in interpersonal relationships. Students review general principles of human communication, address communication skills considered important for effective communication in relationships, analyze communication behavior in the formation, maintenance and dissolution of interpersonal relationships, explore interpersonal communication theory in specific settings and discuss several philosophical orientations to interpersonal communication. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.426 Leadership and Team Building (3) - An intensive survey of theory and research pertaining to working in small groups. Includes a focus on practical knowledge required to become a productive participant and leader in small group contexts. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.470 Independent Study (1-3) - Provides for individual work and study in one of the areas of rhetoric and communication. Student finds a faculty sponsor, prepares a written proposal that requires departmental recommendation and the dean's approval, arranged through the chairperson. See section on Independent Study.

25.492 / 25.493 / 25.495 Advanced Studies in Communication (3) Investigates significant aspects of communication studies. Topics vary by semester and include nonverbal communication, political communication and cultural foundations of the information society. Consult the schedule booklet or the listed instructor for further information. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215 or permission of the instructor.

25.494 Advanced Studies in Communication: Diversity Focus (3) - Investigates significant aspects of communications studies. Topics are approved as diversity courses. Consult the schedule booklet or the listed instructor for further information. Prerequisites: 25.103 or 25.104; at least one of 25.205, 25.210, 25.215

or permission of the instructor.

25.497 Internship in Communication (3-12) - Integrates classroom experience with practical work experience in industrial, business, or government work settings. Students must establish academic integrity of their proposed experience and its relevance to coursework in the major. Contact departmental internship coordinator to obtain detailed information and forms.

Theatre Arts

*Administered by Department of
Communication Studies and Theatre Arts*

26.102 Introduction to Theatre Arts (3) - Presents a survey of the literature, production, and criticism of the theatre. Required for theatre majors.

26.108 Theatre Practicum (0-1) - Participation in plays: acting or technical work. Grade awarded each semester. Participation for two semesters for 1 semester hour of credit. May be repeated for maximum of 3 semester hours.

26.112 Fundamentals of Acting (3) - Introduces the theories and techniques of acting. Provides for individual and group exercises.

26.200 Experimental Movement (3) - Exercises and methods explored to support the vocal and physical demands of performance for the stage.

26.209 Theatre Appreciation (3) - Presents a survey of all aspects of theatre: acting, criticism, design, directing, history, and production.

26.211 Theatre Production/Stagecraft (3) - Studies basic stagecraft: scene construction, painting, drafting, and crewing of a show. Laboratory work required.

26.215 History of the Theatre (Spring) (3) - Surveys structures, production practices, plays and the theatre's function in societies from ritual beginnings through the 19th century.

26.219 Children's Theatre (3) - A survey of history, theory, and production of theatre for young audiences.

26.251 Theory of Stage Lighting and Design (3) - Provides for intensive study of theory and design of lighting of a production supplemented by applied work on productions. Laboratory hours required.

26.311 Scene Design (3) - An introduction to basic movements and the methods, approaches, tools, materials, and visual concepts of scene design.

26.316 Play Directing (3) - An overview of the principles and techniques of directing and the collaborative process with an introduction to script analysis needed for concept development. Prerequisite: One course in theatre.

26.321 Theatre and Stage Management (3) - Prepares students for professionalism in production of plays and the management of a theatre company.

26.340 Scriptwriting (3) - Studies dramatic structure, types, and styles of drama. Students are required to write scripts for stage, film, radio, or television. Prerequisite: One writing course or consent of the instructor.

26.341 Fundamentals of Theatre Design (3) - An introduction to the elements of designing scenery, costumes, and lighting as they relate to the components of a theatrical production.

26.345 Costume Construction (3) - Basic techniques and approaches to costume construction for the stage.

26.414 Costuming for the Stage (3) - The study and application of costume design for the theatre including methods, tools, materials, and visual concepts.

26.416 Modern Theatre (3) - Continues the study of theatre history from 19th century through the theatre of today. Prerequisite: 26.215 or consent of the instructor.

26.451 Advanced Acting (3) - Character analysis based on scriptwork. Students begin to focus on particular areas of development.

26.470 Independent Study (1-3) - Provides for individual work and study in one of the areas of theatre. Student finds faculty sponsor and prepares a written proposal, which requires departmental recommendation and dean's approval, arranged through the chairperson. See Independent Study.

26.490 Seminar: Theatre (3) - Provides for a concentrated study of an individual artist, a period or a movement in theatre. Offered on demand. Prerequisite: 9 semester hours in theatre or consent of the instructor.

Mass Communications

Administered by Department of Mass Communications

Note: Prerequisites may be waived by an instructor subject to the concurrence of the departmental chairperson.

27.110 Mass Communications and the Popular Arts (3) - A comprehensive overview of mass communications and their relative impacts on society and culture. Covers magazines, newspapers, motion pictures, radio, television, public relations, advertising, ethical codes, and media regulations.

27.190 History of Film (Spring) (3) - An overview of the history and growth of the motion picture. Studies film genres, historical figures, technicians, and performers. Students must view approximately 15 films during the course in laboratory showings.

27.230 Newswriting (3) - Outlines the theory and techniques of news reporting; the historical development of reporting, its practices and principles, and the organizational patterns of news stories and gathering of news. An elementary outline of defamation and libel is included. Student should be able to type 30 to 40 words per minute before enrolling in this course.

27.241 Media Graphics (3) - Computer-generated design and layout problems and applications for printed and visual material including newspaper and magazine pages as well as advertising layouts and visual presentations for video and television material.

27.251 PR: Theory and Practice (3) - An introduction to the development, principles, theories, and practice of public relations as a social and organizational implement. Looks briefly at the communication process, publicity, community relations, and public affairs practice.

27.261 Principles of Advertising (3) - Introduces students to the basic objectives and procedures of advertising in a modern economy. Examines the variety of components and methods used to achieve specific objectives in advertising campaigns and the type of instruments used for advertising.

27.271 Media Operations (3) - Concentrates on the knowledge and physical use of techni-

cal requirements that operate the growing range of equipment needed to produce contemporary radio, television, and video programs.

27.275 Cinema Appreciation (Fall) (3) - Examines film form, theory, and criticism to bring about a better understanding and greater appreciation of the motion picture. Enhances the visual appreciation required in modern media. Approximately 15 films viewed.

27.297 Mass Communications Practicum (3) - Requires participation in film, television, radio or print productions in any of the sequences offered in the department or other departments on campus having similar needs relevant to mass communications.

27.310 Media Law (3) - Surveys legal restraints that influence the nature and content of mass media messages and business practices. Covers historical developments, criminal libel, sedition, defamation, privacy, copyright, obscenity, shield law, freedom of information, free press-free trial, unique broadcast policies, advertising, and antitrust problems.

27.315 Social Foundations of Mass Communications (3) - An interdisciplinary study of the historical, philosophical, social, economic, and legal foundations of American mass media as a base for study of contemporary mass media. Examines media from the perspective of journalists, owners, audience, and government.

27.334 Editing (3) - Designed to improve writing for newspapers, magazines, and brochures. Indicates particular types of styles most used; emphasizes good, tight copy in news stories; offers practice in headline writing, and some elementary layout and design including photo editing. Suggests some defenses to possible defamation and libel problems for copy editors. Prerequisite: 27.230.

27.340 Feature Writing (3) - Outlines basic requirements for feature-type articles for newspapers and magazines. Studies various techniques used to gather information and to develop a range of feature articles. Includes practical work as well as the study and discussion of published articles and marketing strategies. Prerequisite: 27.230.

27.352 Publicity and Public Relations (3) - Comprehensive study of various publicity techniques used in public relations efforts of busi-

ness, government, and nonprofit organizations. Students prepare press releases, public service announcements, speeches, slide programs, or other appropriate communication vehicles. Prerequisite: 27.251.

27.360 Mass Media Processes and Effects (3) - Locates specific issues in mass media exposure, identifying various ways in which individuals and the whole body of society depend on information provided by the mass media. Prerequisite: junior standing.

27.366 Design in Advertising (3) - Principles of advertising layout and design in print and broadcasting. Includes hands-on experience in layout, typography, and paste-up in addition to theory. Prerequisite: 27.261.

27.367 Television Acting and Directing (3) - Provides instruction in acting and directing for television. Includes laboratory hours. Prerequisite: 27.271.

27.371 Broadcast Journalism (3) - Studies technical elements of broadcast writing, script formats, and nondramatic material; provides opportunities to study, write, and announce news, commercials, and other broadcast material. Prerequisite: 27.271 and 27.230.

27.375 Broadcast Programming and Management (3) - Studies television and radio management and programming; examines each medium as a business and the elements of success or failure. Studies some basic economics of media and methods of handling this material as well as codes, laws, and community interests. Prerequisite: Junior standing.

27.390 Film and Video Production (3) - Reviews the basic processes of filmmaking in an introductory but comprehensive manner. Concentrates on making short silent films and requires laboratory hours and field work by arrangement. Students provide their own film stock for shooting, and pay film processing costs. Prerequisite: 27.271.

27.420 Audience Analysis (3) - Explores the theoretical distinction between the social world of actual audiences and the discursive constructs of mass media audiences. Charts the development of an ethnographic understanding of mass media audiences that focuses on the diverse, the particular and unpredictable in everyday life. Stresses design and construction of various research methods on mass me-

dia audiences. Prerequisites: junior standing.

27.435 Journalism Seminar: Special Topics (3) - Studies a variety of ethical and practical problems in journalism. Topics may vary each semester. May be repeated with different topics to a maximum of three seminars with approvals of adviser and chairperson. Prerequisite: 27.230.

27.440 Public Affairs Reporting (4) - An advanced reporting course on the role of public affairs in news reporting in mass media. Concentrates on a number of governmental "beats" most susceptible to news generation. Students learn basic abilities consistent with entry-level professional reporting requirements in public affairs coverage, including courts, police, and government. Prerequisite: 27.340.

27.446 Magazine Editing and Production (4) - Acquaints students with principles and techniques of magazine production including manuscript selection and editing, advertising, design, production, circulation, promotion, and various business operations. Study of the nature of magazines as part of a mass communications system. Each semester students produce a community/regional consumer magazine. Prerequisites: 27.334, 27.340, or consent of the instructor.

27.455 Public Relations Cases and Problems (3) - A study of the use of publicity as a particular element of public relations. Examines specific publicity cases and requires practical hands-on production of written material. Prerequisite: 27.352.

27.466 Advertising Media and Campaigns (3) - Study of the use of advertising media, methods of selection, and the skills and background required for media buying and traffic planning. Basic principles and applications of advertising research and campaign planning, preparation, and presentation are taught in a problem-solving format. Prerequisite: 27.366.

27.478 Independent Study (1-3) - Provides for individual work and study in an area of mass communications concentration. Students find a faculty sponsor/adviser and prepare a written proposal, which must have departmental approval and approval of the dean, College of Arts and Sciences.

27.480 Telecommunications Production Workshop: Special Topics (3) - A practical workshop

program in which telecommunications majors undertake specific instruction on the technical aspects of their major. Topics may change from semester to semester, and students may be required to work on specific projects, such as telethons or television news, as part of their workshop programs. Workshops may be repeated provided topics change. Instructor's and department chairperson's approvals required.

27.482 Mass Communications Seminar (3) - A seminar program that studies ethical and social problems resulting from the pervasiveness of new technologies. Topics may change from semester to semester. Students may repeat seminars, subject to a change in topic and with the approvals of the instructor and department chairperson.

27.485 RTF Authorship Theory and Practice (3) - A study of the construction of documentary and dramatic material in terms of telecommunications/film semiotics with an overall survey of production and business problems. A project course designed primarily for film, television, and radio majors moving into mass communications production seminars. Prerequisite: 27.271.

27.497 Mass Communications Internship (3-9) - Open to junior and senior majors with a QPA of 2.75 in the major, although consideration will be given for other practical experience students may have. May include on-campus or off-campus study of a particular project arranged by the student, adviser, and department chairperson. Interns are expected to have completed several of their basic specialist courses prior to applying for internships. Projects must be submitted in writing at least a month before the project is expected to begin and must be approved by the student's adviser and department chairperson. Course may be repeated within catalog regulations. Internships will become a compulsory part of the mass communications program. Credit is based on 3 semester hours for each 10 hours of work undertaken per week per semester. Limit is 9 total semester hours for internships. Special arrangements must be made for summer internships.

Philosophy

Administered by Department of Philosophy.

28.110 Critical Thinking (3) - Designed for students to learn how to think critically. Emphasis is on the construction and evaluation of arguments. Surveys several forms of argument including inductive, deductive, analogical, and legal reasoning.

28.111 Introduction to Philosophy (3) - Presents reflective inquiry into selected problems of general philosophic interest. Considers the types of knowledge, individual and social values, the nature of reality, and the existence of God.

28.212 Logic (3) - Examines the syllogism, predicate calculus, sentential calculus and quantification.

28.213 Logic and Computing (3) - Introduces fundamental areas where logic and computation intersect including the propositional calculus and the design of logic circuits; validity and proof; Turing machines and logic programming.

28.220 Ethics (3) - Studies ethical theory focusing on such issues as ethics as a branch of knowledge, egoism vs. altruism, and role of intentions and consequences in moral judgments. Reviews theories such as relativism, utilitarianism, and Kantianism. Investigates concepts of "rights"; and "justice."

28.221 Plato and Aristotle (Fall) (3) - Studies the origins of Western philosophy in ancient Greece. Examines Plato's philosophical writings in light of pre-Socratic speculation on one hand and in terms of Aristotle's criticisms and developments on the other.

28.224 Descartes to Kant (Spring) (3) - Examines the writings of the 17th and 18th century philosophers: Descartes, Hobbes, Locke, Berkeley, Hume, Kant, and others. Topics include: the nature of reality, the sources and limits of knowledge, the relation between mind and body, and the possibility of a rational basis for religious belief.

28.228 Existentialism (Spring/even-numbered years) (3) - Studies the writings of philosophers and theologians such as Kierkegaard, Nietzsche, Husserl, Sartre, and Tillich. Major themes include human subjectivity, human freedom, alienation, and meaning.

28.229 20th Century Philosophy (Fall/odd-numbered years) (3) - Examines 20th century philosophical movements. Emphasizes the re-

lation between language and philosophy, particularly views about truth, free will, the nature of morality and religion, and the nature of mind.

28.290 Medical Ethics (3) - Investigates moral issues that arise in such medical contexts as human experimentation, death and dying, medical care and its distribution, genetic engineering, and the definition of health and illness.

28.292 Contemporary Moral Problems (3) - Investigates some of the major contemporary (and perennial) moral problems: abortion and the rights of the fetus; pornography and its control; crime and its punishment; obedience to laws; discrimination based on race and sex; decision-making procedures; social justice; drugs, suicide, and euthanasia; freedom and its limits.

28.295 Business Ethics (Spring/even-numbered years) (3) - Review of moral canons in relation to business practice. Moral concepts are applied in analyzing situations. Utilitarianism, Kantianism, and contemporary Egalitarianism are introduced as aids in decision making. General principles and concrete cases considered.

28.303 Philosophy of Science (Fall/even-numbered years) (3) - Analyzes the logic of inquiry in the natural and social sciences; the nature of scientific explanation, problems of causality, measurement, prediction, and verification. Considers case studies, such as evolutionary theory.

28.304 Philosophy of the Social Sciences (3) - Examines philosophical problems in the social sciences including objectivity, classification, explanation, the nature of laws, and the nature of social facts.

28.305 Philosophy of Law (Fall/even-numbered years) (3) - Examines the theoretical background of the law and legal systems. Encourages students to develop their own views about the proper use of the law. Topics include the concepts of "law" and "legal system," limits of the law, and justification of punishment.

28.306 Philosophy of Religion (3) - Presents a critical analysis of the origins and nature of faith. Emphasizes types of religion, evidence supporting religious belief, and problems in and challenges to religion.

28.307 Contemporary Political Philosophy (Fall/odd-numbered years) (3) - Studies the nature of the good and just state, the limits and powers of the state. Investigates competing theories of neo-Aristotelianism, utilitarianism, contractarianism, libertarianism, Marxism, and anarchism. Addresses questions concerning the obligations of an individual citizen to the state.

28.308 Feminist Philosophy (3) - Explores the major trends in feminist philosophy including liberal, Marxist, socialist, radical, and psychoanalytic approaches. Explores such questions as whether women's experience differs from men's, and the extent to which male domination informs woman's experience. Considers recent feminist attempts to articulate an emancipating standpoint.

28.351 Theory of Knowledge (Spring/odd-numbered years) (3) - Inquires into the problem of knowledge, certainty, and skepticism. Reviews theory of perception; discusses concepts of meaning and truth.

28.352 Contemporary Philosophy of the Mind (Fall/even-numbered years) (3) - Explores the philosophical foundations of the interdisciplinary field of cognitive science. Topics discussed include contemporary scientific solutions to the mind-body problem, the possibility of artificial intelligence, and the nature and success of cognitive explanations in psychology.

28.470 Independent Study in Philosophy (3-6) - Provides for individual study of a particular philosophical problem under the guidance of the staff. Emphasizes independent research on topics selected by the student and the faculty member. Course may be taken twice. Prerequisite: 6 semester hours of philosophy. See section on Independent Study.

28.471 Seminar (3) - Studies selected problems in philosophy.

Art

Administered by Department of Art

30.101 Introduction to Art (3) - Examines major works of art and architecture and the cultural forces that shaped them from ancient times to the present, from a global perspective.

30.205 Children's Art (3) - Provides encounters with the art of children and ways to pro-

mote attitudes of discovery and invention, with emphasis on growth of expression.

30.385 Philosophy and Psychology of Art (3) - Studies major philosophical points of view governing an understanding and criticism of the arts, past and present.

Art History

Administered by Department of Art.

31.215 American Art History (3) - Studies the history of visual arts in America.

31.225 History of Architecture (3) - Presents a study-survey of great architectural works of the past and the present including examples of both East and West.

31.235 Ancient and Medieval Art (3) - Studies the history of the visual arts on the European continent from the prehistoric era up to and including the Late Gothic.

31.236 Art from the Renaissance Through Impressionism (3) - Studies the history of the visual arts beginning with the Italian Renaissance up to and including French painting of the 19th century.

31.324 History of Photography (3) - Surveys the history of photography from its invention in 1839 to the present. Includes development of photography as a medium of aesthetic expression, technical evolution of photography and photography's impact on both culture and society.

31.345 Art History of the Near East (3) - Studies the history of the visual arts of the Islamic and the Mesopotamian worlds.

31.346 Art History of the Far East (3) - Studies the history of the visual arts of India, China, Japan, and Southeast Asia.

31.355 History of Modern Art (3) - Examines movements in art from mid-19th century France to the contemporary United States.

31.365 Italian Renaissance Art (3) - Addresses the painting, sculpture, and architecture of the Renaissance in Italy with a view toward historical and social context, patronage, and theory.

31.375 Independent Study in Art History (3) - Research and scholarship on a selected, approved topic in art history under the supervision of a faculty member, resulting in a pub-

lishable paper.

31.390 Foreign Study Italy (3) - An examination of the art of Italy, particularly the Renaissance, with special reference to its physical and historic context, through studying original works of art in Italy, on site whenever possible. Summer only.

31.395 Visual Aesthetics (3) - A seminar emphasizing artistic relationships and theories of aesthetics and art criticism.

31.450 Museum Theory (Experimental, Fall 1997) (3) - Acquaints students with current museum theory and practice. Includes history of art museums in the United States, the relationship between museums and society, collecting and display and roles of museum personnel.

Art Studio

Administered by Department of Art.

Level I courses are open to all students.

32.111 Drawing I (3) - Examines various approaches toward drawing and explores the use of a variety of drawing materials. Studio practice and class critiques address each person's power of observation, craftsmanship, self-expression, and growth.

32.151 Three-Dimensional Design (3) - Introduction to the basic elements and principles of design such as the organization of visual elements and color, with emphasis on three-dimensional design.

32.152 Two-Dimensional Design (3) - An introduction to the basic elements and principles of design such as the organization of visual elements and color, with an emphasis on two-dimensional design.

32.195 Computer Art Graphics (3) - An introductory course exploring the potential of the computer as a tool to create fine art. Stresses images based on current computer technologies and use of software and computers to create new kinds of image. Emphasis on new technologies as an important tool for an artist to become sensitive to his or her culture. Emphasis on using technologies with a fine arts approach.

32.201 Ceramics I (3) - Introduces the processes of making and firing ceramic objects.

32.202 Ceramics II (3) - Affords students the opportunity to become more involved by selecting their own methods of work. Prerequisite: 32.201.

32.210 Life Drawing (Experimental, Fall 1997) (3) - The human figure is an important component of much artistic expression. Students learn how to represent the figure more effectively and correctly.

32.212 Drawing II (3) - Continues exploration of attitudes and materials stressing composition and form. Includes work from the human skeleton and linear perspective. Prerequisite: 32.111.

32.221 Fabric Design I (Fall) (3) - Introduction to a variety of methods, approaches, tools, materials, and visual concepts in designing with fibers.

32.222 Fabric Design II (Fall) (3) - Continuation of 32.221 with limited areas of concentration selected by each student. Professional methods, approaches, and attitudes discussed. Prerequisite: 32.221.

32.231 Painting I (3) - Introduction to the methods, materials, and concepts of painting. Provides exploration of and increased sensitivity to one's environment through color.

32.232 Painting II (3) - Devotes attention to the development of the technical skill inherent in the formation of images. Includes the study of the landscape as a concept in painting. Prerequisite: 32.231.

32.241 Sculpture I (3) - Explores three-dimensional artistic expression with an emphasis on introducing a student to basic sculptural materials.

32.242 Sculpture II (3) - Promotes continued development in the use of materials and processes; strives for unique individual expression. Prerequisite: 32.241.

32.251 Weaving I (Spring) (3) - Provides an introduction to weaving including foot-powered looms and off-loom techniques. Weaves, fibers, spinning, and looms will be part of the studio experience. Prerequisite: 32.152 or consent of the instructor.

32.252 Weaving II (3) - Requires a loom-controlled sampler plus continued experience in weaving techniques and artistic decision dealing with fibers. Prerequisite: 32.251.

32.261 Graphics I: Printmaking (3) - Introduction to the methods, materials, and concepts of graphic art through exploration of basic printmaking techniques.

32.261 Graphics II: Printmaking (3) - Emphasis on color printmaking and color registration procedures. Provides a concentration in serigraphy and intaglio techniques. Prerequisite: 32.261.

32.275 Crafts I (3) - Introduction to a varied array of crafts, methods, tools, materials, techniques, and artistic concepts.

32.276 Crafts II (3) - Provides a continued exploration of selected in-depth crafts processes and concepts on a more professional basis. Prerequisite: 32.275.

32.281 Photography I (3) - Introduction to black and white photography as a medium of visual expression. Technical emphasis on fundamental camera and exposure controls and introduction to darkroom printing techniques. Photographic style, composition, and theory discussed. Students must have a 35mm camera and provide their own film and paper.

32.282 Photography II (3) - Continues exploration of black and white fine art photography. Emphasis on refining exposure and printing skills. Introduces zone system metering, medium format photography, and alternative photographic processes. Students must have a camera and provide their own film and paper. Prerequisite: 32.281.

32.303 Ceramics III (3) - Provides student an opportunity to specialize through the pursuit of making an art object. Prerequisite: 32.202.

32.304 Ceramics IV (3) - Requires students to be responsible for making, firing, and showing their own wares. Prerequisite: 32.303 and permission of the instructor.

32.313 Drawing III (3) - Entails studio practice, outside assignments, and critiques in pursuit of self-discovery and personal expression. Each student completes an individual project. Prerequisite: 32.212.

32.314 Drawing IV (3) - Continues studio practice and outside assignments. Critiques stress individuality and deep involvement of personal expression. Each student pursues an individual project. Prerequisite: 32.313 and permission of the instructor.

32.323 Fabric Design III (Fall) (3) - Provides a continuation of Fabric Design II with concentration in one area selected by the student. Focus is on refining one's craft, visual perception, and professional attitude. Prerequisite: 32.222.

32.324 Fabric Design IV (Fall) (3) - Presents a continuation of Fabric Design III with each student functioning in a highly independent and professional manner in one area. Prerequisite: 32.323 and permission of the instructor.

32.333 Painting III (3) - Provides development toward maturity of study and statement. Includes study of the figure as a concept in painting. Prerequisite: 32.232.

32.334 Painting IV (3) - Provides advanced work planned for individual needs. Paintings are structured from experiences based on previous development. Prerequisite: 32.333 and permission of the instructor.

32.343 Sculpture III (3) - Focuses on the expansion of expression and its relationship to sculptural processes. Prerequisite: 32.242.

32.344 Sculpture IV (3) - Enables advanced, independent work toward a maturing, personal expression in sculpture. Prerequisite: 32.343 and permission of the instructor.

32.353 Weaving III (Spring) (3) - Provides continued experience in weaving techniques with emphasis on in-depth production, two-dimensional or three-dimensional. Prerequisite: 32.252.

32.354 Weaving IV (Spring) (3) - Develops an individualistic approach to weaving with emphasis on in-depth production. Prerequisite: 32.353 and permission of the instructor.

32.363 Graphics III: Printmaking (3) - Exploration of mixed media printmaking methods and concepts. Emphasizes photographic and lithographic techniques. Prerequisite: 32.262.

32.364 Graphics IV: Printmaking (3) - Exploration of experimental printmaking. Emphasis on personal expression. Prerequisite: 32.363 and permission of the instructor.

32.383 Photography III (3) - Requires students to develop personal photographic projects to produce during the semester. Emphasizes individual exploration of black and white photographic materials and processes. Students must provide a 35mm camera, film, and pa-

per. Prerequisite: 32.282.

32.384 Photography IV (3) - Requires students to produce personal photographic projects resulting in final portfolios and an exhibition of fine art photographic prints. Students must provide a 35mm camera, film, and paper. Prerequisite: 32.383 and permission of the instructor.

32.395 Art and Culture of France (3) - Provides a study-tour of France with specific attention to French art seen in relation to its social and cultural environment. Features a new theme and visits to related areas each time course is offered. Past themes include "The Age of Francis I," "The Art of Provence," and "The Normandy Influence."

32.475 Independent Study in Studio Arts I (1-3) - Allows individualized independent study in a selected studio area. Amount of course credit awarded is determined by the instructor on the basis of the substance and depth of the project to be undertaken. Prerequisite: Satisfactory completion of four levels of a studio area or its equivalent.

32.476 Independent Study in Studio Arts II (1-3) - Extension of 32.475 Independent Study in Studio Arts I.

32.480 Internship in Art (3-6) - Provides upper-level art majors with an opportunity to acquire meaningful experiences in practical work situations outside the regular courses prescribed by art curriculum (e.g., museum curator, designers, merchandising operations, artists).

32.490 Art Gallery (3) - Provides involvement with the collection, preservation, and exhibition of art work. Experience concludes with planning and hanging an exhibition in Haas Gallery of Art. Visits to museums and art galleries familiarize students with the varied nature and philosophy of exhibition today.

Music

Administered by Department of Music

35.101 Music Listening (3) - Provides an approach to music listening through study of basic vocal and instrumental styles. Analysis of various masterpieces, composers, and musical forms. Requires no previous musical experience. Recommended first course in non-ap-

plied music.

35.103 Fundamental Musicianship (Spring) (3) - Explores personal music understanding and development through elementary terminology, symbols, theory, music reading, singing, playing, and chording of simple instruments and bodily movement to music. Suggested for students with little musical background as preparation for applied study and courses 35.201, 35.210, and 35.320. Recommended first course in applied music.

35.106/ 35.306 Maroon and Gold Band (0-1) - Performs music of varied styles and periods. Marching band each fall, concert band each spring. Requires 5 hours per week each fall and 4 hours per week each spring.

35.107/ 35.307 University-Community Orchestra (0-1) Performs music appropriate to the symphony orchestra. Requires 3 hours per week. Rehearses Monday evenings. Election for wind and percussion players requires permission of the instructor.

35.108/ 35.308 Concert Choir (0-1) - Performs choral music of varied styles and periods. Membership by audition only. Requires 4 hours per week.

35.109/ 35.309 Women's Choral Ensemble (0-1) - Performs varied styles from popular to masterworks. Requires 3 hours per week. No audition required.

35.110/ 35.310 Husky Singers (0-1) - Performs varied music for men's chorus. Requires 2 hours per week. No audition required.

35.111/ 35.311 Chamber Singers (0-1) - Performs music of many styles and periods, Renaissance to present. Open to singers from other university vocal ensembles. Requires 3 hours per week. Membership by audition only.

35.112/ 35.312 Studio Band (0-1) - Performs jazz, swing, and other forms representing the big band style. Requires 3 hours per week. Election requires permission of the instructor. Audition may be necessary.

35.201 Sight Singing (Fall) (2) - Development of the musical ear through progressive training. Elected by music majors or as a single course by non-music majors. Requires 2 hours. Prerequisites: 35.103, 35.210 or consent of the instructor.

35.203 Class Voice (Fall) (2) - Provides group

voice instruction for the beginner. Emphasizes fundamental singing techniques and solo performance. Requires 3 hours per week.

35.204 Class Piano I (2) - Provides group piano instruction for the beginner. Emphasizes solo playing, sight-reading, and creative accompaniment. Requires 3 hours per week. Limited seating.

35.205 Class Piano II (Spring) (2) - Develops independence in solo playing and accompanying. Continuation of 35.204 or students with demonstrated abilities. Requires 3 hours per week. Consent of instructor.

35.206 Class Strings (2) - Provides learning of fundamental string skills and information related to string instruments. Requires 3 hours per week. Prerequisite: 35.103 or consent of the instructor.

35.207 Class Brass (Fall/even-numbered years) (2) - Provides group brass instruction for the beginner or the brass player who wishes to double. Emphasizes fundamental technique and elementary performance. Requires two hours per week. Prerequisite: 35.103 or consent of the instructor.

35.210 Music Theory I (Fall) (3) - Studies harmony, voice leading, and written harmonization. Requires 3 hours per week. Prerequisite: 35.103 or consent of the instructor.

35.211 Music Theory II (Spring) (3) - Continues Music Theory I with the study of seventh chords and common-chord and chromatic modulations. Includes melodic and rhythmic dictation and keyboard realization. Requires 3 hours per week. Prerequisite: 35.210.

35.213/ 35.313 Violin (1) - Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.214/ 35.314 Viola (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at one semester hour each election. Consent of instructor.

35.215/ 35.315 Violoncello (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.216/ 35.316 Double Bass (1) - Private in-

struction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.217/ 35.317 Organ (1) - Private instruction for those who have previously studied organ or who have strong piano backgrounds. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.230/ 35.330 Voice (1) - Private instruction for students with demonstrated vocal abilities. One-half hour per week. May be repeated at 1 semester hour each election. Prerequisite: 35.203 except music majors and declared music minors.

35.235/ 35.335 Piano (1) - Private instruction for students with previous piano study. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.240/ 35.340 Trumpet (1) - Private instructions for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.241/ 35.341 Horn (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.242/ 35.342 Trombone (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.243/ 35.343 Baritone (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.244/ 35.344 Tuba (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.251/ 35.351 Flute (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.252/ 35.352 Oboe (1) - Private instruction for students with ability or potential. One-half

hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.253/ 35.353 Clarinet (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.254/ 35.354 Bassoon (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.255/ 35.355 Saxophone (1) - Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.256/ 35.356 Percussion (1) - Private instruction with snare, timpani, and mallets for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.

35.270/ 35.470 Violin for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.271/ 35.471 Viola for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.272/ 35.472 Violoncello for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.273/ 35.473 Double Bass for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.274/ 35.474 Organ for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a max-

imum of 16 semester hours.

35.275/ 35.475 Voice for Music Majors (2) - Two weekly half-hour lessons for students electing the applied voice specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.276/ 35.476 Piano for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.277/ 35.477 Trumpet for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.278/ 35.478 Horn for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.279/ 35.479 Trombone for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.280/ 35.480 Baritone for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.281/ 35.481 Tuba for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.282/ 35.482 Flute for Music Majors (2) - Two weekly half-hour lessons for students electing applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.283/ 35.483 Oboe for Music Majors (2) -

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.284/ 35.484 Clarinet for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.285/ 35.485 Bassoon for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.286/ 35.486 Saxophone for Music Majors (2) - Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.300 Music Theory III (Fall/odd-numbered years) (3) - Continuation of music theory. Includes formal analysis, design, original composition, harmonic dictation, and perception skills. Requires 3 hours per week. Prerequisite: 35.211.

35.301 Music Theory IV (Spring/even-numbered years) (3) - Continuation of music theory. Reviews 20th century compositional practice. Includes analysis and composition. Requires 3 hours per week. Prerequisite: 35.211.

35.302 Piano Proficiency (1) - Provides opportunity for majors in music to gain proficiency at the keyboard. May be repeated.

35.303 Seminar in Piano Accompanying (2) - Provides instruction, coaching, systematic score study, and critical performing experience for pianists. Requires 3 hours per week and includes performing. Offered as needed. Prerequisite: consent of the instructor.

35.304 Special Topics in Music Performance (3) - Provides a unique experience in performance or the study of performance practice. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

35.305 Special Topics in Music Appreciation

(3) - Provides a study of music beyond currently available course topics. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

35.320 Music in the Elementary School (3) - Provides students with practical skills, theoretical background, and musical knowledge that will enable them to teach general music effectively in the elementary classroom. Course designed primarily for elementary education majors. Limited seating.

35.321 Music History to 1750 (Fall) (3) - Emphasizes understanding and appreciation of music from medieval times to 1750 through listening and development of a technical vocabulary.

35.322 Music History-1750 to Present (Spring) (3) - Provides an overview of music history from the Classical era to the present time. Includes discussion of composers and significant persons, works, and development of forms and genres during this time frame.

35.323 Choral Conducting and Methods (Spring/even-numbered years) (3) - Examines the development of techniques and abilities for participating in and supervising choral ensembles. Stresses tone production, proper breathing, choral conducting, and reading of appropriate literature. Prerequisite: 35.211.

35.324 American Music (Fall/even-numbered years) (3) - Studies works of selected American composers with reference to characteristics indigenous to American music. Prerequisite: 35.101.

35.325 Opera and Music Theater (Spring/odd-numbered years) (3) - Studies major works of the lyric stage. Emphasizes listening to and reading works of opera, operetta, and the popular theater. Prerequisite: 35.101.

35.327 Survey of Popular Music (Fall/odd-numbered years) (3) - Analyzes factors and elements of American popular music with emphasis on developments in the 20th century. Includes a chronological study of jazz, balladry, spiritual, country-western, theater, film, and rock in comparative listening situations. Prerequisite: 35.101.

35.329 Instrumental Conducting (2) - Develops skills in baton technique and score reading with emphasis on practical application in

instrumental organizations. Laboratory course with three 50-minute sessions per week. Offered as needed. Prerequisites: music major and 35.211.

35.350 Seminar in Music Theater (3) - Studies the Broadway musical with special emphasis on works currently in production. Offered in conjunction with music theater productions during spring and summer semesters. Prerequisite: 35.101.

35.410 Music Theory V, Counterpoint (Fall/even-numbered years) (2) - Continuation of music theory. Studies melodic writing in two and three voices using 18th century style. Requires 2 hours per week. Prerequisite: 35.211.

35.411 Music Theory VI, Orchestration (Spring/odd-numbered years) (2) - Continuation of music theory. Examines instrumental transposition, idioms, score writing, and analysis. Requires 3 hours per week. Prerequisite: 35.211.

35.430 Seminar in Music History I (2) - Emphasizes development of skill in independent research in areas of music history for majors in music electing the music history specialization. Offered as needed. Prerequisite: 35.321, 35.322.

35.431 Seminar in Music History II (1) - Continuation of 35.430 with emphasis on academic research and musicology for majors in music electing the music history specialization. Offered as needed. Prerequisite: 35.430.

35.497 Internships in Music (3-15) - Provides for extended off-campus field experience to be arranged by the major in music, a faculty adviser, and an off-campus agency. Requires consent of music department during prescheduling. Offered as needed.

35.498 Independent Study in Music (1-3) - Provides for a student project of a creative nature in music history, education or performance. Requires consent of music department during prescheduling.

Economics

Administered by Department of Economics.

40.211 Principles of Economics I (3) - Studies macroeconomics: nature of the economic problem; economic concepts; institutional framework; supply, demand, and the price sys-

tem; national income accounting; determination of output and employment levels; consumption, saving, and investment behavior; inflation and unemployment; business cycles; monetary and fiscal institutions and theory; economic growth.

40.212 Principles of Economics II (3) - Studies microeconomics: supply, demand, the price system; cost and productions analysis, theory of consumer behavior and the firm; output and price determination, resource allocation, and determination of factor incomes under perfect and imperfect markets; current economic problems, and international economics. Prerequisite: 40.211.

40.246 Business and Economic Mathematics (3) - Presents an introduction to basic mathematical tools most frequently employed in economics and business; e.g., systems of linear equations, inequalities, elements of linear programming, matrix algebra, logarithms, mathematics of finance, and differential and integral calculus.

40.311 Intermediate Micro-Theory and Managerial Economics (3) - Reviews the theory of consumer behavior and the firm; output and price determination under different market systems; pure competition, pure monopoly, oligopoly and monopolistic competition; production and cost analysis; allocation of resource and distribution of income; comparison of behaviors of competitive, monopolistic, and oligopolistic product and resource markets; constrained and nonconstrained optimization techniques and their applications to business decisions and business practices; welfare economics. Prerequisites: 40.211, 40.212, 40.246.

40.312 Intermediate Macroeconomic Theory (3) - Stresses the national income analysis; theory of income determination, employment, and price levels; monetary and fiscal institutions; theory and policy; investment, interest, and demand for money; business cycles; inflation and unemployment; national debt; macroeconomic equilibrium; prices, wages, and aggregate supply, economic growth, foreign trade and balance of payments; economic policy. Prerequisites: 40.211, 40.212, 40.246.

40.313 Labor Economics (3) - Presents the economics of the labor market, the supply of and demand for labor, the nature of theory and

wages, productivity and inflation, unionism, theories of the labor movement, collective bargaining and public policy. A major focus is the relationship between labor markets and gender and racial issues. For each of the economic issues, the implications with respect to gender and race will be examined. The economic analysis and empirical data presented in the course will emphasize differences by race and gender. Prerequisite: 40.212.

40.315 Business and Government (3) - Surveys government policies for maintaining competition, for substitution regulation in place of competition and for substituting public for private enterprise; tests of various government policies in light of economic theory and historical experience. Prerequisite: 40.212.

40.316 Urban Economics (3) - Applies economic theory and recent empirical findings to urban resource use. Analyzes problems of unemployment, housing, education, transportation, pollution, and equal opportunity. Prerequisite: 40.212.

40.317 Population and Resource Problems (3) - Reviews classical theories of population growth; recent economic models of population correlating natural resources; capital accumulation and technological change; and population problems in North America, European, and developing countries. Analyzes recent trends in birth and death rates as factors in population growth. Studies measures of population and labor force, their distribution by age, sex, occupation, regions; techniques for projecting population levels. Course is not offered on a regular basis. Prerequisite: 40.212.

40.346 Business and Economics Statistics I (3) - Organizing and presenting data, descriptive statistics, elements of probability and probability distributions, sampling and sampling distributions, estimation and hypothesis testing, analysis of variance and Chi-square, introduction to regression and correlation as applied to business and economic problems. Prerequisite: 40.212.

40.400 Introduction to Econometrics (3) - Applies modern statistical methods to economic problems; time series and cross-sectional analysis of measurements of demand and costs; macroeconomics models; income distribution and growth model. Prerequisites: 40.212, 40.346.

40.410 Public Finance (3) - Analyzes revenues and expenditures of local, state, and national government in light of micro and macrotheory; criteria and models of government services; subsidies, etc., the principles of taxation, public borrowing, and public debt management; impact of fiscal and budgetary policy on resource and income allocation, internal price and employment stability; the rate of growth and world economy. Prerequisite: 40.212.

40.413 Money and Banking (3) - Reviews the historical background and the development of monetary practices and principles of banking; special attention given to commercial banking and credit regulations and current monetary and banking development. Prerequisite: 40.212.

40.415 Environmental Economics (3) - A study of the economics of environmental quality. Examines environmental facts and social circumstances with particular emphasis on market and non-market solutions to the environmental problems. Topics include the private market and its efficiency, externalities, environmental quality as a public good, income distribution effects of government environmental quality as a public good, income distribution effects of government environmental programs; water resources and water quality, problem of air quality, and quality of life and other environmental problems; prohibitions on and regulation of polluting activities, taxes, subsidies, and effluent charges; population, economic growth, and environmental quality. Prerequisite: 40.212.

40.422 Contrasting Economics (3) - Outlines theories of capitalism and socialism with a special emphasis on Marxian theory. Compares theoretical and actual performance of capitalism, socialism, and communism. Prerequisite: 40.212.

40.423 History of Economic Thought (3) - Surveys economic theories propounded in the past and their effect on present-day thinking about economic, business, and political systems. The surplus value theory; economic planning as part of government responsibility; relation of family budgets to Engel's Law; government responsibility for employment and rent control. Prerequisite: 40.212.

40.424 Economic History of the Western World (3) - Presents a comparative analysis of the eco-

nomie theory of the United States and Europe with particular attention to the interplay of changes in business, financial, and labor institutions, products and production, adaptations to resource differences, and conflicting economic doctrines. Prerequisite: 40.212.

40.433 International Economics (3) - Addresses the pure theory of international trade. Outlines the gains from trade; free trade and protection; balance of payments; foreign exchange and capital movements; the dollar and the international monetary system and international liquidity shortage. Prerequisite: 40.212.

40.434 Economic Growth of Underdeveloped Areas (3) - Presents studies of stagnating economies; theories of underdevelopment; operative resistances to economic growth; the role of capital, labor, population growth, and technological advance; development planning and trade in development settings. Prerequisite: 40.212.

40.446 Business and Economic Statistics II (3) - Probability distributions; regression and correlation analysis; analysis of variance and designs of experiments; time series analysis and index numbers, non-parametric methods; modern decision theory and Bayesian statistics; computer application. Prerequisites: 40.212, 40.346.

40.460 Advanced Political Economy (3) - Applies economic and political models of social decision making to historical problems from local through international levels. Presents an evaluation of market; political and mixed techniques in particular areas from the 18th through the 20th centuries. Prerequisite: 40.212.

40.470 Senior Seminar (3) - Discusses the current literature on economic theory and economic policy. Students read one journal article a week on which they write a report and make a seminar presentation. Prerequisite: Senior standing or consent of the instructor.

40.490 Independent Study in Economics (1-3) - Provides students with an opportunity to receive individualized instruction as they pursue in-depth inquiries into previously specified subject matter of special interest within the field of economics. Topic and outline must be developed with a faculty sponsor and approved by the department during the preceding se-

mester of residence.

Geography

*Administered by Department of Geography
and Earth Science*

41.101 World Physical Geography (3) - Studies Earth-sun relationships, land masses, oceans, landforms, weather and climate, and natural resources as elements and controls related to the adjustments humans make to their environment.

41.102 World Cultural Geography (3) - Demonstrates the relationship of humankind, land, culture, and economic activities.

41.105 Environmental Issues and Choices (3) - Examines contemporary environmental resource issues within a values, ethics, and decision-making framework.

41.125 Weather and Climate (3) - Studies the interrelationships between the elements of weather and climate; elaborates on the functional application of these elements through a study of climatic realms.

41.200 Geography of United States and Canada (3) - Presents a spatial analysis of the United States and Canada emphasizing such concepts as environmental perception and sequent occupancy; considers salient problems within geographic regions in terms of genesis and potential for solution.

41.201 Geography of Europe (3) - Studies Europe's physical characteristics, topography, transportation systems, resources, populations, and trade.

41.202 Geography of Latin America (3) - Examines Latin America as a major geographic region in terms of those economic, racial, and cultural forms that have provided regional unity and diversity.

41.203 Geography of Australia (3) - A regional and spatial analysis of Australia within a physical, cultural, economic and environmental context. Examines Australia's historic and contemporary role within the Asian-Pacific sphere.

41.221 Economic Geography (3) - Reviews major economic activities; focuses on significant characteristics, location theory, and spatial patterns.

41.242 Map Skills (3) - Uses a variety of pub-

lished maps for interpreting and interrelating past and present physical and cultural phenomena with a view toward the future.

41.250 Elements of Planning (3) - Acquaints students with the philosophy of planning, the roles of the planner, and planning objectives.

41.256 Climatology (3) - Analyzes climate (temperature, moisture, pressure, wind, air masses, and storms) and the worldwide distribution of climates.

41.258 Environmental Conservation (3) - Identifies resource management and environmental problems and offers possible alternative solutions for these problems.

41.264 Applied Cartography (4) - Studies fundamental principles, use of graphic media, methods of construction, use and interpretation of maps, models, charts, and diagrams, utilized in geography and in urban and regional planning.

41.281-289 Special Topics in Geography (3) - Presents areas of geographic interest to a general audience.

41.301 Water Resources Management (3) - An examination of contemporary water resource issues related to environmental planning and management.

41.302 Land Resources Management (3) - An examination of selected land-related issues and problems with the objective of identifying appropriate management techniques.

41.303 Biogeography and Soil Resources (4) - Examines biogeographical and edaphic phenomena and the ways in which humans have modified vegetative communities and soil cover; characteristics of soil and processes involved in their formation, and significance of soils to mankind. Emphasizes sound biotic and soil resource management strategies.

41.304 Environmental Valuation (3) - Provides a conceptual and methodological framework for evaluating environmental resources. Emphasis is on quantitative valuation techniques that help separate facts from emotion in complex environmental problems. Prerequisite: 41.105 or permission of the instructor.

41.310 Population Geography (3) - Analyzes physical, human, and economic factors that influence the changing pattern of the political map of the world.

41.315 Outdoor Recreation Resources Management (3) - Explores the array of contemporary issues involving land, leisure, and recreational planning.

41.342 Geographic Information Systems (3) - Presents an introduction to computer-assisted analysis of geographic data. Emphasizes GIS applications in management of natural resources, environmental assessment, and urban and regional planning. Laboratory projects provide opportunities to develop computer expertise. Prerequisite: 41.242 or 41.264 or consent of the instructor.

41.350 Advanced Planning (3) - Presents the development of skills and techniques used in analysis, plan preparation, goal setting, and implementation of urban and regional planning processes and activities. Prerequisite: 41.250 or consent of the instructor.

41.363 Urban Geography (3) - Provides a conceptual and methodological framework in which to view the process of urbanization.

41.462 Techniques of Geographic Measurement (3) - Data handling and map symbolization emphasized in this spatial analysis course. Topics in descriptive and inferential statistics are explored with an emphasis on applications to problems with spatial dimensions. Prerequisite: 41.242 or consent of the instructor.

41.475 Independent Study in Geography (1-3) - Provides independent, investigative research oriented to studies of specific geographical problems. Prerequisite: Open to juniors and seniors majoring in geography.

41.496 Internship in Geography (3-12) - Provides for on-site work experience in an appropriate agency or business. Internship is intended to integrate classroom learning with practical work experience emphasizing the functions, projects and responsibilities available at the internship site. Prerequisites: Major in Geography, Option I, appropriate completion of course requirements in the option, and consent of the instructor.

41.497 Internship in Planning (12) - Involves the placement of a student who is enrolled in the course of study in urban/regional planning or environmental planning into a planning office for one semester, during which time the student is actively involved in the functions and activities of that planning office.

41.498 Applied Planning Seminar (3) - Provides an opportunity for reporting and analyzing experiences in internship. Integrates and utilizes practice in the development of land use from an urban or environmental perspective. Taken in coordination with the internship in urban/regional planning (41.497) or geography (41.496).

History

Administered by Department of History

Prerequisites are subject to modification by the instructor.

42.100 Transatlantic World in the 20th Century (3) - Represents an analysis comparing and contrasting the experiences of Americans and Western Europeans in the 20th century. Focuses on the decay of Western traditions, the dilemma of the individual in an increasingly complex society, and the rise of "technocratic" civilization. Provides insight into roots of current events, promotes sense of historic awareness beyond the national level, and enhances appreciation of basic similarities and differences among Americans and Western Europeans.

42.112 Origins of the Modern World (3) - Describes the political, economic, social, intellectual and military developments that shaped the story of mankind from the early Renaissance to the early 19th century.

42.113 The Modern World (3) - Reviews the political, economic, social, intellectual, and technological elements of 19th and 20th century history, showing the progress of the Western tradition and the growing importance of the non-Western world.

42.121 United States History Survey: Colonial Period to 1877 (3) - Presents a chronological history to 1877 with emphasis on foreign affairs and the evolution of politics, economics, society, and culture.

42.122 United States History Survey: 1877 to the Present (3) - Presents political, social, cultural, intellectual, economic, and foreign affairs developments of the United States from Reconstruction to the present.

42.133 The Ancient and Medieval Worlds (3) - Surveys from the Ancient Near East to the fall of the Roman Empire in the West, emphasizing Greece, Rome, and the rise of Christiani-

ty; a study of the people and countries of the West that emerged after the fall of the Roman Empire, with emphasis on feudalism, manorialism, and the medieval church.

42.141 The Modern Far East (3) - Focuses on modern China and Japan and closely studies the value system of these peoples as reflected in their politics, arts, and communications in the 19th and 20th centuries. Particular attention paid to the interaction between the old models provided by Confucianism and Buddhism with the models provided by the West during modernization. Not offered every semester. Approved for diversity requirement.

42.142 Latin America: From European Colonization to the Present (3) - A concise introductory survey of Latin American history from 1492 to the present, stressing the significant economic and social factors in its evolution. Not offered every semester. Approved for diversity requirement.

42.143 Black Africa (3) - Presents a survey of the transformation of the societies of Sub-Saharan Africa from colonialism to national independence. Approved for diversity requirement.

42.144 Islamic and Hindu Worlds: Middle East, India, and Malaysia (3) - Introductory course surveying the religious, cultural, economic, and political history of the Middle East, North Africa, the Indian subcontinent, the Malay Archipelago, and their bearing on contemporary Third World problems. Not offered every semester.

42.208 Contemporary Issues in U.S. History (3) - Examines selected issues of social, political, or foreign affairs within a historical context, describing the origin, evolution, current significance, and importance in American society. The issues may vary each semester.

42.210 Values in Conflict in 20th Century History (3) - Presents select American conflicts in the 1960s involving values of the individual and the civilization; resolutions achieved are reviewed and evaluated. The selection of conflicts varies each semester. Approved for diversity requirement.

42.215 Global Issues in History: A Conflict of Values (3) - Introduces the historical and global nature of many of today's critical issues that have far reaching consequences. Population

explosion, famine in the underdeveloped world, energy crisis, terrorism, and the spread of nuclear weapons are illustrative of some of the issues that will be examined. Attention will be given to defining values as related to these issues.

42.222 Business History of the United States (3) - Focuses on the evolution of business from 1600 to the present, entrepreneurial leadership of major businessmen and the history of major modern industries.

42.223 Economic History of the United States (3) - Focuses on the changing nature of the American economy. This course covers three time periods: the commercial-agricultural age, the industrial age, and the modern managerial age. Examines agriculture, banking, business administration, commerce, labor, manufacturing, mining and transportation, social and political factors that contributed to changing economic relationships in the United States.

42.224 The Immigrant Experience (3) - Provides an overview of cultural diversity in American society by focusing on the history of immigration from the colonial period to the present. Students examine ethnicity in America through the study of political, economic, religious and social issues; industrialization and urbanization; attitudes of nativism, discrimination and racism; and powerful influences of immigrant kinship networks, ethnic community associations, cultural traditions, religious institutions and ethnic group identity. Lectures include new historical interpretations of cross-cultural relationships and new assimilation theories. Not offered every semester. Approved for diversity requirement.

42.226 Popular Culture in America (3) - Review of major forms of popular culture in America from colonial beginnings to the present, telescoped to permit fullest presentation of the period since 1920. Course blends continuity of values and ideas in American culture with dynamics of change to which the culture constantly adjusts. Not offered every semester.

42.228 African-American History (3) - Examines the nature and meaning of the African-American experience in the United States surveyed from its beginnings to the present. Reviews black creative expressions in the visual arts, music, literature, philosophic thought, and social history. Approved for diversity re-

quirement.

42.229 Modern World Leaders (3) - Studies significant world leaders in religion, politics, war, and culture and their impact on world history. Focuses on different leaders each time offered and covers a selected period from the Renaissance to the present. Analyzes the conditions which helped produce these leaders and ends by discussing reasons for their success or failure. Includes only leaders who have made a significant contribution outside their national boundaries.

42.250 History of Science (3) - Studies historical development of the sciences and the nature of scientific thought and method; provides understanding of the characteristics of the sciences as well as their significance to human progress from antiquity to the present. Not offered every semester.

42.255 Health Issues and Health Professionals in History (3) - Delineates major issues and personalities in rise of modern health care as well as ideas and attitudes prevalent in the histories of health professions. Compares and contrasts American, Western European, and Canadian health services. Explains relevance of cultural values for the theory and organization of health care. Not offered every semester.

42.260 Sport and Society in America (3) - Presents a cultural approach to organized sport in the United States; proceeds from the premise that sport mirrors the values, states of technology, and the conditions of society. Emphasizes the rise of the institution of sport and its impact on business, commercialism, leisure, affluence, urbanism, nationalism, and the problems of governance and law. Not offered every semester.

42.281 Military History I (3) - Studies organized warfare from its origins to the last campaign of Napoleon I, concentrating on strategy and tactics. Examines moral and social problems raised by warfare. Not offered every semester.

42.282 Military History II (3) - Studies organized warfare and the theory of war from the Napoleonic age to the present, concentrating on strategy and tactics. Examines the socio-political background, especially of the two world wars and the age of guerrilla warfare.

Not offered every semester.

42.315 Origins of Civilization: The Ancient Near East (3) - Surveys known origins of civilization in the Neolithic, Bronze and Iron ages in Mesopotamia, Egypt, Anatolia and Syria-Palestine, with some attention to India and China. Not offered every semester. Prerequisite: 42.133, or consent of the instructor.

42.316 The Classical World: Ancient Greece and Rome (3) - Covers ancient Greek and Roman history and culture. Greece: emphasis on Aegean civilizations, the age of Pericles and the Hellenistic age after Alexander the Great. Rome: emphasis on early monarchy and republic, imperial expansion, the Pax Romana, and the decline and fall of the empire; concluding with the Barbarian age and the rise of Byzantium. Not offered every semester. Prerequisite: 42.133, or consent of the instructor.

42.318 Early England: The Making of an Island State (3) - Reviews political, economic, social, and cultural life in England to the Glorious Revolution. Not offered every semester.

42.319 Modern England: The First Industrial Empire (3) - Examines political, social, economic, and cultural development in England from the Glorious Revolution to the present with emphasis on the development of democracy, the Industrial Revolution, and the growth and decline of the British Empire. Not offered every semester.

42.320 French Revolution and Napoleon (3) - Analyzes 1789-1815 era in France and assesses its significance for the history of France and the world. Not offered every semester. Prerequisite: 42.112 or consent of the instructor.

42.324 Revolutionary Europe and the Rise of Modern Traditions, 1600-1789 (3) - Discusses the rise of the modern state; the political, intellectual, social, economic, and cultural aspects of the eras of the Scientific Revolution and Enlightenment; the establishment of European world hegemony and a world economy; the diplomatic and military interaction of the European states. Not offered every semester.

42.326 Europe 1789-1914 (3) - Studies political and military events within their economic, social, intellectual, religious, and artistic settings from the French Revolution through the Industrial Revolution. Examines the unifica-

tion of Italy and Germany to the diplomatic crises that led to the first world war. Not offered every semester.

42.327 World War I and the Dictators (3) - Examines origins of World War I and alliance systems that fought it, diplomacy, military strategy, tactics of the war and the peace treaties of 1918-1920, plus the rise of Mussolini, Stalin, Hitler, and the lesser dictators along with the international crises that finally culminated in the outbreak of World War II. Course stresses ideological and global patterns developments. Not offered every semester.

42.328 World War II and Its Aftermath (3) - Surveys European powers in the late 1930s with emphasis on the forces leading to war; military and diplomatic developments of World War II and the causes of the East-West rift; the reconstruction of democratic Europe and formation of the Soviet bloc; European integration and political trends in both power systems. Not offered every semester.

42.329 The American Woman (3) - Studies the history of women in America from colonial times to the present; topics include women's work, family life, politics, sexuality, education, feminism and reactions against it, and the many facets of women's public and private roles in the nation's history. Approved for diversity requirement.

42.335 History of Christianity (3) - Promotes student analysis of the ancient, medieval and modern roots of contemporary Christian denominations and movements. Primary and secondary historical sources are discussed seminar-style in order to critically examine important ideas, personalities and historical conditions of Christianity. Prerequisite: Any course in history or consent of the instructor.

42.336 Medieval Europe (3) - An analysis of European history from 300 to 1400, focusing on political, social, religious, and intellectual trends during the period. Feudalism, church history, and commercial relations receive particular emphasis. Examines the status of women in medieval society. Prerequisite: 42.112.

42.337 Europe in the Renaissance and Reformation (3) - A detailed analysis of European history from 1300 to 1650, focusing upon the intellectual and artistic movement known as the Renaissance and the religious upheaval

associated with the terms "Reformation" and "Counter-reformation." Political, social, intellectual, and religious trends are highlighted. Prerequisite: 42.112.

42.346 Modern European Intellectual History (3) - Relates changes in currents of thought during the period to political, economic, and social developments. Special attention given to interpretations of major intellectual movements. Not offered every semester.

42.347 History of the Holocaust (3) - Focuses upon the major theme-the genesis and implementation of the planned destruction of European Jewry from 1933 to 1945; briefly traces the history of anti-Semitism and evaluates scope of prejudice, discrimination, and genocide in contemporary civilization. Includes an analysis of literature of the Holocaust and evaluation of the Holocaust's impact on modern-day Israel and world Jewish community. Not offered every semester.

42.356 Russia to 1917 (3) - Analysis of Russian political and social history from the ninth century to 1917, with emphasis on the 18th and 19th centuries. Not offered every semester.

42.372 Colonial America and the War of Independence (3) - Reviews European colonization in North America with major attention to the establishment and development of England's colonies, an emerging American society, and problems which created conflict between the Americans and the British resulting in the American War of Independence. Not offered every semester.

42.374 U.S. Social History (3) - Focuses on everyday life in the past and how ordinary people made history and were affected by historical change. Emphasis on family life, as a way of exploring issues of race, gender, and ethnicity. Prerequisites: 42.121 and/or 42.122.

42.379 The New Nation: United States, 1781-1845 (3) - Reviews the impact of the democratic experiment on government, the economy, culture, and society. Among subjects studied are political parties, railroads, popular music, and anti-slavery. Not offered every semester.

42.381 Civil War, Reconstruction and Industrialization: United States, 1845-1896 (3) - Surveys the causes of the Civil War, the war itself, reconstruction, and industrialization. Topics include politics, ideology, military technology

and tactics, race and gender issues, the economy, labor, immigration, and popular culture. Prerequisite: 42.121.

42.383 Shaping of Contemporary America, 1896-1941 (3) - Examines, during these years, major changes: imperialistic adventures, reluctant but expectant involvement in World War I, the "flaming '20s," and the nation's greatest depression. Out of these emerges the modern mass-centered welfare state. Not offered every semester.

42.385 Recent American History: 1941 to the Present (3) - Examines the major political, economic, social-cultural, and intellectual developments in the United States from 1941 to the present. Cold War, Korea and Vietnam, turmoil of the 1960s, nuclear concerns, and the role of the individual in an increasingly complex, technological society are some of the major themes examined. Not offered every semester.

42.388 Pennsylvania (3) - Examines major contributions of Pennsylvania to national life, relations between state and national movement. Not offered every semester.

42.391 Diplomatic History of the United States to 1898 (3) - Presents a critical analysis of United States foreign relations from the Colonial Period to the 1898 war with Spain. Not offered every semester.

42.392 Diplomatic History of the United States Since 1898 (3) - Presents a critical analysis of United States foreign relations from the war with Spain in 1898 to present. Not offered every semester.

42.395 African-American Radicalism in the 20th Century (3) - Examines the major black radicals and their philosophies and movements in 20th Century America. Special emphasis will be placed on the following figures: W.E.B. DuBois, Marcus Garvey, Malcolm X, Stokely Carmichael (Kwame Toure), Angela Davis, Amiri Baraka, the Black Panther Party and Louis Farahkhan of the Nation of Islam. Approved for diversity requirement.

42.397 Independent Study in History (1-4) - The topic selected must be approved by a committee appointed by the chairperson. Independent reading and/or research related to some aspect of history is supervised by an appropriate member of the department. A student may register for this course no more than twice, and

credits may not exceed 4 semester hours. See the section on Independent Study. Prerequisite: 60 semester hours.

42.398 Research and Writing Skills (3) - Focuses on the development of proficient research and writing skills. Students learn to fully utilize library and research facilities; develop skills in analyzing and interpreting original/primary research documents; and produce a clear, concise and well-written lengthy formal paper. In addition, students develop an understanding of how and why history is written and revised.

42.404 Topics in American History (3) - Seminar allows students to focus on a specific topic or related topics in American history for in-depth study and analysis. Includes historiography of the chosen topic, discussion of problems associated with the topic, and production of a research paper. Topics vary from semester to semester.

42.452 Soviet Russia (3) - Analysis of 20th century Russian and Soviet political and social history. Not offered every semester. Prerequisite: 42.113.

42.453 Problems of Contemporary Latin America (3) - Analyzes recent events or movements that may indicate recurrence of historical problems or major developments of international significance in selected countries of Latin America. Not offered every semester. Prerequisite: 3 semester hours in history.

42.460, 42.461 Topics in European History (3) - Investigates select topics in European history. Seminar-style course studies variety of problems in European history, in the medieval, early-modern, and modern periods. In-class discussion and analysis of primary and secondary materials on the history, philosophy, politics, science and art of a chosen period. Seminar aims toward the production of a research paper in an area of the student's own choosing. Topics vary from semester to semester. Prerequisites: 42.112 or 42.133.

42.469 Women and Gender in European Intellectual History I (3) - Investigates the condition of women, of female views concerning that condition, and the view of males concerning women, over the course of western history. Women and Gender I covers the ancient, medieval and early-modern periods (c.650 BC -

1650 AD). Prerequisite: two 100-level courses in history or consent of the instructor. Approved for diversity requirement.

42.470 Women and Gender in European Intellectual History II (3) - Investigates the condition of women, of female views concerning that condition, and the view of males concerning women, over the course of western history. Women and Gender II covers the Scientific Revolution to the present (c.1550-1995). Prerequisite: two 100-level courses in history or consent of the instructor. Approved for diversity requirement.

42.472 History of Labor in the United States (3) - Surveys the emergence and development of organized labor from the post-Civil War period to the present. A third of the course is an analysis of contemporary labor-management problems and labor's changing role in an increasingly technological society. Prerequisite: 3 semester hours in history.

42.497 Internship in History (3-12) - Provides a work-study experience jointly administered by an academic faculty member and a sponsoring employer, with about 40 hours of supervised work generating each semester hour. Prerequisite: For history majors, 15 semester hours of history, including 42.398. Other majors may enroll with consent of advisers. Note: A student may not apply more than 3 semester hours of internship toward the fulfillment of the history major, although a student may enroll for more than 3 semester hours of 42.497.

Political Science

Administered by Department of Political Science

44.101 Elements of Political Science (3) - Uses the procedures of political science to study power and examines the processes of politics and the practices of governments, the performance of and the pressures on the political system. For non-majors.

44.108 Contemporary Political Ideologies (3) - An introduction to those political beliefs that shape contemporary politics: nationalism, liberalism, conservatism, socialism, feminism, religious fundamentalism, populism.

44.120 United States Government (3) - Introduces government and politics in the United

States, emphasizing constitutional development, political development, civil rights, parties, elections, pressure groups, the Congress, the president, courts, and contemporary problems, such as foreign affairs, defense, unemployment and poverty.

44.160 Nations, States, and Governments (3) - Presents a comparative study of the governance of countries or nation-states in selected developed and less developed regions of the world.

44.181 Contemporary Issues in World Politics (3) - An introduction to international politics through an examination of such critical problems as war and peace, East-West relations, nation-building, revolution and democratization.

44.207 Ethics, Politics, and Public Policy (3) - Examination of normative, descriptive, and metaethical approaches employed by politicians and policymakers in confronting issues of responsibility and choice in public programs and policies. Focuses on ethical problems and responses in civic life and emphasizes the ways alternatives impact on society.

44.210 Introduction to Political Theory (3) - An introduction to fundamental political concepts such as liberty, justice, equality, power, and authority, as well as the main ideas of some representative political philosophers from Socrates to the present.

44.222 Women and Politics (3) - Emphasizes political systems and the broad range of issues that find women as the recipients of and makers of public action and policy. Examines issues that unify and divide women as they attempt to understand the problems of becoming equal in an unequal society. The role of women in the United States and in other nations is explored. Approved as a diversity course.

44.244 Introduction to Criminal Justice (3) - Provides students with a comprehensive survey and basic understanding of the role and function of the criminal justice field. Focuses on crime and criminal law, the police, law enforcement, courts, corrections, and juvenile justice.

44.280 Introduction to International Relations (3) - Examines sources of international conflict and cooperation, power politics in the international arena, problems of collective security, the settlement of disputes, diplomacy, rev-

olution, and international law.

44.303 Politics and the Arts (3) - Surveys painting, music, films, poetry, and novels to show the relationship between these media and political concepts, philosophies, and problems.

44.322 Political Violence (3) - Surveys individual, group, and mass political violence, concentrating on causes and manifestations. Studies positive and negative effectiveness of political violence with the object of placing the phenomena in meaningful historical and contemporary contexts.

44.326 Parties, Groups, and Public Opinion (3) - Examines the development of political parties in the United States; elections, voter behavior, and political participation; and the role of interest groups and political propaganda.

44.336 Public Administration Theory (3) - Includes leadership/followership and motivation/manipulation propositions on personnel management; conflict, competition, and cooperation propositions about budgeting; and information-communication propositions in relation to planning.

44.363 Soviet and Post Soviet Politics (3) - Studies the history, development, ideology, institutions, and policies of the Soviet political system.

44.366 Political Systems of Western Europe (3) - Examines democracy as practiced in Western Europe; the politics and governments of Great Britain, France, and Germany; comparisons with the United States; principles of comparative analysis.

44.371 Political Systems - Africa (3) - Examines problems of newly independent states, the struggle for independence, attempts to create national unity and create political stability, economic and political development, the role of the military in politics, and politics in the Republic of South Africa.

44.373 Government and Politics in China and India (3) - Studies politics and government in selected states with an emphasis on the forces which shape domestic and foreign politics and processes.

44.375 Multiculturalist Theory (3) - Treats the issues of concern generated from an attention to, and appreciation of, our diverse cultural identities. As a theory course, it approaches

multiculturalism as a new attempt to respond to the challenges that difference poses in democratic theory. A combination of theoretical, empirical and participatory methods are used.

44.376 Government and Politics of the Middle East (3) - Introduces the political history and governments of particular states in the region and considers their interactions regionally and internationally. Considers in particular the importance of Islam in politics, the Arab-Israeli conflict, the Iranian revolution, the Iraqi wars.

44.377 Feminist Political Theory (3) - Explores various strands of feminist political thought and approaches to philosophical critique. The primary aim of the course is to familiarize students with the contributions made by feminists to the field of political theory and to provide students with the basic tools with which to read, understand, critique and write in acknowledgment of these contributions.

44.405 Development of Political Thought (3) - A chronological survey from the ancient Greeks to the present. Examines the ideas of seminal political thinkers as they grapple with perennial problems.

44.409 American Political Thought (3) - Analyzes the relationship of American political thought to contemporary political science by using traditional materials in a historical, chronological way but reworking them to show their relation and relevance to actions and institutions. Includes the main ideas of the leading political thinkers in America from the colonial period to the present.

44.412 Scope, Approaches, and Methods of Political Science (3) - Analyzes the various approaches and methods currently in use in political science.

44.437 Public Administration Applications (3) - Examines major theories of public management and their application in the workplace to enhance productivity. Uses readings, cases, and simulations and requires a term paper based on a government agency's data.

44.438 Public Personnel Administration (3) - Public service as a career; personnel needs of national, state, and local governments; civil service law; personnel systems; and current problems.

44.440 The President and Congress (3) - Re-

views presidential and congressional politics, public policy-making roles, executive-legislative relationships, and constitutional issues. Examines problem areas and proposals for reform.

44.446 Constitutional Law I (3) - Analyzes the evolution, structure, and function of the Supreme Court, concentrating on a case-study approach to the court's interpretations of the powers of the president, Congress, and federal-state relationships.

44.447 Constitutional Law II (3) - Studies decisions of the Supreme Court as they relate to the individual and the government, concentrating on nationalization of the Bill of Rights, rights of persons accused of crime, equal protection, and voting rights.

44.448 The Judicial Process (3) - Studies policymaking by the federal courts, primarily the Supreme Court. Analyzes the nature of the policy-making function as well as the impact of policy making on American society.

44.452 State and Local Government Politics (3) - Presents a description and analysis of state and local legislatures, executives, and judiciaries, the myths and realities of state and local politics, intergovernmental relations, current policies, and problems.

44.456 Public Policy (3) - Studies the institutional and political context of policy formation and implementation; the process for designing and administering government programs; and the techniques of analysis and evaluation that are or could be employed in formulating policy objectives, choosing from among alternatives, and assessing performance. The approach is pragmatic, applied, and interdisciplinary.

44.458 U.S. Foreign Policy (3) - Analyzes the substance, methods, and purposes of U.S. foreign policy including the determinants of policy, policy-making machinery, and implementation matters.

44.464 Government and Politics of Ireland (3) - A survey of historical, social, cultural, and religious developments in Ireland with concentrated study of the government and politics of Northern Ireland and the Irish Republic. Examines contemporary literature, drama, music, and art.

44.487 International Law and Organization (3) - Presents the theoretical and practical impli-

cations of the legal and organizational efforts to regulate international relations with emphasis on international law, the United Nations, the International Court of Justice, and regional and functional organizations.

44.490 Independent Study in Political Science (1-6) - Provides for individualized reading, research, and reporting under conditions of minimal supervision. Projects must have departmental approval and be underway by the end of the first week of a session.

44.492 Seminar in Government and Politics (3) - Examines problems in government and politics in an attempt to review and unify theories and methods of political science. Emphasizes individual research projects.

44.497 Internship in Political Science (1-15) - Provides for on-site work experience and training designed to give an opportunity to apply the theoretical and descriptive knowledge acquired in the classroom, or the "Field Experience" course, to the political, legal, organizational, and administrative operations of contemporary institutions. The student is supervised by an instructor and an on-site person. A paper is required.

Sociology

Administered by Department of Sociology and Social Welfare

45.133 Introduction to Social Work and Social Welfare (3) - An orientation to the profession of social work and field of social welfare. Includes an examination of historical and current social work processes, values, and practices in various settings and with special population groups.

45.211 Principles of Sociology (3) - Introduces the basic concepts, theories, and perspectives in sociology. Sociology is the scientific study of the influence of groups, institutions, and cultures upon individuals. For example, the extent to which race, gender, class, religion, and education affect the behavior and opportunities of individuals is probed.

45.213 Contemporary Social Problems (3) - Examines social issues such as plant closings and unemployment, the impact of multinational corporations on the economy and the environment, mobility, aging, family problems - sex

roles, abuse, incest, divorce, alcohol and drug abuse, social change and disorganization, racism, sexism, employment discrimination, crime, alienation, and poverty.

45.215 Racial and Ethnic Minority Groups (3) - Presents a sociological examination of some of the major racial, ethnic, and religious minorities and their divergent heritages in the contemporary American scene. Prerequisite: 45.211.

45.217 Sociology of Sport (3) - An introduction to and critical examination of the role of sports in society. Focuses on the reciprocal impact of sports and various institutions of society. Students examine the sociological perspective on sports as a human activity.

45.231 Marriage and Family (3) - Provides a sociological examination of the traditional and changing institutions of marriage and the family in contemporary society. Focuses on family and marital interaction, roles, and interpersonal familial relations.

45.236 Child Welfare (3) - Examines child welfare services, issues, and the institutions which affect the social functioning of children. Course is not in the social welfare degree program.

45.242 Juvenile Delinquency (3) - Examines social pressures operative upon children in American society, which leads to formation of delinquent personality. Consideration of treatment and prevention, juvenile courts, clinics and correctional institutions, evaluation of theories, concepts, and relevant empirical research.

45.244 Introduction to Criminal Justice (3) - Offers a comprehensive survey and basic understanding of the role and function of the criminal justice field. Attention is given to crime and criminal law, law enforcement, police, courts, corrections, and juvenile justice.

45.260 Basic Social Statistics (3) - Presents principles and techniques of statistical analysis used by sociologists and others in social sciences: descriptive tables and graphs, measures of dispersion, significance tests, correlation, and regression. Students collect and analyze data using computers. Emphasis on understanding concepts underlying statistical analysis in order to permit intelligent use and interpretation of statistics.

45.297 Introductory Practice Experience in Social Welfare (3-6) - Exploratory practice experience for students considering a social welfare major. Provides an overview of the agency system under the direction of a practice supervisor. Prerequisite: 45.133.

45.316 Urban Sociology (3) - Presents a sociological analysis of origin and growth of cities with an emphasis on the dynamic patterns of social interaction in the changing contemporary urban scene. Views cities mainly from a multinational perspective with a special focus on urban regions. Prerequisite: 45.211.

45.318 Social Stratification (3) - Examines the role of social class in terms of structure, function, and persistence in any society. Examines classical theoretical statements and evaluates current American class relations in terms of status, power, authority, and social mobility. Covers notable studies of the American class system and provides a close look at power relations and styles of life among the various American classes. Prerequisite: 45.211.

45.319 Religion and Society (3) - Examines religion as a means by which people, as members of communities, order their lives and endow them with meaning. Topics include ritual and belief systems, the social organization of religion, and the relationship between religion and other parts of the social structure.

45.320 Sociology of Women (3) - Explores the development of the traditional roles of women in Western society to the present time including both work and family roles. Included is an analysis of the women's movement as a social movement. The course acquaints students with feminist theory within a sociological perspective. Prerequisite: 45.211 and 45.260 or equivalent.

45.334 Social Work Practice with Individuals and Families (Fall) (3) - Examines several orientations to problem solving with individuals and families. Emphasizes the essential knowledge, values, and interviewing skills for beginning social work practice. Prerequisites: 45.133, 45.211, 45.215, 45.297; 48.101, 48.210, 50.101.

45.341 Criminology (Fall) (3) - Discusses the major sociological theories of crime and justice. Presents the scope of crime in the United States and other countries. Probes each major type of crime, namely, homicide, rape, white-

collar crime, political crime, organized crime, property crimes, drug crimes, prostitution and pornography. Describes and analyzes law enforcement system. Prerequisite: 45.211.

45.342 Penology (Spring) (3) - Penology studies the social rationales, methods, and consequences of punishing and rehabilitating law breakers. Includes a social history of prisons, jails, and punishment, the interpersonal dynamics within the institution, the inmate social order, causes of riots, treatment programs, and alternative models and policies. Prerequisite: 45.211.

45.343 Victimology (Spring) (3) - Examines the short-term and long-term effects of victimization on individuals and groups from such crimes as family violence, rape, street crime, business fraud, corporate negligence, and political wrong doings. Prerequisite: 45.211.

45.345 Medical Sociology (3) - Facilitates student's ability to understand, analyze, and evaluate sociological factors in relation to illness, medical behavior, and health care systems. Prerequisite: 45.211 or consent of the instructor.

45.376 Science and Society (3) - Explores science as the organized activities of an occupational community. Examines the development of science as an institution, its social organization in modern society, and its internal and external politics. Prerequisite: 45.211 or consent of the instructor.

45.400 Sociology of Mass Communication (3) - An in-depth discussion of the cognitive and behavioral affects of mass media, especially television on audiences, the social structure of the communications industry, particularly its influence on media content, and the political use of mass media. Students critique latest research articles in the field. Prerequisites: 45.211 and junior status.

45.441 Social Indicators (3) - Attempts to reinforce and extend earlier learning in research techniques and methods by focusing upon systematic, step-by-step understanding, analysis, and preparation of social indicators at the federal, state, and local levels of social policy planning. Promotes understanding of social indicators and the use of these indicators within all levels of society.

45.443 Sociology of Deviant Behavior (Fall) (3) - Evaluates the presence and function of devi-

ance in society. Includes mental illness and various types of crime and stigmatized behavior. Examines how it is handled therapeutically and legally through institutionalization and treatment. Attempts to provide a broad theoretical perspective as well as concrete examples of deviance in any society. Examines current methods of rehabilitation and punishment. Prerequisite: junior year standing (or 65 semester hours or more).

45.450 Social Work Practice with Small Groups (Fall) (3) - Uses problem-solving interventions in small groups integrating social work knowledge, skills, and values. Prerequisites: 45.133, 45.211, 45.215, and 45.297; 48.101, 48.210, 50.101.

45.451 Family Counseling (3) - Surveys major theoretical models for family assessment and intervention with primary emphasis on ecological systems. Working knowledge of rudimentary assessment and intervention skills for problem solving with families acquired. Course is not in the social welfare degree program.

45.452 Social Work Practice With Organizations and Communities (Spring) (3) - Examines problem-solving interventions with large groups, communities, and organizations using the conceptual framework of social work knowledge, skills, and values. Prerequisites: 45.133, 45.215, and 45.297, 40.211, 44.120.

45.453 Social Welfare Policy (Spring) (3) - Frameworks for analyzing social and economic policies presented with special focus on legislative, judicial, and administrative policies. Prerequisites: 45.133, 45.215, and 45.297 (may be taken concurrently), 40.211, 44.120.

45.457 Sociology of Community (3) - Reviews and examines theories and research of communities. Gives special emphasis to the American community. Prerequisite: 45.211.

45.461 Social Problems in Rural-Urban Communities (3) - Focuses on social problems peculiar to and characteristic of rural and small urban communities. An eclectic theoretical interpretation will be made of the major social problems. Emphasizes problems which result in the dysfunctioning of patterned social relationships.

45.462 Sociological Theory (3) - Examines classical forms of social theory from the 19th century and their impact on the development of

theory in the 20th century. Studies the views of Max Weber, Emile Durkheim, and Karl Marx on the social structure, social organization, economy, and human condition as well as their influence on contemporary perspectives, namely, the conflict and functional approaches, sociology of knowledge, phenomenological sociology, and symbolic interactionism. Prerequisite: 45.211.

45.465 Computer Applications in the Social Sciences (Spring) (3) - Introduces computer use for the social sciences (through the use of SPSS). Emphasizes translating questions into data analysis and interpretation of statistical results. Prerequisites: 45.260, 45.466, or consent of the instructor.

45.466 Social Research (3) - Stresses design and construction of major research methods and procedures used in social research. Special emphasis on survey research. Prerequisites: 45.211, 45.260 or consent of the instructor.

45.467 Populations Problems (3) - Studies human population, its major theories, distributions, composition, characteristics, changes, and future developments of population and impacts of population problems on society as influenced by vital processes. Prerequisite: 45.211.

45.468 Social Service Planning (3) - Provides an advanced consideration of the social context and the development of social policy and planning. Stresses the implementation of social and/or human services at federal, state, and local levels of organization. A critical analysis of the effects of social policy, planning, and services on people in a service-oriented, post-industrial society. Prerequisites: 45.211 and consent of the instructor.

45.470 Senior Seminar (3) - Provides for individual research projects and reports within selected areas of interest such as the family, criminology, social services, and special populations. Usually offered in the spring semester. Prerequisites: Senior status; 18 semester hours of sociology and social work; and consent of the instructor.

45.471 Independent Study in Sociology (3) - Allows student to pursue individualized instruction in-depth with a faculty member in a specific area of the field not covered in current courses. Prerequisites: 45.211 and consent of

the instructor, chairperson, and members of the department.

45.474 Contemporary Environmental Issues (3) - Examines some major human problems that lead to environmental deterioration, particularly water, air, and noise pollution, energy and other resource depletion, and increasing population density. Prerequisite: 45.211.

45.477 Community Land Use Planning (3) - Introduces the community planning process and the theoretical perspectives relevant to community land use planning. Examines selected substantive planning problem areas in the local community. Students formulate, develop, and present a community land use plan. Prerequisite: 45.211.

45.478 Sociology of Work (3) - Presents a sociological examination of work and the milieu of the worker. Studies formal and informal work organizations, job satisfaction and dissatisfaction, structure and organization of industrial and post-industrial societies, and relationship between work organizations within communities and society. Prerequisite: 45.211.

45.490 Sociology of Aging (3) - Studies aging, its major theoretical themes, patterns of living, socio-psychological, and cultural consequences. Examines the contemporary issues, problems, and programs of the aging. Prerequisite: 45.211 or consent of the instructor.

45.496 Sociology Internship Program (1-15) - Designed primarily for the junior or senior working in a specific institutional field and/or college-approved, off-campus activities related to student's chosen professional field. Prerequisites: Consent of the instructor and department chairperson.

45.497 Social Welfare Internship (10-15) - Provides the social welfare major with the opportunity to integrate and apply knowledge, theory, and understanding extracted from the foundation courses. Fosters skill development and evaluates the demonstration of beginning competencies in working with individuals, families, groups, organizations, and communities. 45.466 and 45.498 may be taken concurrently. Prerequisites: 45.133, 45.215, 45.260, 45.297, 45.334, 45.450, 45.452, 45.453, 40.211, 44.120, 48.210.

45.498 Integrative Methods Seminar in Social Work and Social Welfare (3) - An examination

of social work practice from a system theory perspective and its functional relevance to contemporary social problems. Internship and other practice experiences are critical elements in this review course. Course is taken concurrently with or after the social welfare internship. Prerequisites: 45.133, 45.215, 45.260, 45.297, 45.334, 45.450, 45.452, 45.453, 40.211.

Anthropology

Administered by Department of Anthropology.

46.101 Introduction to Anthropology (3) - A beginning course for students with no background in anthropology. Provides an overview of peoples and cultures of the world today and of the past as well as the fossil evidence for human evolution. Topics may include living primates, magic and religion, and kinship, marriage, and sex roles. Not for students who have taken 46.200, 46.210 or 46.220.

46.102 Anthropology and World Problems (3) - Explores the origins of global problems and evaluates the variety of cultural solutions to those problems. Investigates cultural values and solutions of tribal peoples holistically and compares them to those of industrialized nations in terms of their consequences and implications. Approved as a diversity course.

46.200 Principles of Cultural Anthropology (3) - Provides a cross-cultural study of all human behaviors in contemporary cultures. Topics surveyed include socialization; language; sex, age, and kinship roles; religion and magic; marriage and the family; political and economic behavior; cultural change; and the arts. Anthropological methodology and the concept of culture also are stressed. Approved as a diversity course.

46.210 Prehistoric Archaeology (3) - Provides a worldwide examination of human prehistory from the origins of humankind to the development of early writing. Focuses on regional differences and similarities in key evolutionary transitions including sedentary lifeways, urban origins, and the rise of states.

46.220 Human Origins (3) - Studies the emergence and development of humans, the biological basis of human culture and society, and the origin of the social units of fossil humans.

46.260 Men and Women: An Anthropological

Perspective (3) - A cross-cultural and evolutionary perspective on sex role behavior in past and contemporary cultures. Examines sex roles in nonhuman primates as well as in humans. Examines sex roles in hunting and gathering, horticultural, pastoralist, peasant, and other pre-industrial societies as well as sex roles in modern industrial societies. Covers genetic and environmental theories of sex role behavior. Prerequisite: 3 semester hours of anthropology. Approved as a diversity course.

46.290 Race and Racism (3) - Studies race from holistic and cross-cultural perspectives. Explores biological nature of race through investigation of human evolution. Considers socio-cultural aspect through a comparative study of racial categories in cultures and societies worldwide. Approved as a diversity course.

46.300 Archaeological Method and Theory (3) - Explores the modern theoretical foundations of archaeology. Students read and discuss original contributions to the field and learn methods in preparation for actual fieldwork. Prerequisite: 46.210 or consent of the instructor.

46.301 Field Archaeology (3-6) - Provides field investigation of various prehistoric cultures in northeastern United States. Students learn excavation and recording techniques, visit important sites during field trips, and become part of a unique community that studies our past.

46.310 Aztecs and Mayans (3) - Surveys the prehistoric cultures of Mexico and Central America. Emphasis on the development of Aztec and Mayan civilizations. Approved as a diversity course.

46.311 Archaeology of Northeastern North America (3) - Surveys the prehistoric cultures of the area from arrival of the first inhabitants through early historic times. Provides a laboratory for the study of broader issues of socio-cultural processes. Prerequisite: 46.210 or consent of the instructor.

46.312 South American Archaeology (3) - A survey of prehistoric cultures of South America. Emphasizes the civilizations of the Andean zone and the role played by the Amazonian region in the development of Andean Cultures. Prerequisites: 46.101 or 46.200 or 46.210 or consent of the instructor. Approved as a diversity course.

46.320 Contemporary World Cultures (3) - Presents a comparative analysis of selected non-European societies in contrasting cultural and natural areas. Indicates stresses on the natural and social environment; national character; religion and world view; and literary, artistic, and musical expression. Approved as a diversity course.

46.333 Ethnic Identity in the United States (3) - Explores the varieties of ethnic experience in the United States. A uniquely anthropological perspective is utilized to give students a sense of how a cultural-ethnic identity is formed and maintained in our society. Special attention paid to Italians and Latinos (including Puerto Ricans) as examples of extremely different immigrant experiences. Prerequisite: 46.200. Approved as a diversity course.

46.340 Native North America (3) - Surveys native cultures of North America in prehistoric and early historic periods.

46.360 Pseudoscience (3) - Sharpens critical thinking skills and deepens understanding of human belief systems and ethics by examining how science operates and evaluating extraordinary ideas that claim to be scientific. Investigates scientific-creationism, ESP, UFOs, fantastic archeology, dowsing and others.

46.350 Medical Anthropology (3) - Studies of cross-cultural concepts of health, illness, and curing as well as health care delivery in industrialized cultures. Includes the topics of divination and diagnosis, sorcery and witchcraft in healing, public health and preventive medicine, alcoholism and drug use, and the medical knowledge of tribal and peasant societies. Approved as a diversity course.

46.385 Anthropology Research and Writing Skills (3) - Familiarizes students with information sources in anthropology. Students learn how to access those sources and to write and present research paper in anthropology. Basics of statistical analysis are covered. Students write, revise and present a research paper on an anthropological topic. Prerequisite: 46.200, 46.210, 46.220.

46.390 Socialization of the Child (3) - Examines life experience and adjustment of the individual through infancy, middle childhood, and youth. Reviews contrasting methods of introducing children to adult economic, social,

and religious activities. Prerequisite: 46.200. Approved as a diversity course.

46.405 Primates (3) - Studies the various phenomena affecting primate behavior; ecology, social life, and socio-cultural adaptation, with emphasis on the development of socio-biological traits relating to human origins. Prerequisite: 9 semester hours of anthropology or 46.220 or any biology course.

46.410 Anthropology of Art (3) - Studies the graphic arts, music, dance, performance, and literature of prehistoric and modern cultures that lie outside the Great Traditions of art from an anthropological perspective. Prerequisite: Minimum of 55 semester hours or consent of the instructor. Approved as a diversity course.

46.440 Language and Culture (3) - Studies the place of oral and non-oral language in human evolution and contemporary cultures. Discusses dialectal variation, discourse analysis, multilingualism, language and cognition, and the role of language in education. Approved as a diversity course.

46.450 Peoples and Cultures of South America (3) - Presents a survey introduction to the aboriginal, non-literate cultures of South America including ecological background, cultural patterns and effects of modernization on traditional culture. Prerequisite: 46.200 or consent of the instructor. Approved as a diversity course.

46.466 Independent Study in Anthropology (3) - Independent study by a student with faculty guidance of a particular research problem in anthropology. The research problem either extends current course content or deals with an area not covered in the current course offerings in anthropology. A problem is chosen by the faculty member and the student working together.

46.470 History of Anthropological Thought and Theory (3) - Surveys the leading methods and theories of anthropological and ethnological interpretation with special emphasis on the concept of culture and its practical application to modern problems.

46.475 Field Methods in Cultural Anthropology (3) - Provides class discussion and field experience in participant observation. Experience in interviewing, surveying, kinship charting, mapping, studying complex organizations,

and writing ethnographic field reports.

46.480 Religion and Magic (3) - A comparative analysis of the origins, forms, elements, and symbolism of religious beliefs and behavior; the role of religion in society with particular reference to nonliterate societies. Anthropological theories and methods of religion, historical and contemporary. Approved as a diversity course.

46.495 Special Topics in Anthropology (3) - Provides for instruction and student research within selected areas of interest not available in other courses. Prerequisite: 18 semester hours of anthropology or consent of the instructor.

46.497 Internship in Anthropology (3-15) - An on-site training and learning experience in anthropology that provides opportunities to apply theoretical and descriptive knowledge of archaeology, cultural anthropology, and physical anthropology in private and government institutional settings.

Psychology

Administered by Department of Psychology

48.101 General Psychology (3) - Studies psychology as a system of scientific inquiry into the nature and behavior of humans. Presents major concepts, principles, and processes concerned with human functioning in individuals and social settings.

48.131 Psychology of Adjustment (3) - Examines the personal and social meaning of adjustment. Presents an operational approach to mental health including such concepts as anxiety, frustration, conflict, aggression, and defense.

48.160 Basic Statistics (3) - Introduces fundamental statistical concepts and principles providing a foundation for research methodology for students who need not be mathematically inclined. Discusses computation, interpretation, and application of commonly used descriptive, correlation, and inferential statistical procedures for analyzing data.

48.210 Life-Span Psychology (3) - Examines the psychology of human development from conception to death. Discusses traditional topics and issues in developmental psychology such as cognition and personality, but within a

life-span developmental perspective. Prerequisite: 48.101.

48.211 Child Psychology (3) - Studies normal development and the interrelationships among various aspects of biological, cognitive, personality, and social factors. Emphasizes prenatal to adolescent development. Prerequisite: 48.101.

48.212 Adolescence (3) - Studies developmental, personal, and social issues confronting adolescents as they emerge from childhood and strive for adulthood. Prerequisite: 48.101.

48.251 Psychological Foundations of Education (3) - Examines principles of psychology as applied to the classroom. Emphasizes learning processes as affected by environmental, experiential, and developmental factors. Prerequisite: 48.101.

48.253 Social Psychology (3) - Studies interpersonal behavior with emphasis on affiliation, interpersonal perception and attraction, group behavior and conformity, attitude change, and compliance. Prerequisite: 48.101.

48.254 Psychological Aspects of Social Issues (3) - Examines the application of psychological theories and techniques to existing social issues and their relationship to alternative ethical viewpoints regarding social issues selected by the instructor for study. Prerequisite: 48.101.

48.281 Experimental Psychology: Methodology (3) - Introduces experimental design, statistical analysis, and issues of control and confounding. Surveys classical and learning experiments as well as issues in social, developmental, educational, and clinical psychology from an experimental perspective. Prerequisites: 48.101 and 48.160 (with a minimum grade of C in each).

48.282 Experimental Psychology: Applications (3) - Surveys the application of designs and statistics to problems encountered in psychology. Addresses ethical issues in experimentation, the value of experimentation, and the limitations of research designs. Emphasizes discussion and application of various research strategies to contemporary and traditional problems in psychology. Prerequisites: 48.101 and 48.160 (with a minimum grade of C in each), and 48.281 or concurrently taking 48.281.

48.311 Adulthood and Aging (3) - Studies the development of adults in our culture. Includes

topics on the effects of social environment on aging, special problems of aging, sex differences during adulthood, vocational, marital, and familial developments, and psychology of death and dying. Emphasizes human behavior between young adulthood and senescence with emphasis on the aging process. Prerequisite: 48.101.

48.321 Psychological Tests and Measurements (Fall) (3) - Introduces the logic of psychological measurement including the applied and practical aspects of psychological testing with emphasis on reliability, validity, and test norms. Provides background for test evaluation. Prerequisite: 48.101, 48.160, or consent of the instructor.

48.335 Abnormal Psychology (Spring) (3) - Surveys the description, causation, prevention, and treatment of maladaptive behavior, as well as the ethical aspects of these issues. Considers biological, psychological, and social factors. Prerequisites: 48.101, 48.160, 48.281 or consent of the instructor.

48.340 Community Psychology (Spring) (3) - Examines concepts, research and interventions regarding psychological well-being and empowerment of individuals in community context and the relationship of these to the psychological sense of community. Prerequisites: 48.101, 48.160 and 6 semester hours in psychology.

48.341 Theory and Practice of Academic Psychology (3) - Sharpens and expands knowledge of the basic principles of psychology. Provides an intensive review of the content taught in General Psychology and requires students to lead discussion groups. Prerequisites: Junior standing; 48.101, 48.160, 48.281, 48.282 and consent of the instructor.

48.350 Psychology of Sex and Gender (3) - Examines the theoretical and research issues in psychological experiences of males and females. Views gender role development and implications for the daily lives of men and women from historical, biological, psychoanalytic, learning, sociological, and anthropological perspectives. Prerequisites: 48.101, 48.160, 48.281.

48.356 Psychology of Motivation (Fall) (3) - Surveys the fundamental determinants of human and animal activities. Studies theories,

research methodologies, and experimental evidence related to the activation and the direction of behavior. Prerequisites: 48.101, 48.160, 48.281 or consent of the instructor.

48.360 Cognitive Psychology (Spring) (3) - Examines the major theoretical perspectives and research in the area of cognition and presents the ways in which mental processes such as memory, perception, language, and problem solving may be empirically studied. Prerequisites: 48.101, 48.160, 48.281.

48.375 Psychology of Learning (Fall) (3) - Examines the theoretical and experimental bases of learning in animal and human behaviors. Studies situational and drive factors affecting learning, stimulus generalization, and discrimination, retention, and forgetting. Prerequisites 48.101, 48.160, 48.281, 48.282, or consent of the instructor.

48.380 Behavioral Neuroscience (Spring) (3) - Studies the relationship between psychological processes and physiological activity. Reviews neurological and biochemical bases of behavior with emphasis on the synergistic functions of the nervous system, sense organs, and glandular system. Prerequisites: 48.101, 48.160, 48.281, 48.282, or consent of the instructor.

48.401 History of Psychology (3) - Studies the historical development of modern psychology and compares present-day models of behavior within an historical framework. Prerequisites: 90 semester hours and completion of one of the following courses: 48.360, 48.375, 48.380, 48.335, 48.436 or consent of the instructor.

48.406 Psychology Seminar (3) - Provides for an advanced consideration of significant topics in psychology. Requires reports and discussions of current research and may be repeated with change in topic. Prerequisites: 48.101 and consent of the instructor.

48.436 Theories of Personality (Fall) (3) - A critical study of theories explaining development, structure, and organization of personality. Considers personality from psychoanalytic, social, individual, self, and learning points of view. Prerequisite: 48.101, 48.160, 48.281, or consent of the instructor.

48.439 Introduction to Clinical Psychology (Spring) (3) - Surveys clinical psychology and the role of the clinical psychologist in community and hospital mental health programs, clin-

ical assessment, and diagnosis. Examines concepts in and models of psychotherapy. Prerequisites: 48.101, 48.335 or 48.436, or consent of the instructor.

48.451 Laboratory Training in Group Processes (Spring) (3) - Offers on-going experience on topics including norm-setting, leadership, problem solving, role playing, cooperation/competition, and decision making. Class size limited to 20 students. Prerequisites: 48.101 and consent of the instructor.

48.453 Organizational Psychology (Spring) (3) - Describes the application of psychological theory and research to the study of industrial, business, profit and nonprofit service, military, and governmental organizations. Emphasizes the interaction of individual perceptions, group dynamics and organizational climates, and strategies to maximize the satisfaction and effectiveness of each component within and between complex organizations. Prerequisites: 48.101, 48.253, and consent of the instructor.

48.463 Personnel Psychology (Fall) (3) - Surveys behavioral principles, techniques of investigation, recent research literature, and practice in the application of psychological knowledge relevant to a wide range of personnel management problems. Considers the impact of the EEO guidelines for personnel management in the areas of recruitment, selection, promotion, training, and performance appraisal. Prerequisites: 48.101, 48.160 or 40.346 and junior standing (48.321 recommended).

48.464 Advanced Experimental Design (3) - Presents an advanced consideration of the planning, conduct, and evaluation of research in the behavioral and biological sciences, employing parametric and nonparametric statistics. Emphasizes inferential statistics, design, analysis, interpretation, and computer utilization. Prerequisites: 48.101, 48.160, 48.281, 48.282, or consent of the instructor.

48.466 Independent Study in Psychology (3) - Provides for the study of a topic via review and research of technical psychological literature or empirical manipulation of variables in the field or laboratory under supervision of a psychology faculty member. Documents results in a written report. Prerequisites: Consent of the instructor and departmental approval.

48.476 Principles of Behavior Modification (3)

- Studies the application of learning principles to change behavior in both individual and group settings. Prerequisite: 48.101 and 6 semester hours in psychology.

48.497 Practicum in Psychology (1-15) - Provides application of psychological knowledge through study, observation, and practice in a community setting. May be repeated for a total of 15 semester hours. Prerequisite: consent of the instructor.

Biology

Administered by Department of Biological and Allied Health Sciences

50.101 General Biology I (3) - Presents major concepts and principles of biology relating to humans. Lecture and discussion. Not applicable to biology major.

50.102 General Biology II (3) - Studies biology from the ecological, evolutionary, and behavioral perspective with emphasis on human-kind. Prerequisite: 50.101. Not applicable to biology major.

50.107 Medical Terminology (1) - Studies roots, prefixes, and suffixes of medical terms via programmed instruction. Recommended for students in the health sciences. Pass/fail credit only. Not applicable to biology major.

50.110 Biology of Animals (4) - Introduces fundamental principles of zoology as applied to representative groups of animals. Laboratory work emphasizes comparative development, anatomy, physiology, and behavior of representative animals. Three hours lecture/3 hours laboratory per week.

50.111 General Biology Laboratory (1) - Offers "hands-on" experience emphasizing biological concepts. Two hours laboratory per week. Prerequisite: 50.101 or concurrent. Not applicable to biology major.

50.120 Biology of Plants (4) - Introduces fundamental principles of taxonomy, anatomy, morphology, physiology, and genetics as applied to the plant kingdom. Three hours of lecture/3 hours laboratory per week.

50.173 Anatomy and Physiology I (4) - An introductory course integrating the structure and function of the human body. Covers fundamental principles of anatomy and physiology, the chemical basis of life, cell structure and func-

tion, tissues, integumentary system, skeletal system, muscular system, nervous system, and special senses. Three hours of lecture/3 hours of laboratory per week. Not applicable to biology major.

50.174 Anatomy and Physiology II (4) - Introductory course integrating the structure and function of the human body. Covers blood and defense mechanisms, cardiovascular system, lymphatic system, respiratory system, digestive system, metabolism, nutrition, urinary system, fluid and electrolyte balance, endocrine system, reproductive system, growth and development, and human genetics. Three hours lecture/3 hours laboratory per week. Prerequisite: 50.173 or consent of the instructor. Not applicable to biology major.

50.200 Dendrology (3) - Covers the basic principles of dendrology: the biology and economic significance of trees and shrubs. Emphasis is placed on tree species of eastern North American forests. Two hours of lecture and 10 hours of laboratory per week. Summer session only. Prerequisites: 50.120 or equivalent or permission of the instructor.

50.205 Introduction to Nutrition (3) - A foundation of nutritional concepts and practices that can be applied to personal lives and incorporated into careers. Concepts include nutritional requirements for optimal health and performance throughout the life span, making food choices in the marketplace, analyzing nutritional information in the media, and controversial issues in nutrition and health. Not applicable to biology major.

50.211 Invertebrate Zoology (3) - Studies the principal phyla of invertebrate animals in relation to their anatomy, classification, and behaviors in the ecosystems in which they participate. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. Three hours lecture/2 hours laboratory per week. Prerequisite: 50.110.

50.212 Vertebrate Zoology (Fall) (3) - Studies the biology of vertebrate animals, emphasizing natural history, physiology, morphology, and behavior. Reviews evolutionary and ecological aspects of each class. Includes laboratory work with living and preserved specimens to familiarize students with representative individuals of the major classes of this group.

Field trip component at the Marine Science Consortium, Wallops Island, Va., includes additional student costs. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110.

50.221 Comparative Biology of Nonvascular Plants (3) - Provides a phylogenetic study of major nonvascular plants with an emphasis on development, structure, reproduction, and selected ecological aspects. Two hours lecture/3 hours laboratory per week. Prerequisite: 50.120.

50.222 Comparative Biology of Vascular Plants (3) - Provides a phylogenetic study of major vascular plants with emphasis on their development, structure, reproduction, and selected ecological and paleobotanical aspects. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.120.

50.231 Biology of Aging (3) - The biological mechanisms of the aging process are discussed with special emphasis on these processes in humans. Discussions include studies of aging at the molecular, cellular, systems, and organism levels of organizations. Three hours lecture per week. Not applicable to biology major.

50.233 Human Genetics (3) - Explores the principles of human genetics and their application to problems in anthropology, biology, medicine, psychology, sociology, and special education. Three hours of lecture/discussion per week. Prerequisite: 50.101, 50.110, or 50.120 or consent of the instructor.

50.240 Introductory Microbiology (3) - Presents elementary aspects of morphology, metabolism, and cultivation of bacteria, viruses, and other microorganisms with consideration of their relationship to public health and various industrial processes. Two hours lecture and 2 hours laboratory per week. Not applicable to biology major.

50.242 Biology of Microorganisms (4) - Introduces the fundamental principles of nomenclature, classification, microscopy, cytology and anatomy, cultivation, growth, metabolism, and genetics of the microbial world. Microbial interrelationships and control are integrated into a systematic approach to classical microbiology as it relates to humans and the environment. Three hours of lecture/3 hours of laboratory

per week.

50.252 Field Zoology (Summer/odd-numbered years) (3) - Studies common vertebrates (excluding birds) of North America with emphasis on observation, collection, and recognition of local fauna. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor.

50.253 Freshwater Biology (Summer) (3) - Emphasizes the chemical, physical, and biological aspects of freshwater environments. Two hours of lecture/3 hours of laboratory per week. Prerequisites: 50.110 and 50.120 or consent of the instructor.

50.254 Social Implications of Biology (3) - Explores the societal implications of current thought in biology. Addresses values, ethics, and responsible decision making. Three hours of lecture and discussion per week. Not applicable to biology major.

50.263 Field Botany (Summer/even-numbered years) (3) - Addresses identification and classification of seed plants represented in local flora. Two hours of lecture/3 hours laboratory per week. Prerequisite: 50.120 or consent of the instructor.

50.271 Cell Biology (4) - Examines the structure and function of the cell and its organelles. Emphasis on general principles and processes by which all cells function. Three hours of lecture/3 hours of laboratory per week. Prerequisites: 50.110 or 50.120 and 52.115 or 52.118.

50.279 Cooperative Education in Biology and Allied Health Sciences (3-6) - A work-study program open to students majoring in the biological sciences with a minimum of 32 semester hours earned. Differs from internship 50.490 in that Cooperative Education must be paid and is a two-opportunity experience, with the first experience generally undertaken soon after 32 credits are earned. The two experiences may total from 9 to 12 hours since one of the two must be fulltime (equivalent to 6 semester hours) and the second may be part time (3 semester hours) or full time. No more than 15 semester hours in cooperative education and/or internship may be taken. Refer to the section on cooperative education, internship and independent study. Prerequisite: Open only to students majoring in the biological sciences who have earned at least 32 semester

hours.

50.290 Writing in Biology (3) - Provides experience in types of communication useful in a natural science with a basis in experimentally acquired information. Emphasizes types of written communication; includes oral presentations. Prerequisites: 20.101 or 20.104 and completion of two biology courses (50.110, 50.120 or 50.242). Word processing skills are highly recommended.

50.331 Embryology (Spring/even-numbered years) (3) - Reviews the patterns, processes, and principles of animal development. Laboratory studies emphasize descriptive embryology of a number of representative vertebrates with emphasis on amphibian, avian, and mammalian development. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor.

50.332 Genetics (3) - Addresses mechanisms of heredity in animals and plants; Mendelian inheritance, linkage, probability, crossing over, chromosomal modifications, nucleic acids, and gene action. Three hours of lecture/2 hours of laboratory per week. Laboratory hours will vary. Prerequisite: 50.271.

50.342 Medical Bacteriology (4) - Provides a study of bacteria capable of causing disease in humans. Emphasizes laboratory aspects of bacterial disease but includes pathogenicity, identification, diagnosis, treatment, and prevention. Three hours of lecture/3 hours of laboratory per week. Prerequisites: 50.242 and 50.271.

50.343 Immunology (3) - Introduction to components and functions of human immune system; application of immunology to infectious disease, blood transfusion, organ transplantation, and cancer; consideration of conditions involving the immune system such as immunodeficiencies (AIDS), allergies, and autoimmune diseases. Prerequisites: 50.271; and a background in genetics, organic/biochemistry, and/or infectious diseases recommended.

50.350 Plant Pathology (3) - Examines the nature of vascular plant diseases, the biology of plant pathogens, and the impact of diseases on human affairs. Lecture stresses principles of plant pathology; disease and pathogen classi-

fication, modes of pathogenesis, host response to disease, and disease control. Laboratory stresses identification of plant pathogens and disease symptoms, histology of diseased tissues, and research techniques. Three hours of lecture/2 hours of laboratory per week. Prerequisites: 50.242 and 50.271; or consent of the instructor.

50.351 General Ecology (3) - Introduces principles and concepts pertaining to energy flow, limiting factors, habitat studies, succession patterns, and population studies at the species, interspecies, and community level. Field trip component at the Marine Science Consortium, Wallops Island, Va., may incur additional student costs for food and lodging. Two hours lecture/3 hours laboratory per week. Prerequisite: 50.110 or 50.120 or consent of the instructor.

50.361 Comparative Vertebrate Anatomy (Spring/odd-numbered years) (3) - Presents a comparative study of the chordates emphasizing the vertebrate classes. Attention given to structure, morphogenesis, functional adaptations, and evolutionary trends. Laboratory emphasis is placed on the lamprey, shark, and cat. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor.

50.364 Vertebrate Histology (3) - Studies the structure and function of vertebrate cells and tissues from various body systems. Laboratory studies include the use of prepared microscope slides and color photomicrographs. Two hours lecture/3 hours laboratory per week. Prerequisite: 50.271 or consent of the instructor.

50.365 Histological and Histochemical Techniques (3) - Provides theory and practice in the use of histological and histochemical techniques in a laboratory format. Fixation, preparation embedding, sectioning, and staining of various animal tissues. One hour lecture/4 hours laboratory per week. Prerequisites: 50.364 or 52.131 recommended or consent of the instructor.

50.366 Anatomy and Physiology: Head, Neck, and Thorax (Spring) (3) - Focuses on the anatomy, physiology, and development of the head, neck, and thorax. Emphasizes the organ systems that relate to the hearing and speech

mechanisms. Three hours lecture/2 hours laboratory per week. Preference given to students in communication disorders. Not applicable to biology major.

50.371 Principles of Mammalian Physiology (4) - Studies principles of cell physiology that are basic to the function of the following mammalian tissue and systems; blood, metabolic, neuromuscular, cardiovascular, and urinary. Neural and chemical processes of the aforementioned are emphasized. Three hours of lecture/3 hours of laboratory per week. Prerequisites: 50.271, 52.131, and 52.216, or consent of the instructor. A background in organic chemistry and algebra and, at least, sophomore standing recommended.

50.372 Plant Physiology (Spring) (3) - An introduction to plant function including discussions of water relations, carbohydrate metabolism and translocation, photosynthesis, mineral nutrition, plant growth hormones, and growth and development. Three hours lecture per week. Prerequisites: 50.120 and 50.271, 52.131 or 52.216 or consent of the instructor.

50.380 Biology Seminar (1) - Emphasizes preparation and presentation of biological topics in both oral and written formats. Prerequisite: junior standing or minimum of 64 semester hours completed.

50.390 Independent Study in Biology I (1-3) - Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of research with the aid of a faculty member. Research culminates in a scholarly paper written by the student that presents findings of the laboratory or field investigation in a form suitable for publication. Refer to section on cooperative education, internship and independent study. Prerequisite: junior standing.

50.391 Independent Study in Biology I (1-3) - Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of scientific research with the aid of a faculty member. Prerequisite: 50.390.

50.411 Radiation Biology (3) - Studies the effects of radiation on living organisms; nuclear structure; fundamental properties of radiation; physical, chemical, and genetic effect on plants and animals from cells to whole organisms; the

application of radiochemicals in biological studies. Prerequisites: 52.216, 54.112 or 54.212 or consent of the instructor.

50.430 Evolution (3) - Studies the major concerns of the theory of evolution and contributions toward their solutions made by genetics, paleontology, systematics, and ecology. Three hours of lecture per week. Prerequisites: 50.110 or 50.120; 50.332 recommended.

50.432 Microbial Genetics (3) - A genetic analysis of microbes to provide insights into the molecular basis of gene action using viruses, bacteria, and lower eukaryotes. Topics include DNA and genetic recombination, plasmids, transposons, and recombinant DNA. Two hours of lecture and 3 hours of laboratory per week. Prerequisites: consent of the instructor or two courses from 50.242, 50.332 and 52.341.

50.441 Cytogenetics (3) - Examines structure and behavior of chromosomes and their effects on development. Describes human genetic syndromes and the effects of chromosome abnormalities. Explores relationships between chromosomes, oncogenes, and cancer. Laboratory studies include cell culture methods, microscopic techniques, and karyotype preparation. Two hours of lecture/2 hours of laboratory per week. Prerequisites: 50.233 or 50.332 and 50.271; or consent of the instructor.

50.442 Virology of Mammals (3) - Introduces viral structure, classification, replication, genetics, and pathogenesis. Studies entail the diagnosis, prevention, and treatment of viral infection, and families of viruses that cause disease in humans and other mammals. Includes such current topics as AIDS and tumor virology. Prerequisites: At least one course from 50.332, 50.342, 50.343, Chemistry 52.341; background in microbiology recommended.

50.450 Mycology (3) - A critical survey of the kingdom Fungi, with emphasis on the Ascomycota, Basidio-mycota, and Deuteromycota. Lectures cover the topics of morphology, physiology, biochemistry, cytology, genetics, systematics, ecology, and evolution. Laboratory stresses comparative morphology of higher fungi, laboratory techniques, and field mycology. Two hours of lecture/3 hours of laboratory per week. Prerequisites: 50.271; one course in genetics recommended; or consent of the instructor.

50.455 Environmental Microbiology (3) - Aspects of applied microbiology as related to some fundamentals of public health, food contamination, water pollution, and sanitation. Emphasis on related laboratory testing procedures. Four hours per week. Additional time may be required. Prerequisite: 50.242.

50.457 Entomology (Summer) (3) - Studies the physiology, morphology, behavior, classification, and general biology of the insects. A collecting period will provide an opportunity for students to collect, mount, and properly display insects for study. Taxonomic emphasis limited to order and family. Equivalent to a minimum of 5 hours per week including laboratory. Prerequisite: 50.110.

50.458 Fungal Ecology (3) - A broad treatment of the ecology of fungi, examination of such topics as fungal decomposition of wood and bark, fungal decomposition of forest litter, ecology of aquatic fungi, community structure of soil and/or dung fungi, ecology of predaceous fungi, and aspects of mycorrhizal symbioses. Topics vary with each semester. Laboratory includes field component and stresses demonstration of basic principles, testing existing and formulating new hypotheses, and research techniques. Two hours of lectures/3 hours of laboratory per week. Prerequisite: 50.351 or concurrent enrollment or consent of the instructor.

50.459 Ornithology (3) - Studies the biology of birds including bird identification in the field by song and sight. Studies birds of this region in relation to migration, time of arrival, and nesting. Two hours of lecture/3 hours of laboratory per week. Some study off-campus may be required. The field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. Prerequisite: 50.110 or consent of the instructor.

50.460 Population Biology (3) - Presents selected themes in the biology of animal, plant and fungal populations. Topics include: population structure and dynamics, population genetics, population ecology, and speciation. Fundamental principles, and current models and hypotheses will be stressed, along with treatments of research techniques, computer modeling, and potential for future research. Three hours of lecture/discussion per week.

50.461 Animal Behavior (3) - In depth intro-

duction to modern ethology. Emphasizes current models of animal behavior and theoretical foundations of ethology. Research and project oriented. Students may incur additional cost due to the field trip component at Marine Science Consortium, Wallops Island, Va. Three hours of lecture/2 hours of laboratory per week.

50.462 Plant Anatomy (3) - Outlines recent concepts of plant anatomy and historical consideration of classical researchers. Reviews the structure, function, growth, and morphogenesis of the vascular plants. Addresses composition and growth of meristems and the phenomena of subsequent tissue differentiation. Describes anatomical organization by developmental and comparative methods in order to explain important cell, tissue, and organ relationships. Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.120.

50.463 Biological Photographic Techniques (3) - Presents theory and practice of photography as applied to biology including negative and printmaking, gross specimen photography, copying, transparencies, film strips, autoradiography, nature work in close-ups, photomicrography, thesis illustration, and other special techniques. Two hours of lecture and 3 hours of laboratory per week. Additional laboratory hours may be required. Prerequisite: open only to majors in biology or allied health with at least junior standing.

50.470 Medical Parasitology (3) - Presents life history, physiology, taxonomy, and morphology of parasites of medical importance to humankind. Special attention given to clinical aspects such as pathology, symptomology, diagnosis, prevention, and treatment. Laboratory work stresses identification of parasitic disease through living and preserved material, the proper handling of specimens, and methods of professional patient interviewing. Five hours per week. Prerequisite: 50.110 and 52.131 or 52.216, or consent of the instructor. Completion of additional coursework in biology recommended.

50.473 Systemic Physiology (3) - Examines how normal body function is maintained by the precise control and integration of the specialized activities of the various organ systems. Three hours of lecture/ 2 hours of laboratory per week. Prerequisites: 50.271, 52.131, 52.216

and 50.371 or 50.174.

50.475 Cell Physiology (3) - Applies physical and chemical principles to cellular processes, biochemistry or cellular constituents, physiochemical environment, bioenergetics, and intermediate metabolism. Three hours lecture and discussion per week. Prerequisites: 50.271 and 6 semester hours of biology; 52.216 or 52.232 or consent of the instructor.

50.476 Neuromuscular Physiology (3) - Examines normal physiology of the nervous and skeletal muscular systems; specifically studying cellular neurophysiology, muscle contraction, sensory physiology, motor control and their integration. Three hours lecture and discussion per week. Background in mammalian or systemic physiology, biochemistry and anatomy recommended. Prerequisites: 54.112 and 50.371 or 50.473.

50.479 Cooperative Education in Biology and Allied Health Sciences (3-6) - A work-study program open to biological science majors who have completed 50.279. Differs from Internship 50.490 in that Cooperative Education must be paid and is at least a two-opportunity experience. The two cooperative education experiences may total from 9 to 12 semester hours since one of the two must be full-time (equivalent to 6 semester hours), and the second may be part-time (3 semester hours) or full-time (6 semester hours). No more than 15 semester hours in Cooperative Education and/or internship may be taken. Prerequisite: 50.279.

50.481-489 Advanced Special Topics, Biology/ Allied Health Sciences (3) - Presents an area of biology or allied health which requires the student to have some background in biology. Three semester hours may be applied to a biology major. Prerequisite: Determined by the instructor.

50.490 Internship in Biology and Biology Research (3-15) - A work-study program open only to juniors and seniors majoring in biology and allied health sciences. No more than 15 semester hours in Cooperative Education and/or internship may be taken.

50.493 Honors Independent Study I - Biological Research (3) - Consists of a laboratory or field investigation of a particular problem or topic in biology. The study will be conducted

under the supervision of a biology faculty member. The course is open to students enrolled in the B.A. and B.S. in biology degree programs. Refer to section on cooperative education, internship and independent study. Prerequisite: 50.380 and admission to the Honors Program.

50.494 Honors Independent Study II - Biological Research (3) - Consists of a laboratory or field investigation of a selected problem or topic in biology. The study will be conducted under the supervision of a biology faculty member. This course completes the requirements for Biology Honors research. Prerequisite: 50.493.

Geology and Earth Science

Administered by Department of Geography and Earth Science

51.100 Environmental Geology (3) - Application of geologic knowledge to environmental concerns. Emphasizes energy, soil, mineral, and water resources along with Earth processes that are hazardous to humans. An afternoon field trip with a nominal fee is required.

51.101 Physical Geology (3) - Studies the landscape in relation to the structure of the earth's crust; agents at work to change landforms; classification and interpretation of rocks. One semester hour optional lab; an afternoon field trip is required.

51.102 Historical Geology (3) - Examines the evolution of Earth and life on Earth as interpreted from rock and fossil evidence; particular emphasis is on the geologic history of North America. One semester hour optional lab; afternoon field trip is required.

51.111 Physical Geology Laboratory (1) - Presents an introduction to the practice of fundamental geology laboratory techniques including qualitative and quantitative analysis. Two hours of laboratory per week. It is recommended that course be taken concurrently with 51.101.

51.112 Historical Geology Laboratory (1) - Provides an interpretation of Earth's history through the identification and evolution of the rock and fossil record and through the interpretation of geologic maps. Two laboratory hours per week. It is recommended that course

be taken concurrently with 51.102.

51.255 Meteorology (3) - Studies the atmosphere via the use of gas laws and the underlying principles of atmospheric change. The field trip component incurs an additional cost to students of approximately \$20 for airfare.

51.259 Oceanography (3) - Provides an introduction to the geologic, chemical, and physical aspects of the ocean basins. Emphasizes wave motion, topographic features, ocean basin structure, current circulation, and methods of investigation. A weekend field trip is encouraged.

51.260 Earth Materials (4) - Explores the origin, occurrence and identification of the common materials and of igneous, sedimentary and metamorphic rocks, with emphasis on practical means of recognition. Three hours lecture, two hours laboratory per week. Prerequisite: 51.111.

51.261 Mineralogy (Fall) (4) - Reviews the origin, occurrence, and identifying characteristics of common minerals. Stresses megascopic and microscopic techniques. Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 and 51.111 or permission of the instructor.

51.262 Petrology (Spring) (4) - Presents megascopic and petrographic analysis and identification of rocks with emphasis on field occurrences and associations. Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.261.

51.265 Geomorphology (Fall) (4) - Study of the origin of landforms with emphasis on the geologic processes and structures that generate the landforms and applications of landform analysis. Two-day weekend field trip is required. Three hours of class, 2 hours of laboratory per week. Prerequisites: 51.101 and 51.111 or consent of the instructor.

51.320 Remote Sensing of the Earth (3) - Studies the use of remote sensing technology to explore for, monitor, and manage Earth's natural resources. Two hours of class, 2 hours of laboratory per week. Prerequisite: 53.112 or higher or consent of the instructor.

51.355 Synoptic Meteorology (3) - Presents observation and analysis of data for understanding and predicting the complexities of the atmosphere. Prerequisite: 51.255 or consent of

the instructor .

51.360 Introduction to Paleontology (4) - Introduces students to modern concepts and methods in paleobiology using examples from various groups of organisms important in the fossil record. Field trips and laboratory work are an integral part of this course. Prerequisite: 51.102, 51.112 or 50.211 or consent of the instructor .

51.369 Structural Geology (Spring) (4) - Analyzes rock deformation based upon the principles of rock mechanics and the utilization of data from field investigations. Three hours of class, 2 hours of laboratory per week. Prerequisites: 51.101 and 51.111 or consent of the instructor .

51.370 Hydrology (Fall) (3) - Study of water movement upon and within the Earth with emphasis on calculations used in flood forecasting, surface water supply, and groundwater supply. Two hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 or 51.105 .

51.451 Field Techniques in Earth Science (Summer) (6) - Provides intensive field and laboratory training in the use of equipment and techniques in geology, hydrology, and cartography. Field trips are integral, vital parts of the course. Prerequisite: 15 semester hours in earth science courses or consent of the instructor .

51.468 Stratigraphy and Sedimentation (Fall) (4) - Studies processes and agents which erode, transport, and deposit sediments and the geologic interpretation of the resulting rocks. Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 and 51.111, 51.102, 51.112 or permission of the instructor .

51.470 Groundwater Hydrology (Spring) (3) - Covers well hydraulics exploration techniques, groundwater flow theory, development of groundwater supplies, and prevention or correction of groundwater pollution. A one- or two-day field trip required. Two hours of class, 2 hours of laboratory per week. Prerequisites: 51.101 and 51.111 and 51.365 .

51.475 Independent Study in Earth Science (1-3) - Provides an opportunity for student research in various areas of earth science. Research is conducted under the supervision of a faculty member. See subsection of the cata-

log on Independent Study. Prerequisite: 21 semester hours in earth science. .

51.480 Applied Geophysics (4) - Examines the theory and application of geophysical methods for exploring the Earth's subsurface environment. Emphasis on those tools used by agencies or companies involved in resource and environmental assessment. Three hours of lecture and two hours of laboratory per week. Prerequisites: 51.101, 53.123, and 54.111 and 54.112, or permission of the instructor.

51.490 Special Topics in Geology (3) - Study of a particular concept, problem or special topic or new ideas in any area of earth science. Topic chosen through common interests of the instructor and each student. .

51.493 Bibliography and Research (3) - Provides for library and/or field research in geology. Prerequisites: 51.261, 51.262, 51.468 or consent of the instructor .

Chemistry

Administered by Department of Chemistry

52.100 Chemistry and the Citizen (3) - Discussion of chemical principles, the importance of chemistry, the use of chemicals and their impact on society and the environment. Three hours of class per week.

52.101 Introductory Chemistry (3) - Presents an introduction to chemistry for students with little or no background in chemistry. Surveys the principles of chemistry with emphasis on the fundamentals of chemical and physical measurements and calculations. Three hours of class per week. Not intended as a beginning course for science majors.

52.108 Physiological Chemistry (Spring) (4) - Surveys the essentials of organic and biochemistry. Includes bonding, structure, nomenclature, organic functional group reactions, and metabolism of biomolecules. Three hours class, two hours of laboratory per week. Prerequisite: 52.101.

52.115 Fundamentals of Inorganic Chemistry (4) - Introduces descriptive inorganic chemistry and the chemical principles necessary to understand the descriptive material. First half of two-semester sequence for natural science or mathematics majors. Partially fulfills core requirement in inorganic chemistry for Amer-

ican Chemical Society. Three hours of lecture/3 hours of laboratory per week. Prerequisite: high school chemistry or equivalent recommended.

52.131 Fundamentals of Organic Chemistry (4) - Emphasizes structure, stereochemistry, functional group organization, physical properties and classical reactivity of organic compounds. Three hours of lecture and 3 hours of laboratory per week. Prerequisite: 52.115.

52.216 Chemical Principles and Measurements (4) - Second semester of introductory chemistry for natural science and mathematics majors. Surveys principles of chemical stoichiometry, intermolecular forces, kinetics, and thermodynamics as they apply to phase, electrochemical, and acid-base phenomena. Laboratory work illustrates chemical principles and emphasizes common chemical measurements. Three hours of lecture and 3 hours of laboratory per week. Prerequisite: 52.115 plus high school Algebra II or equivalent.

52.232 Intermediate Organic Chemistry (4) - A continuation of organic topics, building on 52.131. Introduces spectroscopy and the application toward structure determination. Emphasizes reaction mechanisms, stereochemistry, syntheses, and analyses of representative compounds. Three hours of lecture and 4 hours of laboratory per week. Prerequisite: 52.131.

52.233 Organic Spectroscopy (2) - Introduces spectroscopy to complement physical property characterization of organic compounds. Recommended for biology and allied health majors. Includes laboratory attainment of spectra and interpretation. Two hours of lecture-problem solving per week. Prerequisites: 52.131, 52.232 completed or concurrent.

52.321 Analytical Chemistry I (3) - Introduces fundamental principles of chemical analysis utilizing classical wet chemistry and modern instrumental techniques. Stresses laboratory skills in the analysis of common commercial or environmental materials. Two hours of lecture and 4 hours of laboratory per week. Prerequisite: 52.216.

52.322 Analytical Chemistry II (4) - Presents the theory and laboratory applications of common methods of instrumental analysis. Topics include spectrophotometry, chromatography, mass spectrometry, nuclear magnetic reso-

nance, and electrochemistry. A laboratory centered course. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: 52.321, 52.362 completed or concurrent.

52.281 Introduction to Scientific Literature (Fall) (1) - Stresses the use of the library and scientific journals to facilitate the formulation of scientific research proposals and presentations. Experience gained in using the literature to design a senior research project and to make presentations to an audience of faculty and peers. One hour class per week. Prerequisite: advanced standing as a natural science major.

52.341 Biochemistry (4) - Emphasizes structure, reactivity, and metabolic reactions of the naturally occurring biomolecules. Discusses selected topics from the various metabolic pathways (both anabolic and catabolic). Introduces biochemical techniques encountered by the modern biochemist. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: 52.131, 52.216.

52.361 Physical Chemistry I (Fall) (4) - Studies thermodynamics; Gibbs free energy and equilibrium; kinetic theory of gases and solutions; chemical kinetics. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: 52.115, 52.216, 53.225, 54.212.

52.362 Physical Chemistry II (Spring) (4) - Continuation of 52.361; Schrodinger quantum mechanics, solid state, molecular orbital theory; spectroscopy. Three hours of lecture and 4 hours of laboratory per week. Prerequisite: 52.361.

52.442 Biochemistry II (4) - Continuation of 52.341; amino acid metabolism, photosynthesis, nucleotide metabolism, replication, transcription, translation, control of gene expression, molecular physiology. Laboratory to emphasize enzyme isolation and molecular biology techniques. Three hours of lecture and 3 hours of laboratory per week. Prerequisites: 52.341.

52.482 Advanced Topics in Chemistry (3) - Advanced course dealing with specialized topics of interest to students in ACS degree track. Subject matter varies. Course may be taken more than once provided subject matter is not repeated. Prerequisite: Consent of the instructor.

52.452 Advanced Inorganic Chemistry (Spring) (4) - Theories and principles of inorganic chemistry; coordination chemistry, organometallic chemistry, systematic analysis of periodic relationships and properties of important elements. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: 52.115; 52.362 concurrent.

52.491 Independent Study I: Special Topics in Chemistry (1-3) - Entails a directed laboratory or library oriented investigation of one or more topics of mutual interest to student and instructor.

52.492 Independent Study II: Introduction to Research (1-3) - Requires a search of chemical literature and a written survey report of the search. A detailed plan of research (to be implemented in 52.493) is developed in a second written report. Prerequisite: approval of chemistry department.

52.493 Independent Study III: Chemical Research (3) - Investigations of selected chemical problems for advanced students. Approximately 120 hours per semester. Prerequisites: 52.492, approval of chemistry department.

52.494 Honors Independent Study IV: Chemical Research (3) - The third semester of a laboratory investigation of selected problems under the supervision of a chemistry faculty member. Approximately 120 hours per semester. Prerequisite: enrollment in the honors program.

52.498 Internship in Chemistry (3-15) - A work-study program, this course is not applicable toward a major or minor in chemistry. Prerequisites: approval of chemistry department; junior or senior standing.

Mathematics

Administered by Department of Mathematics and Computer Science

53.101 Mathematical Thinking (3) - Presents mathematical topics and applications in a context designed to promote quantitative reasoning and the use of mathematics in solving problems and making decisions. Suitable for majors in humanities, education, and others seeking a broad view of mathematics. No background in algebra required.

53.111 Finite Mathematics (3) - Presents an

introductory development of counting techniques, probability spaces, and game theory. Prerequisite: two years of high school algebra or equivalent.

53.112 Trigonometry (3) - Studies elementary algebraic functions and relations, exponential, and logarithmic functions, circular functions, and inverse functions, and their applications. Prerequisite: 53.114 or two years of high school algebra or high school trigonometry or their equivalent.

53.113 Pre-Calculus (3) - Studies elementary algebraic functions and relations, exponential, and logarithmic functions, circular functions and inverse functions, and their applications. Prerequisite: 53.114 or two years of high school algebra or the equivalent.

53.114 College Algebra (3) - Studies fundamental algebraic concepts and develops the mathematical and computation skills necessary to apply algebraic techniques to problems in business, economics, the social and natural sciences, and the liberal arts. Prerequisite: 1 1/2 years of high school algebra or the equivalent. Not open to students with credit for 53.112 or higher.

53.118 Applied Matrix Algebra (3) - Introduces vectors, matrices, linear equations, and linear programming with applications to the social and biological sciences and business. Prerequisite: two years of high school algebra or equivalent.

53.123 Essentials of Calculus (3) - Presents the basic concepts of elementary calculus in a non-rigorous approach for students who are not mathematics majors. Pertinent topics in the real number system, analytic geometry, functions, and limits prepare the student for the study of the basic techniques of applications of differentiation and integration. Course is not for chemistry, mathematics or physics majors. Prerequisite: At least two years of high school algebra, or 53.114 or consent of the instructor.

53.124 Essentials of Calculus II (3) - Techniques and applications of integration with an introduction to infinite series and elementary differential equations as a continuation of 53.123. Course is not for mathematics, chemistry, or physics majors. Prerequisite: 53.123 or consent of the instructor.

53.125 Analysis I (3) - Designed to meet part of the major-level mathematics requirement; first in the sequence of four calculus courses. Provides the basic tools for differentiation and the beginnings of integration for functions of a single variable. Prerequisite: four years of high school mathematics including a year of elementary functions or equivalent of 53.113. TI-85 graphical calculator is required.

53.126 Analysis II (3) - Studies techniques of integration, functions, infinite series, Taylor's theorem, some special differential equations, and polar coordinates. Prerequisite: 53.125. TI-85 graphical calculator is required.

53.141 Introduction to Statistics (3) - Presents the concepts necessary to use and understand basic statistical techniques. Topics include: descriptive statistics, probability, random variables, sampling distributions, hypothesis tests, confidence intervals, and analysis of variance. Prerequisite: High school algebra.

53.185 Discrete Mathematics (3) - An introduction to set theory, logic, combinatorics, and graph theory for those interested in mathematics or computer science. Not usually taken during the freshman year. Prerequisite: 53.125 or consent of the instructor.

53.201 Theory of Arithmetic (3) - Presents the language of sets, the four elementary operations through the real number system, and the elementary theory of numbers. Course is open only to majors in elementary education, special education or communication disorders.

53.202 Geometry and LOGO for Elementary Teachers (3) - Presents the content of geometry for the elementary curriculum using geometric models, inductive reasoning, and the LOGO computer language. Course is open only to majors in elementary education, special education or communication disorders. Prerequisite: Sophomore status or above or consent of the instructor.

53.225 Analysis III (3) - Presents infinite sequences and series, power series, Taylor and Maclaurin series, three dimensional vector analysis, and partial derivatives. Prerequisite: 53.126.

53.226 Analysis IV (3) - Presents an introduction to the differentiation and integration of real valued functions of several variables. Presents curves and parametric equations, surfac-

es, Taylor's, Stoke's, and Green's theorems, functions between Euclidean spaces, and multiple integrals. Prerequisite: 53.225.

53.231 College Geometry (3) - Presents elementary geometry from an advanced standpoint. Discusses incidence in the plane and in space, congruence, inequality, and similarity concepts. Studies properties of circles, polygons, and spheres. Prerequisite: High school geometry, 53.185.

53.241 Probability and Statistics (3) - Calculus-based study of probability and statistics. Topics covered include: descriptive statistics, probability, discrete and continuous random variables, common distributions, sampling distributions, estimation procedures, and inferential statistics. A more rigorous course than 53.141. Prerequisites: 53.126 (or concurrent) and 53.185.

53.243 Nonparametrics Statistics (3) - Presents standard nonparametric statistical procedures. After a brief review of hypothesis testing fundamentals, topics such as goodness-of-fit tests, one and two-sample procedures for location parameter, tests of randomness, and association analysis are covered. Prerequisites: 53.123 or 53.125 and 53.141 or the equivalent.

53.310 Introduction to Abstract Algebra (3) - Provides an introduction to the language and methods of abstract mathematics. Subjects include sets, relations, rings, functions, groups, and fields. Prerequisites: 53.185 and 53.225.

53.311 Algebra for Secondary School Teachers (Fall/even-numbered years) (3) - Presents topics of elementary algebra from an advanced viewpoint. Considers topics of contemporary school mathematics programs. Intended for students in secondary education majoring in mathematics. Prerequisite: 53.310.

53.314 Linear Algebra (3) - Studies abstract vector spaces, linear transformation, matrices, determinants, inner product spaces, and related topics. Prerequisites: 53.185 and 53.225.

53.322 Differential Equations (3) - Studies elementary ordinary differential equations, infinite series and power series solution, some numerical methods of solution, and LaPlace transforms. Prerequisite: 53.225.

53.331 Modern Geometry (Spring/odd-numbered years) (3) - Presents non-Euclidean geometrics and their development from postulate

systems and a formal approach to projective geometry. Prerequisite: 53.231.

53.341 Statistical Methods (Fall, even-numbered years) (3) - Presents common statistical techniques with emphasis on applications. Topics include: confidence intervals, hypothesis test, regression analysis, and analysis of variance. Strongly encourages use of statistical software, especially SAS. Prerequisite: 53.141 or 53.241 or consent of the instructor.

53.342 Design and Analysis of Experiments (Spring, odd-numbered years) (3) - Basic experimental statistics including methods of estimation and hypothesis testing, analysis-of-variance procedures, principles of experimental design, completely randomized and randomized complete block designs, factorial arrangements of treatments, linear regression and correlation analysis, covariance analysis and distribution-free methods. Prerequisite: 53.141 or 53.241 or consent of the instructor.

53.343 Applied Regression Analysis (Fall, odd-numbered years) (3) - A basic course in multiple linear regression methods including weighted least squares, stepwise regression, residual analysis, and applications to mathematical models. Treats problems which involve the use of computing equipment. Prerequisite: 53.141 or 53.241 or consent of the instructor.

53.360 Number Theory (3) - Presents the theory of numbers. Includes the topics of Euclidean algorithm, congruences, continued fractions, Gaussian integers, and Diophantine equations. Prerequisites: 53.185 and 53.225.

53.361 Coding and Signal Processing (Fall) (3) - A mathematical approach to codes and ciphers. Includes security codes, coding for efficiency in computer storage, error-correcting codes. Signal processing, including the Fourier transform and digital filters. Individual projects required. Prerequisites: 53.126 and 56.116 or 56.122.

53.373 Numerical Methods in Computing (Fall) (3) - Analysis and application of various methods of numerically solving problems in the areas of nonlinear equations; systems of equations, interpolation, and polynomial approximation; numerical integration; approximation theory; and differential equations. Students design and execute algorithms on the

computer for specific numerical procedures. Prerequisites: 56.116 or 56.121, and 53.126.

53.374 Introduction to Discrete Systems Simulation (Spring/odd-numbered years) (3) - Studies the ways that systems can be modeled for computer solution. Emphasizes stochastic behavior by discrete random processes and the simulation tools for their solution. Prerequisites: One course each in calculus, programming, and statistics.

53.381 Introduction to Operations Research (Fall/odd-numbered years) (3) - A survey of the methods and models used in applying mathematics to problems of business. Topics drawn from decision making, linear, and dynamic programming, networks, inventory models, Markov processes, and queuing theory. Prerequisites: 53.118 and 53.123 or 53.225.

53.411 Introduction to Group Theory (Alternate years) (3) - Study of theorems and applications of group theory begun in abstract algebra continued. Prerequisite: 53.310.

53.421 Advanced Calculus (Fall/even-numbered years) (3) - Presents a rigorous treatment of the concepts of limit, continuity, derivative, and integral for functions of a single real variable. Prerequisites: 53.226, consent of the instructor.

53.422 Complex Variables (Fall/odd-numbered years) (3) - Presents a rigorous treatment of the complex numbers and theory of functions of a complex variable, limits, continuity, analytic functions, Cauchy-Riemann equations, contour integrals, conformal mappings, and applications. Prerequisites: 53.226, consent of the instructor.

53.451 Introduction to Topology (Alternate years) (3) - Introduces fundamentals of general topology; elementary set theory, topological spaces, mappings, connectedness, compactness, completeness, product and metric spaces; nets and convergence. Prerequisites: 53.226, consent of the instructor.

53.461 Probability Models and Applications (Spring, even-numbered years) (3) - An introduction to elementary stochastic processes and their applications to various phenomena in engineering, management science, the physical and social sciences, and operations research. Prerequisite: 53.241.

53.462 Introduction to Mathematical Statistics

(Fall, even-numbered years) (3) - An introductory study of mathematical statistics including distributions of functions of random variables, interval estimation, statistical hypotheses, analysis of variance, and the multivariate normal distribution. Prerequisite: 53.241.

53.471 Numerical Analysis (Spring/even numbered years) (3) - Provides a computer-oriented analysis of algorithms of numerical analysis. Includes the topics of non-linear equations, interpolation and approximation, differentiation and integration, matrices and differential equations. Prerequisite: 53.322 and 53.373.

53.472 Matrix Computation (Spring/odd numbered years) (3) - Presents a computer-oriented analysis of matrices. Includes Gaussian reduction, LDU factorization, special reduction techniques for tridiagonal matrices, iterative methods, and a study of the matrix eigenvalue problem. Prerequisites: 53.225 and 53.373.

53.491 Special Topics in Mathematics (3) - Presents an area of mathematics which is not available as a regular course offering. Prerequisite: Consent of the instructor.

53.492 Independent Study in Mathematics (1-3) - Provides for directed study of a particular area of mathematics as mutually agreed upon by the student and the instructor. Emphasizes individual scholarly activity of the highly motivated student.

53.493 Honors in Independent Study in Mathematics (3) - For students who have demonstrated a high level of interest and ability in mathematics and have mastered the required course work. Students investigate research problems selected under the supervision of a faculty member of the Department of Mathematics and Computer Science. Prerequisite: Admission to the Honors Program in natural sciences and mathematics.

53.497 Internship in Mathematics (2-12) - Provides mathematics majors with an opportunity to acquire meaningful and professional on-site training and learning experiences in mathematics at an industrial, private or business workplace. Note: a student may, with departmental approval, apply a maximum of 3 credits of internship toward the fulfillment of the mathematics major. Each academic credit requires 40 hours of supervised work and the limit is 12 total semester hours for internships. Prereq-

uisites: students must establish adequate course preparation for the proposed internship. Internship applications must be submitted one month before the internship begins and must be approved by the department chairperson.

Physics

Administered by Department of Physics

54.101 Basic Physical Science (3) - An introductory integration of concepts and principles from chemistry, physics, and astronomy, with consideration for the nature of scientific thought and the interaction of science with human and community concerns. For nonscientists.

54.103 Principles of Physical Science (3) - An integrated physical science course emphasizing laboratory experience. Provides an introduction to the basic concepts of physical science by studying such topics as the structure and properties of matter, motion and forces, energy, light and sound, electricity and magnetism, and astronomy. For elementary education majors. Four hours class/laboratory per week.

54.104 Elementary Electronics (3) - An introduction to basic electronics that gives students in nonphysical science areas some theoretical and practical knowledge of electronic circuits, instruments, and devices. No experience of physics or electronics required.

54.105 Energy: Sources and Environmental Effects (3) - Explains energy in elementary scientific terms and examines present national and international energy situations in regard to sources, utilization, and environmental effects. Surveys fossil fuels and nuclear, solar, geothermal, and other energies with respect to availability and promise for the future.

54.106 The Science of Sound (3) - Provides an introduction to the principles of sound and its reproduction for students in nonphysical science disciplines. Knowledge of basic algebra required, but no experience in physics or electronics necessary.

54.107 Applied Physics for Health Sciences (Spring) (4) - Studies selected principles of physics with applications to the processes and instrumentation of medical technology. Examines mechanics, fluids, kinetic energy and heat,

optics, electricity and magnetism, electronics, atomic structure, radiation, and data acquisition and readout. Six hours per week: 3 classes, 3 laboratories.

54.110 Introduction to Astronomy (3) - Surveys the physical state of the universe and the variety of objects it comprises: solar system, stars, galaxies. Provides a descriptive account of the present state of our knowledge of the cosmos and an understanding of how such knowledge is obtained. Intended for nonscience majors.

54.111 Introductory Physics I (Fall) (4) - Presents an approach to selected topics such as mechanics, heat, kinetic theory, molecular theory of gases, wave motion, and sound. Not intended for students specializing in physics or chemistry. Six hours per week: 3 classes, 3 laboratories.

54.112 Introductory Physics II (Spring) (4) - Studies electricity, magnetism, light, relativity, quantum and atomic theory, structure of matter, nuclear physics and particle physics. Continuation of 54.111. Six hours per week: 3 classes, 3 laboratories. Prerequisite: 54.111 or consent of the instructor.

54.180 Computer-Aided Design and Engineering Graphics (3) - Course provides hands-on introduction to computer aided design (CAD) with an emphasis on basic engineering graphics. Culmination of course is a team design and construction project.

54.210 Observational Astronomy (Spring) (3) - Provides hands-on experience in observations of the night sky. Focuses on the interpretation of astronomical measurements, including the students' own telescopic observations of stars, planets, nebulae, and other objects. Open to non-science majors. Prerequisite: 54.110 or consent of the instructor.

54.211 General Physics I (4) - An introduction to physics using calculus. Studies mechanics, the physics of fluids, kinetic theory, heat, and thermodynamics. Appropriate for physical science or mathematics majors. Six hours per week: 3 classes, 3 laboratories. Prerequisite: 53.125 or concurrent registration.

54.212 General Physics II (4) - Studies wave motion, sound, geometrical and physical optics, electricity, and magnetism. Continuation of 54.211. Six hours per week: 3 classes, 3 laboratories. Prerequisites: 53.126 or concurrent

registration; 54.211 or 54.111 with consent of the instructor.

54.301 Mechanics: Statics (Fall/alternate years) (3) - Introduces the fundamentals of statics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in the engineering field. Prerequisites: 53.126 or concurrent registration; 54.211 or 54.111 with consent of the instructor.

54.302 Mechanics: Dynamics (Spring/alternate years) (3) - Introduces the fundamentals of dynamics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in an engineering field. Prerequisites: 53.225 or concurrent registration; 54.212 or 54.112 with consent of the instructor.

54.310 Modern Atomic Physics (Fall) (3) - Presents some of the basic concepts and phenomena that constitute modern physics, including studies of the quantum nature of radiation, atomic structure and spectra, X-rays, relativity, wave-particle duality, the uncertainty principle, and a brief introduction to nuclear physics and radioactivity. Prerequisite: 54.212 or 54.112 with consent of the instructor, 53.126.

54.314 Electricity and Magnetism (Alternate years) (3) - Studies electric and magnetic fields and potentials, electric and magnetic properties of matter, electrodynamics, and electromagnetic waves. Prerequisites: 54.212, or 54.112 with consent of the instructor, 53.225.

54.315 Electronics (Alternate years) (4) - Presents the theory and application of semiconductors with special emphasis on circuitry. Studies basic electronic instrumentation as related to the gathering, processing, and display of scientific data in any discipline. Six hours per week: 3 classes, 3 laboratories. Prerequisite: 54.112 or 54.212.

54.316 Digital Electronics (Alternate years) (3) - An introduction to the techniques and devices of digital electronics. Includes practical experience of the building and testing of digital circuits. Supplies the background necessary for the understanding of microprocessors and computer circuits. Prerequisite: junior standing or consent of the instructor.

54.317 Computer Electronics (Alternate years) (3) - An introduction to the electronics and

operation of digital computers. Intended for students with a background in digital circuitry. Includes practical experience of the operation and interfacing of microprocessors and other devices. Prerequisite: 54.316 or consent of the instructor.

54.318 Optics (Alternate years) (4) - Presents a combination of geometrical optics including lens theory with physical (wave) optics including diffraction, interference, polarization, lasers, and coherent light. Six hours per week - 3 classes, 3 laboratory. Prerequisite: 54.212 or 54.112 with consent of the instructor.

54.320 Nuclear Radiations I (Alternate years) (2) - Presents a laboratory-oriented course using modern nuclear electronics and detectors for measuring and analyzing nuclear radiations. Four hours per week: one class, 3 laboratories. Prerequisite: 54.310 or concurrent registration.

54.330 Radiation Physics (Alternate years) (3) - Presents properties and models of nuclei, radioactive decay, radiation and its interaction with matter, and nuclear applications. Prerequisite: 54.310 or concurrent registration.

54.341 Astrophysics: Galaxies and Cosmology (3) - Focuses on objects outside of our own galaxy, discusses emission mechanisms from other types of galaxies including normal spirals, seyferts and quasars. Structure of the universe as a whole is described using various cosmological models. Prerequisites: 53.126 and 54.112 or 54.212.

54.360 Health Physics (Alternate years) (3) - Presents a study of the principles of health physics, including biological effects of radiation, dosimetry, radiation measurement and radiation protection. Prerequisite: 54.310 or concurrent registration.

54.400 Advanced Physics Laboratory (Alternate years) (2) - Presents the basic tenets of lab work in physics, involving considerations of experimental error, proper research and preparation of an experiment. Includes experiments primarily from the areas of atomic physics, electricity, magnetism, and optics. Four hours per week: one class, 3 laboratories. Prerequisites: 54.310.

54.420 Nuclear Radiations II (Alternate years) (2) - A laboratory course which presents advanced techniques of nuclear measurement,

and includes applications involving environmental monitoring and health physics. Four hours per week: one class, three laboratories. Prerequisite: 54.320 or consent of the instructor.

54.421 Solid State Physics (Alternate years) (3) - Examines physical properties of matter in the solid state. Reviews basic quantum concepts, crystal structure, electrons in metals, electrical conductivity, semiconductors, band theory and the p-n junction. Studies dielectric and magnetic properties of matter. Prerequisites: 54.310 54.314., 53.225.

54.422 Thermodynamics (Alternate years) (3) - Presents concepts and principles of classical thermodynamics, thermodynamics of simple systems, introduction to kinetic theory, and statistical thermodynamics. Prerequisites: 54.212 or 54.112 with consent of the instructor, 53.225.

54.450 Introduction to Quantum Mechanics (Alternate years) (3) - Examines the development and interpretation of Schrodinger's wave mechanics, its mathematical formalism, and the results and predictions of this quantum theory as applied to one-dimensional systems, the hydrogen atom, and multi-electron atoms. Prerequisites: 54.310, 53.225.

54.460 Applied Health Physics (Alternate years) (3) - Presents advanced topics involving health physics principles and radiation protection standards as applied to science, industry, and medicine. Prerequisite: 54.360 or consent of the instructor.

54.490 Seminar in Physics (1) - A selected topic in physics is studied, and prepared in a form suitable for presentation. Student attends and participates in physics seminars and makes a presentation in the same semester of enrollment in the course.

54.491 Independent Study in Physics (1-3) - Investigates an area of special interest and value to the student, under the direction of a faculty member, following a plan approved in advance by the department chairperson. May be partly interdisciplinary and may involve limited experimental work.

54.493 Independent Research (1-3) - Provides for an application of theoretical and/or experimental research methods to a special problem. May be interdisciplinary. Requires the

preparation of a report and a plan, approved in advance by the department chairperson, which is acceptable to the student and the supervising faculty member.

54.494 Honors Independent Study in Physics (3) - Provides the qualified student with an opportunity to participate in an advanced experimental or theoretical investigation of a current problem in physics, under the supervision of a physics faculty member having expertise in the student's proposed research area.

Marine Science

Administered by Department of Biological and Allied Health Sciences and Department of Geography and Earth Science

Marine Science courses are offered during the summer at the Marine Science Center in Wallops Island, Virginia. Bloomsburg University and other institutions are members of the consortium that operates the center. Courses are offered which satisfy requirements for biology majors, for earth science majors, and for general education. Specific courses satisfy requirements for the Marine Biology Option in Biology. Other courses provide earth science majors experiences which are not available on the main campus. For more information, contact the Marine Science coordinators in the Departments of Biological and Allied Health Sciences and Geography and Earth Science.

55.110 Introduction to Oceanography (3) - An introduction to the marine sciences with an emphasis on physiography of ocean basins, wave motion, tides, current circulation patterns, near-shore processes, physical and chemical nature of sea-water, and methods of investigation.

55.211 Field Methods in Oceanography (3) - Familiarizes students with the dynamic marine environment and with work on board a research vessel. Introduces the use and application of standard oceanographic instruments and sampling devices. Independent research is promoted and encouraged. Prerequisite: 51.259 or 55.110.

55.221 Marine Invertebrates (3) - 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. Prerequisite: 50.110, 50.120 or consent of the instructor.

55.241 Marine Biology (3) - A study of plant and animal life in the marine environment. Emphasis on physical and chemical environmental factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristics of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships. Prerequisite: 50.110, 50.120 or consent of the instructor.

55.250 Wetlands Ecology (3) - Biological, chemical, and geological characteristics of coastal wetlands. Considers the structure and function of wetlands, human impacts on wetlands, and approaches for wetland management and restoration. Laboratory consists of field exercises in the study of wetlands. Prerequisite: 50.110, 50.120.

55.260 Marine Ecology (3) - Interrelationships among animals, plants, and physical and chemical aspects of the environment studied, with stress on adaptations for survival that are unique to the marine environment.

55.270 SCUBA Diving (3) - Basic SCUBA diving coupled with advanced techniques. Leads to open-water certification. Prerequisite: Swimming Proficiency and physicians certification of fitness for SCUBA are required.

55.300 Behavior of Marine Organisms (3) - Concepts of ethology; discussion and observation of the influence of external and internal factors on the regulation; and control of behavior of organisms living in the marine coastal environment. Prerequisite: 50.110.

55.320 Marine Microbiology (3) - A survey of methods and concepts of marine microbiology. Focus on the technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, and methods of enumeration and identification with emphasis on marine bacteria. Prerequisite: 50.110, 50.120.

55.330 Tropical Invertebrates (3) - Introduction to tropical invertebrates, using a variety of collection and observation methods to sample nearshore and reef areas. Emphasis on sys-

tematics and ecology using the communities approach. One week at Wallops Island, Va., for intensive review of general systematics and ecology of marine invertebrates; then two weeks in Florida sampling and identifying species and describing ecological communities. Course is a sequel to marine invertebrates or a landlocked invertebrate zoology course or a thorough landlocked zoology course. Prerequisites: 55.221 or 50.211.

55.331 Chemical Oceanography (3) - A field-based study of ocean, bay, and estuarine environmental chemistry. Develops and awareness of the relationships between chemical, geological, and biological environments. Investigates the chemical compositions of waters and substrata and biogeochemical processes and cycles. Prerequisite: 52.215.

55.342 Marine Botany (3) - Taxonomy, physiology, ecology, and economic importance of marine and coastal plants as exemplified by those found on the Delmarva Peninsula. Laboratory techniques include collecting, preserving, identifying, and analyzing plants and plant materials, appropriate instrumentation to be used. Emphasis on in-the-field studies and laboratory analyses. Prerequisite: 50.110, 50.120.

55.343 Marine Ichthyology (3) - A study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space. Prerequisite: 50.110, 50.120.

55.345 Ornithology (3) - Introduces avian fauna of the sea coast and enables comparison with inland species. Field work provides visual and vocal identification; lecture material includes information on distribution, behavior, physiology, and anatomy of birds. Prerequisite: 50.110, 50.120.

55.362 Marine Geology (3) - Structure and sedimentology of ocean basins and shores. Presents methods of geological exploration in the marine environment, features of ocean basins, and theories of ocean basin evolution. Prerequisite: 51.101, 51.102, 51.111, 51.112 and 51.259 or 55.110.

55.364 Physical Oceanography (3) - A study of the physical properties of the oceans including: mass and energy budgets; theory of the distribution of variables; cause, nature, measurement, analysis, and prediction of tides,

currents and waves; and basic instrumentation in field work. Prerequisite: 51.259 or 55.110, or 53.125, and 54.112 or permission of instructor.

55.394 Comparative Physiology of Marine Organisms (3) - This course will provide an introduction to the physiology of marine organisms utilizing a comparative approach. The lecture will introduce the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomotion, and sensory systems by drawing comparisons between the mechanisms and strategies utilized by a wide range of marine organisms. Laboratory and field work will focus on the physiological responses of marine plants and animals to common environmental stresses such as salt load, temperature variation, depletion of dissolved oxygen, and tidal flux. This will be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting. Prerequisite: 50.110, 52.115, 52.131, 55.241, or permission of instructor.

55.430 Coastal Sedimentation (3) - A study of depositional environments of marine dominated shorelines, sediments, sedimentation processes, sedimentary facies, models of rock record growth, barrier island dynamics, and development of tidal deltas. Prerequisites: 51.101, 51.102, 51.111, 51.112 or permission of instructor.

55.431 Ecology of Marine Plankton (3) - Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons made between planktonic populations of various types of habitats in relation to primary and secondary productivity. Prerequisite: 50.110, 50.120.

55.432 Marine Evolution Ecology (3) - The study of the ecological mechanisms underlying evolutionary processes. This course is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. Marine, estuarine and maritime organisms are used as model systems and processes which affect marine populations are emphasized.

55.441 Biology of Molluscs (3) - An evolutionary, functional and ecologic approach to studying the second largest group of animals and

perhaps the most diverse in terms of morphological, ecological and behavioral variations. Prerequisites: 50.110, 50.221 recommended.

55.459 Coastal Geomorphology (3) - Study of coastal geomorphology with an emphasis on Late Cenozoic and Pleistocene sea and lake-level changes in response to world-wide glaciation. Students participate in field studies of Pleistocene deposits and the weathering and erosion of these deposits. Prerequisites: 51.101, 51.102, 51.111, 51.112.

55.464 Biological Oceanography (3) - Interdisciplinary study of the interactions between biological communities and the ocean environment as seen by distributions of coastal plankton, fish, and benthic invertebrates. Projects will involve boat trips to sample populations and to quantitatively document environmental variables with state-of-the-art equipment, laboratory and field experiments to determine rate processes, and visits to nearby field and government laboratories. Examples of project topics include transport of plankton at barrier island passes, effect of submarine banks on fish populations, ground truth data for satellite imagery, and other current topics in biological oceanography. Prerequisites: 50.110, 50.120, 50.242. Recommended: 51.259 or 55.110.

55.470 Research Diver Methods (3) - Study and practice of aquatic research methods using SCUBA as a tool. Advanced research diving topics include areas such as navigation, search-and-recovery, underwater photography, survey methods, estimating population parameters, and data acquisition while under water. Specific research techniques will be presented in the context of specific aquatic research projects conducted by students under the direction of the instructor. Prerequisites: 50.110 and Basic SCUBA Certification (NAUI, PADI, SSI).

55.490 Marine Aquaculture (3) - This course includes the theory and practice of raising organisms for food and for the aquarium trade. Techniques of raising economically important organisms from the egg stage to marketable size and their food supplies are studied.

55.491 Coral Reef Ecology (3) - A study of coral reef structure, formation, types and relationships of reef organisms to their environment. Emphasis on species diversity, identification, symbioses and effects of temperature, salinity,

light, nutrient concentration, predation and competition on the abundance and the distribution of coral reef organisms. Prerequisites: 50.110, 50.120 and SCUBA and/or snorkeling experience.

55.492 Marine Mammals (3) - Study of the distribution, population, ecology, behavior, physiology and adaptations of marine mammals. Students collect physiological and behavioral data at field sites and facilities studying marine mammals. Prerequisites: 50.110, 50.120, 50.212 or 50.361 recommended; preferences given to senior students in registering.

55.500 Problems in Marine Science (3) - Graduate students may pursue one of the following options: *Option A* - Enroll in 200, 300, or 400 level course offered at the Marine Science Center in which they desire advanced work and complete, in addition to the regular course requirements, an approved project in the area under the direction of the instructor. Written permission from the instructor is required. OR - *Option B* - Enroll in an Independent Research Project. To be admitted, a student must submit a research proposal to the academic committee of the Marine Science Consortium. The proposal must include the scope and duration of the proposed research, equipment and facilities required, and a recommendation and approval from the student's academic adviser. Requires written permission for graduate credit acceptability from the chairperson of the graduate committee of the Department of Biological and Allied Health Sciences before registering. Copies of this approval and the instructor's permission must be forwarded to the academic director of the Marine Science Center before the student arrives on station to take the course.

55.540 Environmental Science Education (3) - Field-oriented approach to environmental education with special emphasis upon coastal zones. Students relate their own disciplines to education for quality environments. Consideration will be given to sources, facilities, methods, techniques, and concepts used in environmental education.

55.541 Biology of Mollusca (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

ecologic approach to studying this important group of organisms.

55.593 Behavioral Ecology (3) - Designed to present animal behavior within an ecological and evolutionary context. Presents mathematical and theoretical framework of behavioral ecology. An in-depth exploration of the ways in which the behavior of animals is influenced by the environment, especially with regard to resource distribution.

Computer Science

Administered by Department of Mathematics and Computer Science

56.110 Introduction to Computer Science (3) - Presents an introduction to computers and data processing - what they are, how they function, how they are controlled, and how they are used in problem solving. Basic concepts include hardware, I/O systems, data communication and storage, flow charting, and programming in BASIC on a microcomputer. Hands on experience with word processing, spreadsheets, and data base software is required. Not appropriate and credit for 56.110 will not be given to a student who has taken Computer and Information Systems 92.150.

56.116 Algorithmic Processes for Computers (3) - Emphasizes concepts of FORTRAN 77; input and output, program documentation and control, structured programming, extended modes of arithmetic, character strings, and program development and execution. May not be used toward the Computer Science major. Prerequisite: Programming experience or consent of the instructor.

56.121 Computer Science I (4) - A programming course for students with no prior programming experience. Teaches students how to write programs to solve problems using C++ language. Problem-solving methods are presented and some basic object-oriented programming design issues are discussed. Students given extensive "hands-on" experience with guidance from the instructor Prerequisite: 56.110 or the equivalent.

56.122 Computer Science II (4) - A continuation of Computer Science I. Emphasizes software engineering principles in the context of programming. Elementary program performance analysis is performed. Class covers

searching and sorting algorithms. Pointers and dynamic structures: linked lists, stacks, queues and binary trees will also be studied. Advanced object-oriented design methodologies and recursion will be introduced. Prerequisite: 56.121.

56.221 Computer Science III (4) - Increases the student's breadth and flexibility as a programmer and is a prerequisite for most 300 and 400-level courses in computer science. Covers C and C++ languages as well as editing, compiling and debugging in a Unix environment. Introduces nonlinear data structures and hashing, and emphasizes object-oriented programming and design. Prerequisite: 56.122.

56.240 Assembly Language Programming (Spring) (3) - Advanced topics in programming with a microcomputer, introductory concepts of microcomputer architecture, operating systems, and machine and assembly language for microprocessors. Prerequisite: 56.122.

56.250 Programming Language Paradigms (3) (Spring) - Gives an introduction to the functional, logical and object-oriented programming language paradigms. Entering students should already have at least one year of experience with a block structured procedural language. Course gives students a better understanding of programming languages in general and will specifically lead to an understanding of how to use a specific language from three different programming language paradigms to solve programming problems. Prerequisite: 56.122 or equivalent.

56.305 Computer Applications in Secondary School Mathematics (Spring/odd-numbered years) (3) - Studies the theory, design, and usage of a computer as an instructional or training tool. Uses microcomputer to demonstrate and develop software applications. Prerequisite: 56.121.

56.323 Artificial Intelligence (Fall, even numbered years) (3) - Provides an understanding of the philosophy, content, methods, successes and failures of artificial intelligence. Course includes history of artificial intelligence, knowledge representation, game playing, expert systems, logic and theorem proving, search strategies, natural language processing, neural networks, genetic algorithms and problem solving. Prerequisite: 56.250.

56.330 Digital Design (Spring) (3) - Design of combinational and sequential circuits. Coding, various instruction formats and representation of data. Memory, central processors, input-output devices. Introduction to computer architecture. Characteristics and features of some existing computer systems. Prerequisites: 56.122, 53.185.

56.350 Organization of Programming Languages (Fall) (3) - An introduction to the issues of programming languages: syntax, semantics, parsing, language specification, and analysis. Emphasis on the run-time behavior of programming language constructs. Prerequisite: 56.250.

56.355 Analysis of Algorithms and Data Structures (Spring) (3) - A detailed analysis of algorithms and data structures. Examination of theoretical and experimental performance of algorithms and data structures. Particular attention to algorithms for searching and sorting and techniques for implementing and manipulating various data structures: stacks, queues, trees, graphs, and files. Prerequisites: 56.221, 53.185, 53.126.

56.356 Windows Programming (Spring/even-numbered years) (3) - Introduces object oriented programming including the concepts of objects, windows environment, inheritance, encapsulation, polymorphism, and event driven programming. Participation in the development of a large scale application project is required. Prerequisite: 56.221 or 56.250.

56.357 Principles of Database Design (Fall/even-numbered years) (3) - Considers the principal functions of a database management system. Basic concepts used by all database models will be taught. Details of the hierarchical, network and relational database models will be studied in detail. Course examines query languages in general and uses a data manipulation language (DML) and studies its applications. Students implement a relational database management system that involves execution of operations such as an intersection, union, difference, join and multijoins of relations. Study of a commercially available DML prepares students for a career dealing with database systems. Prerequisite: 56.221.

56.373 Numerical Methods in Computing (Fall) (3) - An analysis and application of various methods of numerically solving problems

in the areas of nonlinear equations; systems of equations, interpolation, and polynomial approximation; numerical integration; approximation theory; and differential equations. Students use a computer to design and execute algorithms for specific numerical procedures. Prerequisites: 56.121 or 56.116, 53.126.

56.375 Local Area Networks (Fall, odd-numbered years) (3) - Examines in detail key local area network standards and the fundamental concepts of local area network (LAN) technology. Provides an understanding of network architecture, data transmission methods, and major LANs currently in use. Investigation of LAN protocols, topologies and network operating systems includes hands on experience in installing and demonstrating peer-to-peer and client-server LANs. Prerequisite: 56.330.

56.386 Concurrent Programming and Foundations of Operating Systems (Fall) (3) - Studies the foundation of modern operating systems and concurrent programming problems associated with these systems. Students write and test their solutions to problems. Covers problems and possible solutions encountered in the development of all modern systems. Prerequisite: 56.221.

56.410 Computer Graphics (Spring/even-numbered years) (3) - Presents the basic principles for design, use, and understanding of graphics systems. Hardware and software components of graphics systems examined with a major emphasis on creating and manipulating graphics displays using a software graphics package; the package includes standard computer graphics algorithms. Two and three-dimensional graphics, animation, color, hidden line, and hidden surface algorithms studied in depth. Prerequisites: 56.221, and 53.225.

56.430 Computer Architecture (Spring/odd-numbered years) (3) - Examines design issues for modern, high-performance computer systems. Topics include bus structures, memory hierarchies, RISC and CISC instruction-set paradigms, pipelining and superscalar processor designs, microprogrammed control and input/output and bandwidth issues. Prerequisite: 56.330.

56.444 Introduction to Parallel Processing (Fall/odd-numbered years) (3) - Provides an overview of parallel processing, parallel architectures, design and analysis of parallel algo-

rithms. Focuses on the development and performance evaluation of parallel algorithms on parallel architectures. Prerequisite: 56.221.

56.450 Compiler Construction (Spring/odd numbered years) (3) - An introduction to the construction of compilers and interpreters. The compiler is broken down into phases of scanning, parsing, semantic analysis, optimization and code generation. Studies the relevant theory in the phases as students program a compiler. Prerequisites: 56.350 and 56.221.

56.471 Numerical Analysis (Alternate years) (3) - Provides a computer-oriented analysis of algorithms of numerical analysis. Topics include nonlinear equations, interpolation and approximation, differentiation and integration, matrices and differential equations. Prerequisites: 56.373, 53.322.

56.491 Special Topics in Computer Science (3) - Presents an area of computer science which is not available as a regular course offering. Prerequisite: consent of the instructor.

56.497 Internship in Computer Science (2-12) - Provides computer science majors with an opportunity to acquire meaningful and professional on-site training and learning in computer science at an industrial, private or business workplace. Note: a student may, with departmental approval, apply a maximum of 3 credits of internship toward the fulfillment of the computer science major. Each 1 academic credit requires 40 hours of supervised work and the limit is 12 total credit hours for internships. Prerequisites: students must establish adequate course preparation for the proposed internship. Internship applications must be submitted one month before the internship begins and must be approved by the department chairperson.

59.498 Natural Sciences and Mathematics Internship (1-9) - Internship provides on-site work experience and training program to give selected intern an opportunity to apply the theoretical and descriptive knowledge acquired in multiple natural sciences and mathematics disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

Educational Foundations

Administered by Department of Curriculum and Foundations

60.201 Field Studies in Education I (1) - Field trips to observe various teaching-learning situations. Students required to develop competence in operating all audiovisual equipment. On-campus seminars by arrangement with the instructor. Prerequisite: 30 semester hours.

60.204 Educational Computing and Technology (3) - Introduction to computer technology and the school setting that utilizes computers. Prerequisite: 45 semester hours.

60.205 Career Development and Life Planning (3) - Provides students with career information, values clarification and decision-making skills needed to develop sensitivity to these issues in light of the increasing complexity of the occupational experience.

60.251 Psychological Foundations of Education (3) - Reviews psychological foundations of education, individual differences, learning theories applied to a classroom situation, physical and mental growth, mental hygiene, and personality development. Prerequisite: 48.101.

60.291 Principles of Teaching (3) - Designed as a competency-based course enabling the student to develop an awareness of the teaching process as it sequentially develops. Various instructional techniques, methodologies, and approaches explored. Topics include: specifying instructional/behavioral objectives, sequencing learning activities, applying the various taxonomies, conducting micro-teaching, discipline strategies, questioning techniques, and mastery teaching. Class term project includes unit lesson plan, and evaluative instrument construction. Prerequisites: 60.201, 60.251.

60.301 Field Studies in Education II (1) - Active involvement in a school setting two to three hours per week for approximately 10 weeks. Remaining time spent in campus class seminars by arrangement with instructor. Prerequisite: 60 semester hours.

60.302 Research Literacy (3) - Provides an introduction to research methods and techniques. Gives the student the basic understanding to be a better consumer of research, to be more aware of the value of research, and to be

able to carry out beginning-level research projects.

60.311 Classroom Measures and Assessment (3) - Reviews principles of evaluation; grading; representative standardized tests; vocabulary of measurement, test construction, and interpretation; informal and formal measurement in the cognitive, effective, and psychomotor areas. Prerequisites: 45 semester hours, 60.291.

60.375 Teaching the Reluctant Reader (3) - Addresses methods and materials for the instruction of the disadvantaged child (K-12). Presents techniques and theories as they may be applied to help the socially disadvantaged child function more adequately in the school environment. Prerequisite: 45 semester hours.

60.393 Social Foundations of Education (3) - Reviews social processes underlying education, current social forces, the place of the school in American culture, impact of social stratification, and role of the teacher in a period of rapid social change. Prerequisite: 45 semester hours. Course approved as diversity focused.

60.406 Multicultural Education (3) - Studies the formal educational settings that serve areas in the United States with high population densities and the social factors that influence education in these settings. Fulfills the social foundations requirements for certification. Prerequisite: 45 semester hours. Course approved as diversity focused.

60.427 Classroom Management and Effective Discipline (3) - Focus on strategies for effective discipline and classroom management. Methods of planning for the beginning of the year and for establishing an effective classroom organization to promote appropriate behavior throughout the year are reviewed. Current models and major theories of discipline are reviewed and evaluated. Prerequisites: 60.251, 60.291, 60.201, 60.301.

60.431 Independent Study (1-3) - Requires consent of the department chairperson to schedule.

60.441, 60.442, 60.443 Workshop in Education (1-6) - Studies selected areas of education including research by individual students in a special teaching field.

60.451 Pupil Personnel Services in the Public School (3) - A comprehensive view of pupil personnel services in the elementary and sec-

ondary schools; school attendance, school health programs, pupil transportation, psychological services, and guidance services.

60.497 Teaching in Education: First Experience (6) - Provides opportunities for direct participating experiences. Places students in classrooms with public or private school teachers. The student's major determines their assignment: K-6 - one experience in a primary level and one experience in an intermediate level of a public school; N-K-3 - one experience in a preschool situation and one in a primary level of a public school or two experiences in a primary level of a public school.

60.498 Teaching in Education: Second Experience (6) - The secondary student teaching assignment is determined by the student's area of specialization.

Early Childhood and Elementary Education

Administered by Department of Curriculum and Foundations

62.121 Introduction to Early Childhood Education (3) - Examines the historical and philosophical foundations of early childhood education. Analyzes current trends and practices for teaching children from birth to age 6.

62.302 Teaching of Science in the Elementary School (3) - Emphasizes the major methods and materials used in elementary school science. Prerequisite: 64 semester hours.

62.304 Environmental Education for the Elementary School Teacher (3) - Provides learning experiences for the elementary school level in environmental education programs.

62.310 Teaching Fine Arts in the Elementary School (3) - Provides competencies in the selection and implementation of materials and procedures for teaching literary, visual, and performing arts to elementary school children. Emphasizes comprehension and integration of fine arts into all areas of the school curriculum. Prerequisite: 45 semester hours.

62.322 Seminar in Learning Experiences with Young Children (3) - Outlines physical, mental, emotional, and social levels of children from birth to age 8, with attention to environmental factors that foster child growth. Exam-

ines prenatal, infant-toddler, preschool and kindergarten programs to meet the needs of this age child and to provide the background of experience needed for later ventures into reading, art, arithmetic, science, social studies, music, literature, physical education, and health and safety. Prerequisites: Psychology 48.101, 48.211.

62.371 Teaching Reading in the Elementary School (3) - Examines developmental reading from readiness through sixth grade. Prerequisite: 45 semester hours.

62.373 Diagnostic and Inclusionary Practices (3) - Presents diagnostic and remedial procedures emphasizing both standardized and informal techniques. Prerequisite: 62.371.

62.376 Language Experiences for Children (3) - Explores the language development of children and factors that influence skill in effective communication development from nursery school through sixth grade. Provides a background for students in language arts and literature for children. Prerequisite: 45 semester hours.

62.389 Individualized Instruction Activities in the Elementary School (3) - Emphasizes procedures for helping individuals learn the informal school concept and rearranging the elementary classroom into an efficient and effective learning area with emphasis on a language arts center, mathematics center, science center, and social studies center. Prerequisite: 45 semester hours.

62.390 Teaching Social Studies in the Elementary School (3) - Emphasizes methods and materials appropriate for teaching elementary school social studies in contemporary society. Prerequisite: 64 semester hours.

62.391 Teaching Language Arts in the Elementary School (3) - Emphasizes methods and materials designed to help elementary school children develop communication skills for today's complex society. Includes all areas of a modern language arts curriculum. Prerequisite: 64 semester hours.

62.398 Teaching Mathematics in the Elementary School (3) - Outlines mathematical methods, materials, understandings, and attitudes essential in the teaching of contemporary programs in the elementary school. Prerequisite: 64 semester hours.

62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary Education (1-6) - Presents a workshop format to provide individual or group study of problems concerned with teaching mathematics at early childhood and elementary levels.

62.410 Methods and Materials in Early Childhood Education I (3) - Provides teachers with a workshop experience in infant daycare centers and nursery schools. Provides methods and materials that teachers can use and construct in their centers and classrooms. Examines theories of Bruner, Piaget, Froebel, and Montessori. Prerequisites: 62.121, 62.322.

62.420 Methods and Materials in Early Childhood Education II (3) - Provides teachers with a workshop experience in infant daycare centers and nursery schools. Provides methods and materials that teachers can use and construct in their centers and classrooms. Examines theories of Bruner, Piaget, Froebel, and Montessori. Prerequisites: 62.121, 62.322.

62.431 Independent Study in Elementary and Early Childhood Education (1-3) - Individual projects in education. Requires consent of the department chairperson.

62.450 Methods of Teaching Foreign Languages in the Elementary School (3) - Examines factors influencing second language acquisition and addresses a variety of strategies designed to teach foreign languages in the elementary school. Special focus on integrating the foreign language syllabus within the elementary school curriculum. Culture, art, music and dance included. Prerequisites: 60.291, 200-level foreign language or equivalent.

Secondary Education

Administered by Department of Curriculum and Foundations

65.351 Teaching Communication in the Secondary School (Fall) (3) - Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; junior standing in an area of concentration in secondary education.

65.352 Teaching Mathematics in the Secondary School (Spring) (3) - Prerequisites: Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; junior standing in an area of concentration in secondary education.

65.353 Teaching Science in the Secondary School (Fall) (3) - Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; junior standing in an area of concentration in secondary education.

65.355 Teaching Social Studies in the Secondary School (Fall) (3) - Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; junior standing in an area of concentration in secondary education.

65.358 Teaching Foreign Language in the Secondary School (Spring) (3) - Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; junior standing in an area of concentration in secondary education.

65.374 Teaching Reading in Academic Subjects (3) - Understanding techniques for developing reading skills applicable to the secondary school. Emphasis on readiness, comprehension, silent reading, and oral reading through secondary school academic subjects. Prerequisite: 45 semester hours.

65.411 Seminar in Secondary Education (3) - Activities center around concerns and problems encountered in secondary education. The range of activities is determined by individual need and by levels of professional competency including diagnosis, mutual development of objectives, and self evaluation.

65.431 Independent Study in Secondary Education (1-3) - Requires consent of department chairperson.

Military Science

Administered by Academic Affairs

67.110 Introduction to Military Science (1) - Provides an overview of the organization of the ROTC program. Introduces skills such as rappelling, marksmanship, military customs, preparing military correspondence, and practical field training. One hour class per week, 12 hours laboratory time per semester.

67.120 Introduction to Military Issues (1) - Provides a background in basic skills essential to leaders. Skills may include marksmanship, tactical movement, first aid, and communication skills. One hour class per week, 12 hours laboratory time per semester.

67.210 Applied Leadership and Management I (1) - Provides an overview of the Army rank

structure and a specific survey of the junior officer's duties and responsibilities within that rank structure. Practical training consists primarily of advanced land navigation skills as well as rappelling and practical field training. Two hour class per week, 12 hours laboratory time per semester.

67.220 Applied Leadership and Management II (1) - Presents the fundamentals of small unit leadership and mission planning techniques, to include the reverse planning process and problem-solving techniques. Students learn through case studies how to evaluate different leadership styles and techniques. Two hour class per week, 12 hours laboratory time per semester.

67.230 ROTC Basic Camp (4) - Sophomore summer semester course offered in lieu of the Basic Course for students who want to enter the Advanced Program. The camp is six weeks in duration and students are paid at the rate of half the basic pay for a second lieutenant.

67.310 Advanced Military Science I (3) - Provides a detailed study of the leadership techniques and the principles introduced in 67.220. Course places students in role model situations to provide first-hand experience in problems of small unit leadership. One 3-hour class per week, 12 hours laboratory time per semester.

67.320 Theory and Dynamics of the Military Team (3) - Practical application of the skills learned in 67.310. Students learn how to apply planning and management skills properly in conjunction with small unit tactics. One 3-hour class per week, 12 hours laboratory time per semester.

67.330 ROTC Advanced Camp (6) - A 35-day practical application and evaluation phase required of each cadet prior to commissioning. Advanced camp places cadets in leadership positions where they must put into practice the techniques learned on campus in both tactical and nontactical situations.

67.410 Advanced Leadership and Management I (3) - Presents advanced leadership and management skills required of a manager in a military environment. Students perform roles in management of a military organization using skills in administration, training, conduct of meetings, briefings, and logistics.

67.420 Advanced Leadership and Management

II (3) - Acquaints students through a series of case studies and role playing simulations with the high ethical standards required of a manager and leader. Students learn the basic procedures of military law and their application in a military environment. Students continue to perform roles in management of a military organization, using skills developed in prior military science courses. One 3-hour class per week, 12 hours laboratory time per semester.

Special Education

*Administered by Department of
Communication Disorders and Special
Education*

70.101 Introduction to the Exceptional Individual (3) - Reviews all major areas of exceptionality (visually impaired, mentally retarded, hearing impaired, communication disorders, behavior disorders, learning disabilities) and acquaints the student with social, sociological, psychological, medical, historical, legal, economic, and professional aspects of these conditions. Reviews current research and the latest techniques for facilitating meaningful interactions with these individuals.

70.202 Technology for Exceptionalities (3) - Provides the special education major with an introduction to technology as it is being applied to meet the needs of exceptional individuals and special education teachers. Computers, as well as other technological devices, are studied in relation to use as prosthetics, instructional tools, administrative tools and environmental interfaces.

70.206 Introduction to Early Intervention (3) - An overview of the field of early intervention (EI), including historical perspectives, philosophies of EI, influences of disabilities on the development of young children and early intervention models.

70.240 Foundations in Special Education (3) - An introduction to the history, causes and characteristics of mental retardation, physical disabilities and learning disabilities. A presentation of diagnostic materials and techniques as well as various approaches, programs and services will be given.

70.250 Behavior Disorders (3) - Deals with inappropriate behaviors emitted by children and youth and the techniques and strategies that

may be used to modify these behaviors. Covers psychological disorders, research related to aggressive and withdrawn behavior, and techniques and materials used in social curriculum. Examines group and individual problems at all school levels.

70.340 Educating Individuals with Moderate/ Severe Disabilities (3) - Presents students with different theories and techniques used in the education of persons with moderate and severe disabilities. Students are also exposed to a variety of methods and materials used to educate persons with moderate and severe disabilities.

70.353 Assessment and Planning (3) - Provides information and experience with formal and informal assessment devices and procedures, their usages and appropriateness. Covers gathering information about the learner prior to instruction concerning appropriate instructional tasks, sensory channels, interest areas, and social skills. Covers ways of developing informal assessments, gathering observational information, storing information, and planning for instruction. Prerequisite: junior or senior standing.

70.357 Vocational Programming (3) - Develop a philosophy of vocational education for persons with disabilities, acquire knowledge of programs and strategies to develop students' prevocational and vocational skills, learn information about and gain experience with curriculum materials and assessment procedures and develop strategies in transition planning.

70.375 Individual Project (3) - The student develops a philosophy of vocational education for persons with disabilities, acquires knowledge of programs and strategies to develop students' pre-vocational and vocational skills, learns information about and gains experience with curriculum materials and assessment procedures and develops strategies in transition planning.

70.401 Student Teaching With Exceptional Individuals (12) - Provides opportunities for the student to test educational theory by putting it into practice, opportunities to raise questions, problems and issues which may lead to advanced study, and opportunities for effective functioning in a pupil-teacher relationship in an actual classroom setting. Prerequisite: Concurrent with 70.461.

70.433 Language Arts for Students with Special Needs (3) - Provides preservice teachers with a comprehensive overview of skills, assessment and strategies for teaching listening, speaking, reading and written expression. A holistic philosophy for teaching language arts is stressed. Students will prepare a portfolio of resources and best practices for teaching language arts to students with special needs.

70.450 Methods for Elementary Special Education (3) - Provides a summary of the learning characteristics and instructional needs of students with mild disabilities. Learning theory, effective teaching strategies, classroom management and interaction with parents, paraprofessionals and professionals will be discussed.

70.451 Methods for Secondary Special Education (3) - Familiarizes students with a variety of instructional techniques used to enhance the learning process of individuals with disabilities at the secondary level. Covers information pertaining to current issues in secondary special education and their impact on service delivery.

70.461 Problems in Special Education (3) - Presents instruction in the development of constructive teaching of exceptional individuals. Focuses on problems in the education of exceptional children. Discusses its relationship to teaching as each problem is defined. Helps the future teacher meet practical problems in guiding the exceptional individual in learning experiences at school. Prerequisite: Concurrent with 70.401.

70.496/70.497/70.498 Special Workshop I, II, III (1-6) - Temporary special workshop seminars designed to focus on contemporary trends, topics, and problems in the field of special education. Lecturers, resource speakers, team teaching, field experience and practicum, new media, and related techniques. Workshops usually are funded projects.

Speech Pathology and Audiology

*Administered by Department of
Communication Disorders and Special
Education*

72.152 Introduction to Communication Disorders (3) - Presents an introduction to the study

of human communication and communication disorders, the role of professionals in communication disorders, basic processes, functions and problems of human communication for children and adults.

72.162 Introduction to Speech Pathology (3) - Presents an introduction to the neurophysiological bases of speech and language as fundamental to the understanding of pathologies of language and speech in depth. Explores research findings.

72.200 Introduction to Audiology (3) - Introduces the causes, evaluation techniques and rehabilitative procedures for various types of hearing problems; related auditory, speech, psychological, and educational factors; the roles of parent, educator, and specialist in the rehabilitation program. Presents hearing conservation procedures used in schools and industry.

72.220 Phonetics (3) - Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis on description, classification, and transcription of speech sounds. Provides a base of knowledge for diagnosis and treatment of phonetic and phonological disorders of communication. Prerequisite: 72.162.

72.240 Normal Language Acquisition (3) - Focuses on current information and theory regarding normal language acquisition. Prerequisite: 72.162.

72.300 Auditory Training and Speech Reading (3) - Presents current teaching methods for educating children and adults with moderate and severe hearing losses. Prerequisite: 72.200.

72.310 Speech Science (3) - Speech science is the study of the physiology of speech production, the acoustical characteristics of speech, and the processes by which listeners perceive speech. Prerequisites: 72.220, 50.366.

72.320 Assessment and Remediation of Language Disorders (3) - Prepares students for the clinical application of language analysis procedures drawn from linguistics, psycholinguistics, and sociolinguistics and to apply knowledge from these areas to the management of language disorders. Studies various intervention models. Prerequisites: 72.162, 72.220, 72.240.

72.330 Assessment and Remediation of Speech

Disorders (3) - Considers the major theoretical approaches to assessment and treatment of speech disorders. Students engage in clinical observation, examination of standardized tests, and procedures used in the differential diagnosis of disorders in the areas of articulation, phonology, fluency, and voice. Provides training in the administration of therapy programs. Prerequisites: 72.162, 72.220.

72.340 Applied Behavioral Analysis for Speech and Language (3) - Applies the psychology of learning to communicative behavior and clinical problems. Presents current educational and therapeutic trends and practices.

72.430 Fundamentals of Audiology (3) - Presents a synopsis of primary concepts in diagnostic and rehabilitative audiology. Relates the possible implications of audiological topics to speech pathology, education of the hearing impaired, reading, nursing, and special education.

72.450 Clinical Observation (3) - Students develop the skills of a trained observer and participate in observations of the practice of audiology and speech-language pathology. Observations are conducted on and off campus.

72.460 Psycholinguistics (3) - Presents the study of language as a psychological phenomenon. Areas of study include language acquisition, meaning, biology of language, sociolinguistics, nonverbal communication, animal communication, and application of psycholinguistics to communication disorders. Prerequisites: 72.162, 72.240.

72.468 Speech Habilitation in the Schools (3) - Examines the profession of speech/language pathology in a school setting as it interfaces with the other school-related disciplines. Emphasizes facilitation of communication among the disciplines.

72.480 Career Development in Speech-Language Pathology (3) - Enables pre-professional students to gain greater insight into the nature of speech and language disorders as they affect the individuals who have disorders of communication.

72.492/592 Workshop in Audiology and/or Speech Pathology (1-6) - Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field

experience and practicum, new media and technologies and related techniques and methodologies are included.

72.493/593 Workshop in Audiology and/or Speech Pathology (1-6) - Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field experience and practicum, new media and technologies and related techniques and methodologies are included.

72.494/594 Workshop in Audiology and/or Speech Pathology (1-6) - Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field experience and practicum, new media and technologies and related techniques and methodologies are included.

Studies in Hearing Loss

*Administered by Department of
Communication Disorders and Special
Education*

74.153 Introduction to Sign Language (3) - A study of sign language vocabulary and finger-spelling techniques used in communication with members of the deaf community. Emphasizes developing expressive and receptive skills.

74.154 American Sign Language I (3) - A study of American Sign Language (ASL) including the history of ASL and its recognition as a language. Focuses on development of expressive and receptive conversational ASL skills. Prerequisite: 74.153 or equivalent skills; instructor permission required.

74.155 American Sign Language II (3) - A continuation of ASL I with emphasis placed on more complex grammatical structures and conversational fluency. Prerequisite: 74.154.

74.201 History, Education, and Guidance of the Deaf/Hard of Hearing (3) - Explores hearing loss with emphasis on the history of educational procedures and guidance in communicative, psychological, and vocational habilitation.

74.254 The Deaf Culture (3) - Involves study and analysis of the deaf community. Emphasis on research and discussion of social, psychological, and personal aspects of the members

of the deaf community.

74.255 American Sign Language III (3) - Continuation of ASL II. Major focus on the study of ASL sign principles and linguistic structure of the language to continue building expressive and receptive ASL skills. Prerequisite: 74.155.

74.256 American Sign Language IV (3) - A continuation of ASL III. Focuses on more advanced linguistic aspects of ASL and a synthesis of all concepts previously learned. Prerequisite: 74.255.

74.260 Interpreting in the Educational Setting (3) - Study of interpreting within a variety of educational settings including post-secondary, secondary, and elementary areas. Topical areas include: recent legislation on the status of interpreters, characteristics of various meetings, and visually coded English Sign Systems.

74.301 Introduction to Interpreting for the Deaf (3) - Focuses on topics such as the Registry of Interpreters for the Deaf, various kinds of certification, establishing the interpreting situation, and the mental processes involved in interpreting and transliteration. Emphasis on ethical behavior. Prerequisite: to be taken concurrently with 74.256.

74.302 Interpreting English to American Sign Language (3) - Focuses on building expressive interpreting skills. Experience gained through laboratory work and classroom discussions when interpreting situations for observation and practice are presented. Emphasizes professionalism, principles, and ethics. Prerequisite: 74.301 or permission of the instructor.

74.303 Transliterating English to Sign Language (3) - Focuses on building transliteration skills. Experience gained through laboratory work and classroom discussions when transliteration situations for observation and practice are presented. Emphasizes professionalism, principles, and ethics. Prerequisite: 74.301 or permission of the instructor.

74.304 Oral Interpreting/Transliterating (3) - Identifies information and techniques and the utilization of skills required for effective oral interpreting and transliterating. Includes use of personal characteristics to facilitate speech reading and the identification of the needs of the hearing impaired individual during interpretation. Prerequisites: 74.153, and 74.301.

74.305 Introduction to Instructional Methods for the Deaf/Hard of Hearing (3) - Introduces the design of instructional procedures and methods of implementing curricula for education of the deaf/hard of hearing. Discusses and demonstrates traditional and innovative approaches to teaching.

74.380 Phonetics (3) - Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis on the description, classification, and transcription of speech sounds. Provides a base of knowledge for the diagnosis and treatment of phonemic and phonological disorders of communication. Prerequisites: 74.153, 74.201, 72.200, junior or senior standing.

74.390 Directed Project in Communication Disorders (3) - Gives students the opportunity to carry out special in-residence or field projects in professional service programs under the direction of the faculty or designated practitioners. A detailed project plan must be submitted for faculty approval prior to registration.

74.400 Communication Disorders Workshop (3) - Specialized study of communicatively handicapped persons, new technology in the field of communication disorders.

74.401 Sign to Voice Interpreting (3) - Emphasis on classroom discussion and laboratory work developing skills of comprehending the signed message, forming syntactically and contextually correct English interpretations, and the proper use of the voice. Prerequisite: 74.301 or permission of the instructor.

74.415 Practicum in Interpreting (3) - Involves the placement of the student in interpreting situations on and off campus to gain "on-the-job" experience. Requires a minimum of 120 interpreting hours.

74.462 Problems in Education of the Deaf/Hard of Hearing (3) - Addresses the educational problem of hearing loss and the function of teachers in public and private educational settings.

74.469 Experience in Education of the Deaf/Hard of Hearing (1-3) - Provides experience working under supervision with deaf and hard of hearing children in a demonstration classroom or field facility. Prerequisite: Consent of

the instructor.

74.480 Independent Study and Research (1-3) - Permits students to work under faculty guidance when particular needs cannot be met by regularly scheduled courses. Learning experiences may include library research or creative academic projects. Nature and scope of the project determine semester hours awarded.

Professional Studies

Administered by Department of Curriculum and Foundations

79.312 Internship in Education (1-15) - A work study program in an education-related setting applicable to fulfilling free electives in teacher education degree programs.

79.320 Field-Based Inclusion Practicum (6) - Provides application of theories in learning, assessment, classroom management and teaching strategies to inclusive school settings. Topics include building home/school partnerships, environmental/curricular adaptations, instructional support teams, collaboration, cooperative learning, mastery learning, classroom management, whole language, curriculum-based assessments, peer coaching. Prerequisite: junior or senior status.

Health Sciences

80.400 Health Sciences Internship (3-6) - Provides the opportunity to apply acquired knowledge in an on-site practicum experience under the supervision of an appropriately credentialed preceptor. Open to students in the health sciences. Prerequisite: senior standing.

Nursing

Administered by Department of Nursing

Courses within the nursing curriculum are restricted to students in the B.S.N. program, except for 82.217 Alcohol: Use and Abuse which is a values or free elective open to all students.

82.200 Nursing Placement (Variable) - A number used to transfer in advanced placement credits resulting from NLN Mobility II Profile tests or ANA certification examinations which may be taken by registered nurses.

82.210 Professional Nursing (3) - Introduces

the student to the Bloomsburg University undergraduate nursing program and the concepts and processes of professional nursing. Defines and discusses mission, philosophy and conceptual model of the curriculum. Presents and integrates major concepts of the program. Students develop the view of person as a holistic open-system who is growing and developing across the life span. Explores the person's environment as related to nursing practice. Nursing roles are introduced and examined. Laboratory activities furnish opportunities to develop skills in group dynamics, communication and teaching. The nursing process is applied as the student demonstrates the teaching role with clients in the community. Prerequisites: 45.211 or 45.213 or 46.200; 48.101, 48.210, 50.173, 50.174, 52.101, 52.108, concurrent 50.240; sophomore nursing student status.

82.211 Nutrition (3) - Introduces the principles of nutrition and ways in which these principles are applied to promote an optimal level of wellness for all individuals. Topics include nutritional requirements for maintaining health and development throughout the lifespan as well as factors affecting food choices of individuals and society. Prerequisites: 45.211 or 45.213 or 46.200; 48.101, 48.210, 50.173, 50.174, 52.101, 52.108; concurrent 50.240, concurrent 82.213 and 82.215; sophomore nursing student status.

82.212 Pharmacology (3) - Provides a foundation in pharmacology for pharmacologic content integration throughout the curriculum. Explores the legal, social, ethical, historical, and political dimensions of pharmacotherapeutics. Prerequisites: 50.173, 50.174, 52.101, 52.108, 45.211 or 45.213 or 46.200, concurrent 50.240; sophomore nursing student status.

82.213 Foundations of Nursing Practice (5) - Focuses on the application of nursing process to promote optimal levels of functioning of the adult and older adult. Students apply theory to the care of the individual client as they begin to assume the nursing roles of practitioner, teacher, leader/manager and consumer of research. Students expand their knowledge and application of major nursing concepts as they provide health care to clients in non life-threatening situations. Laboratory simulations and computer instruction enable the student to develop psychomotor skills basic to nursing

practice. Instructional strategies include clinical experiences with clients in community and hospital settings. Prerequisites: 82.210, 82.214, 50.240, concurrent 82.212 and 82.215.

82.214 Health Assessment (3) - Introduces techniques and principles of health assessment for adult clients. Communication and interviewing skills are reinforced throughout the course. Health patterns of adults are assessed. Validation of health histories and practice of review of systems and basic assessment skills will occur in the simulated learning laboratory. Prerequisites: 45.211 or 45.213 or 46.200; 48.101, 48.210, 50.173, 50.174, 52.101, 52.108; or concurrent with 50.240, 82.210; sophomore nursing student status.

82.215 Pathophysiology for Nursing Practice (3) - Assists the student to apply the physiological principles as a means of understanding pathological conditions. Pathophysiological disruptions to system functioning are presented. The impact of these disruptons on the individual are discussed. Students develop an understanding of the signs and symptoms associated with selected pathophysiological disruptions as a basis for determining nursing care needs. Prerequisites: prior to or concurrent with 82.213, 50.173, 50.174, 82.210, and 50.240.

82.217 Alcohol: Use and Abuse (3) - Provides comprehensive overview of alcohol use and misuse in the American population. Because alcohol is a leading public health problem in the U.S., this course is intended for students in all disciplines. Examines the nature of alcohol problems as well as sociocultural attitudes towards drinking. Explores alcohol's effects on the body. Discusses the impact of alcoholism on adolescents, professional workers, women, the elderly, and the family. Examines prevention, intervention, and referrals. An overview of treatment and rehabilitation that includes spiritual, moral, and legal aspects.

82.305 Role Development for the Nurse Generalist (RN) (3) - Resocializes the registered nurse for professional practice. Introduces the purpose, objectives, and conceptual framework of the Department of Nursing's program. Through increased knowledge and integration of varied professional nursing concepts, the student develops the roles of practitioner, teacher, leader/manager, and consumer of

research. Prerequisites: Current state RN license; 50.173, 50.174, 50.240; 45.211 or 45.213 or 46.200; 48.101, 48.210; 48.160 or 53.141; 52.101, 52.108; 82.211, 82.212, 82.213, 82.214 or 82.215; NLN Mobility Profile II examinations.

82.306 Introduction to Nursing Research (3) - Introduces students to the concepts, skills and processes of research in nursing. The contributions of selected nursing theorists are explored as frameworks for nursing inquiry. Students evaluate research critically and examine its importance to the discipline of nursing. Prerequisite: 48.160 or 53.141; junior standing; 82.305 (if RN) or consent of the instructor.

82.307 Geriatric Nursing (3) - Focuses on the physiological, psychological, and social aspects of aging with emphasis on the assessment of problems and appropriate nursing intervention. Prerequisite: junior or senior standing or RN.

82.310 Family Nursing (2) - Focuses on the concept of family as an open system and use of the nursing process to assess and promote family health across its lifespan. Students analyze the structures and functions of the family in contemporary U.S. society as a basis for determining health care needs. The role of the environment and sociocultural factors are explored as they influence the family's various functions. Stresses the nurse's role in assisting the family to assume responsibility for meeting the needs of members.

82.311 Adult Health I (7) - Focuses on the application the nursing process to promote and restore the health of older adults with chronic or potentially life-threatening illnesses. Students apply developmental theory related to the older adult while providing health care. Increasing independence in nursing roles occurs as students collaborate with health care providers in a variety of settings. Prerequisite: 82.210, 82.211, 82.212, 82.213, 82.214, 82.215.

82.312 Maternal and Child Health Nursing (8) - Focuses on family-centered nursing and application of the nursing process to promote and restore health with women, neonates, children and their families. Students apply a variety of family and developmental theories to nursing practice with clients in community and hospital-based settings. Health education that encourages responsibility for health promotion

is discussed. The role development of the student is enhanced through interactions with a variety of health care providers in a collaborative effort to meet the health needs. Prerequisite: 82.210, 82.211, 82.212, 82.213, 82.214, 82.215, junior standing.

82.313 Special Topics (1-6) - Presents a diversity of topics focusing on contemporary trends, issues, and problems relevant to the principles and practice of professional nursing in the health care system. Prerequisite: junior standing.

82.405 Independent Study (1-6) - Requires investigation of an area of special interest and value to the student under the direction of a faculty member following a plan approved by the department chairperson. Course may be interdisciplinary. Prerequisite: senior standing or consent by department.

82.410 Community Health Nursing (5) - Focuses on the use of the nursing process, demography, epidemiology, program planning and evaluation to assist communities with the promotion, restoration and maintenance of health. The impact of multiple systems on health and health care delivery are identified as students collaborate with clients, support systems other providers, public health agencies and the community as a whole. Role development will be fostered through independent and interdependent activities with culturally diverse groups and organizations. Prerequisites: 82.306, 82.311, 82.312.

82.411 Psychiatric/Mental Health Nursing (5) - Focuses on the application of diverse theories, psychobiological concepts and epidemiological principles to students' use of nursing process to promote, maintain and restore the health of a culturally diverse client population in a variety of mental health care settings. Students employ a "therapeutic use of self" and function in independent and interdependent roles as they collaborate with client, support systems and other providers to deliver holistic and humanistic care. Prerequisites: 82.306, 82.310, 82.311, 82.312.

82.412 Adult Health Nursing II (8) - Focuses on meeting the health care needs of a diversity of adult clients with complex needs. Students employ developed skills in critical thinking to problem-solve and make decisions. Students use nursing process, therapeutic skills

and technology in assisting these clients to attain an optimal level of functioning. They collaborate with clients and the interdisciplinary team to promote, maintain and restore optimal health to a variety of clients. Learning experiences are provided in order for students to continue to develop proficiency as a practitioner, teacher, leader/manager and consumer of research. Course promotes integration of values into professional behaviors and accountability for personal and professional growth. Prerequisites: 82.306, 82.310, 82.311, 82.312.

82.413 Nursing Trends and Issues (3) - Explores the nature of professional nursing as it occurs in our society with particular reference to the health care system and the future. Uses seminar format to explore and analyze current issues and trends in professional nursing. Prerequisites: 82.305 (if RN), 82.306, 82.311, 82.312.

82.414 Leadership and Management in Nursing (4) - Focuses on management principles, including leadership theories and concepts, decision-making processes, budgeting guidelines and case management concepts. Content on public policy and health care economics is incorporated. Principles from this course are integrated into concurrent clinical courses to enhance professional role development. Prerequisites: 82.306, 82.310, 82.311, 82.312, senior nursing major status.

82.451/551 Transcultural Health Issues (3) - Provides students with a global perspective of transcultural health issues. Students analyze the cultural, social, educational, economic, political and environmental forces that contribute to health on an international level. Compares major cultural and ethnic determinants of health in developed and developing countries will be compared, addresses approaches used by diverse cultures in various countries in solving their health care problems and examines research on transcultural health issues. Evaluates the role of major international health organizations dealing with cultural and ethical issues in world health. Prerequisites: junior, senior or graduate standing. Approved as a diversity course.

Courses for Non-Matriculating RNs - The following courses are offered through the School of Continuing and Distance Education on a

demand basis for RNs not matriculated with the BSN program. The courses are designed to expand their knowledge and skills bases in the research process in nursing.

82.204 Critical Evaluation of Research in Nursing (1) - Introduces research methods and techniques. Focuses on the student as a consumer of research with emphasis critiquing research studies for application and the ethics of research with human subjects.

82.205 Research Application in Nursing (1) - Focuses on the contribution of research to the discipline and the consumer's role in applying research findings. Emphasizes identifying researchable problems and improving practice through application of research findings. Prerequisites: 82.204, statistics course.

82.206 Proposal Writing in Nursing (1) - Focuses on the research process in identifying a researchable problem and formulating a beginning level research prospectus. Emphasizes conceptualization of a design to study a research problem. Prerequisites: 82.204, 82.205, statistics course, or consent of the instructor.

Medical Technology

Administered by Department of Biological and Allied Health Sciences

86.401 Clinical Microbiology (6-10) - A lecture and laboratory study of bacteria, fungi, parasites, and viruses which cause disease in humans, their clinical pathology, and related diagnostic laboratory procedures.

86.402 Clinical Hematology/Coagulation (6-10) - A lecture and laboratory study of hematopoiesis and blood coagulation. Students acquire an understanding of the theory of hematological tests, skills in the performance of these tests, knowledge of blood disorders, and insight into the significance of test results.

86.403 Clinical Chemistry for Medical Technologists (6-10) - Lecture and laboratory study of enzymes, carbohydrates, lipids, proteins, nitrogenous end products, electrolytes, acid-base balance, body fluids, toxicology, endocrinology, and urinalysis. Lecture series includes anatomy, physiology, methods of analysis, and clinical significance of each biochemical determination. Laboratory study includes standardization and quality control of procedures using

spectrophotometry, chromatography, electrophoresis, and automated techniques.

86.404 Clinical Immunohematology (3-6) - Lecture and laboratory study of blood groups, genetics, antigens, and antibodies and their interaction as related to safe transfusion, prediction of immune incompatibilities, and probability of parentage. Donor collection, processing, blood component preparation, and therapy also studied.

86.405 Clinical Immunology/Serology (2-4) - Lecture and laboratory study of immunological concepts and theory and their relation to serologic reactions and clinical interpretations.

86.406 Clinical Seminar (1-6) - Covers courses not included above, such as orientation, laboratory management, education, clinical microscopy and/or areas unique to the individual hospital program.

General Business

Administered by Department of Business Education and Office Information Systems

90.101 Introduction to Business (3) - Provides a study of business and its environment, organization, operation, and interrelationships with government and society. Business majors develop a broad base for further study in a specific area in business, while other majors become familiar with the American enterprise system and the functions and issues facing business today. Prerequisite: Not open to business administration degree students with 6 or more semester hours in business.

90.234 Business Mathematics (3) - Covers concepts and principles of basic business operations and mathematics as it relates to accounting, retailing, and finance. Prerequisite: Not open to business administration degree students with 6 or more semester hours in business.

90.333 Business Communications and Report Writing (3) - Applies theories and principles of effective communication to solve common business problems. Psychological and organizational strategies are used in writing business reports and other documents. Use of micro-computer software encouraged. Prerequisite: junior or senior standing.

90.341 Principles of Selling (3) - Includes a

study of selling as a profession, preparation for successful selling, steps and procedures associated with the sales process, and special selling topics. Students apply sales principles and techniques while conducting sales presentations.

90.402 Methods of Teaching Business Education (3) - Emphasizes a variety of methods and materials for teaching certification areas of business education. Must be scheduled the semester prior to student teaching and concurrently with 90.403. Classroom discussions closely correlate with the experiences of 90.403. Prerequisite: Admission to teacher education.

90.403 Business Education Field Experience (1) - Initiates an awareness of the teaching and learning atmosphere of the professional teacher in the classroom. Students provided opportunities to undertake the responsibilities assigned to a classroom teacher, including assuming some of the teaching role competencies. Must be scheduled the semester prior to student teaching. Prerequisite: Admission to teacher education.

90.404 Professional Semester in Business Education (12) - Includes orientation experiences to observe the operation of a school and specific classes as well as 16 weeks of participatory teaching experiences correlated with classroom studies under full-time supervision. Must be scheduled concurrently with 90.406.

90.406 Clinical Studies in Business Education (3) - Presents seminars on principles of education for business teachers, methods of teaching business subjects, strategies, and problems of classroom teaching. Classroom discussions closely correlated with the experiences of 90.404.

90.431 Independent Study in Business (1-3) - Topic and outline of project must be approved by the department chairperson and dean of the college. Prerequisite: Open to seniors only.

90.432 Internship in Business (1-6) - Provides students with opportunities to acquire practical experiences in work situations in office systems. Prerequisites: Approval by department chairperson; QPA of 2.50 and 80 semester hours earned.

90.460 Business and Office Workshop (1-3) - Students acquire an awareness and understanding of the knowledge pertaining to the

professional development and improvement of business skills, the enhancement of business and office education as a professional responsibility, and their role in the business world.

90.498 Special Topics in Business Education and Office Systems (1-3) - A study of the aspects of business education or office systems. Not available as a regular course offering.

Accounting

Administered by Department of Accounting

91.220 Financial Accounting (3) - Familiarizes students with a basic understanding of generally accepted accounting principles and their applications. Includes sole proprietorship, partnership, and corporate accounting. General ledger and/or spreadsheet computerized accounting required. For non-accounting majors only. Prerequisite: 92.150.

91.221 Principles of Accounting I (3) - Presents the accounting cycle covering both service and merchandising activities of a sole proprietorship; special journals and special ledgers, accrued and deferred items and receivables and inventories. General ledger and/or spreadsheet computerized accounting is required. Prerequisite: 92.150.

91.222 Principles of Accounting II (3) - Further develops the accounting cycle; recording, summarizing, interpreting financial data for partnerships and corporations. Includes cash flow, long-term liabilities, plant assets, and payroll accounting. A practice set and general ledger and/or spreadsheet computerized accounting are required. Prerequisite: 91.220 or 91.221.

91.223 Managerial Accounting (3) - Presents volume-cost-profit analysis, special decisions, operational and financial budgeting, control and performance evaluation, job-order and process costing, variance analysis, cost allocation, quantitative decision-making techniques, and analysis of financial statements. Students are expected to be proficient in the general use spreadsheets. Prerequisites: 91.220 or 91.222 and 92.150.

91.320 International Accounting (3) - Addresses needs of accounting and finance students wishing to become more qualified in accounting on a global perspective. Provides an inter-

national accounting component for students who have completed foundation courses. Prerequisites: 91.220 or 91.222. Approved as a cultural diversity course.

91.321 Intermediate Accounting I (3) - Presents the conceptual framework of accounting, accounting environment and information processing system, financial statements and the accounting standards regarding present and future value concepts, cash and receivables, temporary investments, inventories, and short-term liabilities. Requires the use spreadsheets to solve computer problems in each chapter. Prerequisite: 91.222.

91.322 Intermediate Accounting II (3) - Presents accounting standards for property, plant, and equipment, intangible assets, income recognition, long-term debts by borrower and lender, formation of corporations and stockholders equity, retained earnings, stock rights and options, and investments in securities and consolidated financial statements. Requires student to use an approved word processing software package to produce a research paper that analyzes one of the statements of financial accounting standards, reviewing the related accounting literature. Prerequisite: 91.321.

91.323 Intermediate Accounting III (3) - Presents accounting standards pertaining to statements of cash flows, pension plans, leases, earnings per share, income taxes, accounting changes and error corrections, and financial reporting and changing prices. Use of spreadsheets to solve computer problems in each chapter is required.

91.324 Federal Tax Accounting (3) - Introduces basic tax laws pertaining to preparation of individual federal tax returns and supporting schedules. Emphasis on tax law research using federal tax services and contemporary professional literature. Requires use of microcomputer income tax preparation software. Prerequisite: 91.321.

91.342 Auditing Theory and Procedure (3) - Outlines principles, standards, procedures, and techniques applicable to internal and public auditing; consideration of the audit report and development of working papers for preparation of the report. Use of commercial computer packages to generate audit programs. Use of spreadsheet templates to work problems and use of word processing package to prepare

an audit practice set. Prerequisites: 91.322, Economics 40.346.

91.348 Cost Accounting (3) — In-depth study of the three major production costs - raw material, factory overhead, and labor. Requires extensive spreadsheet use at intermediate to expert level. Prerequisite: 91.321.

91.424 Advanced Federal Tax Accounting (3) Assigns group and individual projects selected from the following areas of advanced tax accounting; partnerships and corporations, Pennsylvania corporate taxes, estates and trusts, reporting to governmental agencies. Includes lectures, discussion of issues, and practice in the solution of problems. Requires use of tax research software Prerequisite: 91.324.

91.430 Advanced Accounting I (3) - Applies accounting principles to special problems in the consolidation and merger of business enterprises. Includes consideration of the basis for such combinations, consolidated statements on date of acquisition as well as at subsequent dates with special emphasis on design, construction, and utilization of integrated micro-computer generated worksheets and financial statements. Prerequisite: 91.322.

91.431 Advanced Accounting II (3) - Focuses on accounting principles and practices of governments and non-profit institutions. Includes partnerships, estates, trusts, and bankruptcy accounting. Prerequisite: 91.322 or consent of the instructor.

91.432 Internship in Accounting (6) - Provides work experience in the accounting profession. Prerequisite: 80 semester hours completed and adequate course preparation for the tasks to be performed.

91.448 Advanced Cost Accounting (3) - Continuation of 91.348, concentrating advanced cost accounting issues, including standard cost, and budgets. Emphasis on case studies used to analyze and interpret cost data. Prerequisite: 91.348.

91.449 CPA Problems (3) - Addresses the application of procedures for the solving of a cross section of complex accounting problems and the discussion of theory and practice. Requires extensive use of Power Point presentation software. Prerequisites: 91.324, 91.342, and 91.348; senior standing or consent of the

instructor.

91.498 Special Topics: Introduction to Healthcare (3) - Introductory management and leadership skills for the health professional, who by education and background is prepared not to manage but to practice a profession, but nevertheless is in a management position. Extensive use of word processing software.

Computer and Information Systems

Administered by Department of Computer and Information Systems

92.150 Introduction to Computer and Information Science (3) - Introduces computer-based systems and their use in problem solving and information processing. Includes a study of hardware and software concepts, data management, data communications, and system development. Involves hands-on experience with word processing, spreadsheet and file management software using networked microcomputers.

92.177 Structured Programming Methodology (3) - Introduces structured problem solving and programming, encompassing data representation, data structures, and control structures. Develops skills and knowledge needed to solve business problems with a computer; investigates software/tools used with CIS curriculum. Examines data representation, data structures, control structures, structured programming, algorithm development and computer concepts. Involves programming exercises using a high-level language on a UNIX platform. Prerequisites: 92.150 or 56.110 or equivalent.

92.251 Mini/Micro Programming Systems (3) - Surveys minicomputer capabilities available to the small business. Focuses on business applications and system design considerations for micro-based systems. Students work with a variety of software systems including: operating systems, a database management system, network software, and other emerging tools using networked microcomputers. Prerequisites: 92.150 or 56.110 or equivalent.

92.252 Business Oriented Programming (3) - Detailed study of structured problem solving in a business environment. Explores logical

and physical structures, data representation, modular design, structured programming, and documentation. Presents processing techniques for one and two-level tables, data validation, control break logic and sequential file processing. Students develop increasingly complex programs using COBOL in a UNIX environment. Prerequisite: 92.177 or 56.121.

92.254 Management Information Systems (3) - A study of how computer-based information systems provide information for effective decision making. Includes: structured analysis, design techniques, database concepts, person-machine interaction, data retrieval, and telecommunications. Focuses on the use of information technology in the modern business. Prerequisites: 92.150 or 56.110 or equivalent.

92.256 Data and Information Structures (3) - Studies standard data and file structures and algorithms for creation and manipulation of these structures. Explores rationale for use of structures under varying circumstances from both a practical and theoretical perspective. Involves computer exercises implementing selected algorithms in a suitable high-level language on a UNIX platform. Prerequisites: 92.177 and 92.252.

92.350 Analytic Computing Concepts (3) - Presents a detailed examination of the C programming language and programming techniques appropriate to the UNIX environment. Data representation, code generation, and programming considerations related to file maintenance with UNIX and C explored and developed through actual programming experiences. Prerequisite: 92.256 or 56.210.

92.351 Systems Analysis and Design (3) - Provides an opportunity to bring together experiences in CIS courses, other business courses, and life to create usable business information systems. Helps develop skills required for successful business system development. Prerequisite: 92.256.

92.352 Advanced Programming (3) - Presents advanced concepts of programming in COBOL with major emphasis on indexed sequential files, interactive programming, subroutine linkage, random files, and SQL RDBMS programming concepts. Prerequisites: 92.256.

92.354 Data Base Processing Systems (3) - Details and examines data base terminology, or

ganization, and models. Analysis, design, and administration of a relational compatible data base explored through applicable programming experiences. Prerequisite: 92.256 or 56.355.

92.356 Operating Systems (3) - Presents an overview of operating systems including real and virtual operating systems and communications software and techniques. Includes diagnostic facilities, utility routines, and system commands. Provides a detailed look at UNIX. Prerequisite: 92.350.

92.358 Data Communication Systems (Spring) (3) - Data communications terminology, technology, and the functional characteristics of communications hardware and software detailed and explored. Emphasizes systems and programming considerations as related to a commercial environment. Prerequisite: 92.256 or 56.355.

92.432 Internship in Computer and Information Systems (6) - An educational arrangement between the student and an approved industrial, business, or government agency that provides a supervised work experience in a professional area of computer and information science. The experience relates to the academic principles and theories upon which the Computer and Information Systems curriculum is based. Prerequisites: Grade point average of 2.5 and 80 semester hours.

92.450 Expert Systems and Artificial Intelligence (Fall) (3) - A survey of basic concepts and techniques of expert systems and artificial intelligence applied to commercial information systems. Examines knowledge acquisition, representation, storage, and inferencing methods used in expert systems. Stresses applications and illustrations from the business environment. Prerequisite: 92.256 or 56.355.

92.452 Advanced Software Development (Fall) (3) - A formal approach to modern techniques of software design and development and provides for hands-on experience for students to apply the techniques. Students work in teams in the organization, management, and development of a large software project. Emphasizes the use of CASE tools. Prerequisite: 92.351.

92.456 Managerial Computer Applications (3) - Provides practical experience in analysis of business problems. Features advanced tech-

niques and concepts of systems analysis and design along with software engineering with major emphasis on management information systems and decision support systems. Uses team approach to analyze, design, and document realistic systems. Uses project management methods, project scheduling and control techniques, formal presentations, and group dynamics. Prerequisite: 92.351.

92.498 Special Topics (3) - Examines current or advanced issues in the field of computer and information systems not normally examined in depth in other courses.

Management

Administered by Department of Management

93.344 Principles of Management (3) - Administrative, organizational, and behavioral theories and functions of management, contributing to the effective and efficient accomplishment of organizational objectives. Prerequisites: 64 semester hours earned, 40.211 and 40.212.

93.345 Human Resource Management (3) - Equips students with tools and procedures to address human resource issues and problems. Prerequisite: 93.344.

93.346 Labor and Industrial Relations (3) - Describes administration of the relationship between management and the labor force, both where that relationship is governed by a collective bargaining agreement and where it is not. Includes development of the social and legal status of trade unions, organizing, negotiations, strikes, grievance procedure, and union security. Prerequisite: 93.344.

93.347 Management Science (3) - Prerequisites: either 40.246 or 53.123, 53.141, 40.346, 93.344.

93.348 Operations Management (3) - Educates and trains students to deal with the operational issues and problems in manufacturing and services. Prerequisites: 93.344, 53.141, 40.346, 40.246 or 53.123.

93.355 Managing Multicultural Organizations (3) - Prerequisite: 93.344.

93.391 Small Business Management (3) - Introduces environment of small business in the United States. Describes types of small business and problems associated with each type. Covers ownership, start up, franchising, finance,

accounting, personnel, risk management, inventory, advertising and marketing, and production processes. Special emphasis is given to incentives and legal requirements of Pennsylvania with regard to small businesses. Prerequisites: 91.220, 91.223, 93.344, 96.313, 97.310, and 98.331.

93.432 Internship in Management (3-6) - Integrates classroom experience and practical work experience in industrial, business, or government work situations. Allows students to translate academic theories and principles into action, to test career interests, and to develop skills and abilities through carefully planned and supervised problems related to the field of management. Prerequisites: 93.344 or approval of internship supervisor, QPA of 2.50, 80 semester hours, and major or minor in business administration.

93.440 Small Business Institute Seminar (1-3) - Teams of students work with local businesses in a consultancy capacity to aid small businesses while applying business principles. Work includes analysis of a problem, determination of alternative solutions, recommendation of the optimum course of action by means of an oral presentation to business owners. Prerequisite: QPA of 2.5, 91.220, 91.223, 93.344, 96.313, 97.310, and 98.331.

93.445 Managerial Communications (3) - Prepares students for effective managerial communication by providing preparation in the process and structure of communication in a professional setting. Prerequisites: 20.101, 20.201, 25.103, 93.344.

93.449 Organizational Behavior (3) - Provides the tools and theories regarding personal, interpersonal and group processes within the organization at the micro level. Prerequisite: 93.344.

93.456 International Management (3) - Develops and understanding of the issues related to international business environment, refines this knowledge by the analysis of current economical, social and political issues that can influence international and global companies, and prepares students to analyze international business issues as a manager of a multinational/global company. Prerequisite: 93.344.

93.457 Business and Society (3) - Prepares students to manage social responsibility and eth-

ics issues related to business operations and the interests of multiple stakeholders. Prerequisites: 96 semester hours earned, 20.101, 20.201, 25.103, 93.344, 96.313, 97.310, and 98.331.

93.481 Business Policies and Strategies (3) - Prepares students in the area of strategic decision-making for the total organization through strategic formulation and administration using integrative analysis and strategic planning and process. Prerequisites: 110 semester hours earned, 91.220, 91.223, 93.344, 96.313, 97.310, and 98.331.

93.498 Special Topics - Management (3) - Examines current or advanced issues in the field of management not normally examined in depth in other courses. Prerequisite: approval of the department chairperson.

Office Information Systems

Administered by Department of Business Education and Office Information Systems

94.221 Office Systems Concepts (3) - An overview of office systems-technology, people, and procedures within organizational and environmental contexts. Major technologies, both hardware and software, that support information creation, storage, retrieval, manipulation, and distribution are covered. Introduces applications and systems software using computer laboratory projects.

94.302 Business Document Generation (3) - Provides the student with the opportunity to use computer and business applications software to produce business documents.

94.330 Telecommunications (Spring only) (3) - An introduction to telecommunications in the business environment. Topics include telephone, data codes, protocols, network architectures, local area networks, communications media, hardware, and software. Management issues and practical applications are integral to course. Emphasis on application of telecommunications to facilitate information interchange in whatever form the information takes: data, voice, text, and image. Prerequisite: Junior standing.

94.401 Information Resource Management (3) - Provides a study of records creation, inventory and analysis, active and inactive records maintenance, storage and retrieval, micro-

graphics, and computer information management systems. Prerequisite: Senior standing.

94.403 Office Systems Management (3) - A study of the most acceptable methods and practices of office systems. Topics include organization and planning of office systems, human relations, controlling operations, and processing information. Emphasis on competencies needed for organizing and administering automated office systems. Prerequisite: Senior standing.

94.405 Training and Development in Office Systems (Fall only) (3) - Application of theories of learning and instructional development to the education and training of employees in office systems. Topics include instructional design, technology, and the implementation, evaluation, and management of training in an organizational environment. Prerequisite: Senior standing or 64 credits.

Finance

Administered by Department of Finance and Business Law

96.313 Introduction to Corporate Finance (3) - Studies financial management in the areas of asset valuation, risk, working capital management, capital budgeting, cost of capital, financial structure, financing sources, and dividend policy. Prerequisites: 91.220, 40.211 and 40.212.

96.323 Financial Markets and Institutions (3) - Studies short-term money market and long-term capital market instruments, major financial institutions, the relationship between interest rates and security prices, and the role of the consumer and government in financial markets. Prerequisite: 96.313.

96.333 Commercial Bank Operations (Management) (3) - Covers fundamental principles of bank operations. Includes a survey of various bank functions such as accounting, trust department, international financial services, lending operations, public service, and liability management. Prerequisite: 96.313.

96.343 Investment Management (3) - Outlines principles of security investments: descriptions of investments instruments, investment planning, security valuation, portfolio theory and strategy, and security markets. Prerequisite:

96.313.

96.413 International Finance (3) - Studies the principles and practices relevant to understanding the nature of international finance, its problems, and its institutions. Discussion centers on sources and instruments of international export and import financing, balance-of-payments, exchange rates, governmental regulations and policies, financial management, as well as accounting for international transactions. Prerequisite: 96.313.

96.423 Security Analysis and Portfolio Theory (3) - Detailed analysis of major elements related to determining the earnings and risk potential of securities and study of the underlying principles inherent to portfolio construction. Prerequisite: 96.343.

96.432 Internship in Finance (1-6) - Prerequisites: 96.313, junior or senior standing, and QPA of 2.50.

96.440 Introduction to Options and Futures (3) - Detailed analysis of major elements affecting market prices of options and futures contracts and analysis of optimal investment strategies involving these derivative instruments. Prerequisite: 96.343.

96.454 Advanced Corporate Finance (3) - Studies business financial problems and the development of financial decision-making tools and practices as used in the decision-making role of the financial manager. Prerequisite: 96.313.

96.463 Seminar in Finance (3) - Explores a wide range of topics in finance, primarily focused in the area of financial management. Designed primarily for senior finance majors. Prerequisites: 96.313 and 96.343.

96.473 Seminar in Investments (3) - Examines a wide variety of topics in the field of investment management and portfolio theory. Designed primarily for seniors majoring in finance. Prerequisites: 96.313 and 96.343.

Marketing

Administered by Department of Marketing

97.310 Marketing: Principles and Practice (3) - Surveys the fundamental features of contemporary marketing systems and the planning required to make available satisfying goods and services to customers at a profit. Explains the role of marketing in society and the institutions

which compose the market system. Describes components of the marketing mix-product planning, distribution, pricing, and promotion. Prerequisites: 40.211, 40.212.

97.320 Marketing for Non-profit Organizations (3) - Hospitals, social service agencies, universities, fraternities and sororities, political candidates, governments, churches, and libraries are some of the nonprofit organizations which are challenged to effectively solve their marketing problems. Through understanding and by applying marketing theory and methods, students realize how they can aid organizations in developing a better product, price, distribution, and promotion decisions for the publics they seek to serve. Prerequisite: 97.310.

97.350 Retail Management Concepts (3) - Presents retailing as a dynamic aspect of the marketing/channels distribution system. Consumer/marketing analysis, store location, store layout, merchandising, pricing, promotional issues, and problems are considered. Prerequisites: 97.310, 40.212.

97.360 Advertising Management (3) - Studies the advertising element of the marketing/promotional program from a management perspective. Examines advertising's role in business and society. Advertising's use of the communication process is studied from a theoretical and practitioner's perspective. Development of an ad campaign is highlighted with emphasis on management decisions involved in planning and execution. Special attention given to budgeting, copywriting, media analysis, and choice. Prerequisite: 97.310.

97.370 Sales Management (3) - Studies the personal selling element of the marketing/promotional program from a management perspective. Recruiting, selecting, training, organizing, motivating, compensating, evaluating, and controlling the sales force are treated, as well as management's planning responsibilities which include designing intelligence systems, forecasting and establishing sales territories. Special consideration is given to sales management's inputs and integration with marketing management. Prerequisite: 97.310.

97.410 International Marketing Management (3) - Applies the managerial process to the development of international marketing programs. Emphasizes the development and determination of objectives and methods of or-

ganization including the execution of research, advertising, and distribution activities. Considers special problems of adopting marketing principles to fit conditions in different countries. Prerequisite: 97.310.

97.430 Consumer Motivation and Behavior (3) - Analyzes the role of the consumer as the ultimate buyer of the product and the strategy and forces directed at the consumer by the seller. Topics include models of consumer buying behavior, consumer motivation, interpersonal and intrapersonal influence on the consumer as a decision maker in the market place. Prerequisite: 97.310.

97.431 Independent Study in Marketing (3) - Develop research skills in an academic and experience-based setting through collaborative research with a faculty member. Apply marketing theory to an employment situation or research objective. Prerequisite: Nine semester hours in marketing.

97.432 Internship in Marketing (1-6) - Develops skills in an experiential setting that are not available in the academic classroom. Students learn to relate marketing principles and practices to an employment situation. Prerequisites: 97.310, 2.0 QPA, 80 semester hours, and junior or senior standing.

97.440 Marketing Research (3) - Develops the skills of the scientific marketing research procedure (problem definition, research design, data collection, analysis, and interpretation). Applies recent developments in marketing information systems to product planning, advertising research, consumer and competitive analysis. Prerequisites: 97.310 and 40.346.

97.460 Marketing Management (3) - Presents an advanced study of the marketing programs from the systems and managerial viewpoint. Applies analytic, communicative, and problem-solving skills to evaluation and creative planning in the marketing environment. Uses business marketing cases as a vehicle for developing the marketing executive's abilities. Prerequisite: 97.310.

97.480 Industrial Marketing Strategy (3) - Strategies for marketing products and services to industrial, commercial, and governmental markets. Changing industry and marketing structures are analyzed. Prerequisite: 97.310.

97.490 Contemporary Problems/Issues in Mar-

keting (3) - Explores major issues, trends, and problems characterizing the current marketing environment. Encourages students to do extensive reading in current marketing and other related literature. Theoretical, environmental research, and trade-off issues in marketing are assessed. Case study, group projects, and group dynamics are used. Prerequisites: senior standing and 6 semester hours in marketing.

Business Law

Administered by Department of Finance and Business Law

98.331 Business Law I (3) - Introduces the nature and sources of law, the judicial system, principles of law applicable to business transactions including administrative, contracts, torts, sales, property, and criminal law.

98.332 Business Law II (3) - Presents basic principles of commercial law (UCC), agency, and such topics as debtor/creditor relations, business organizations, and ethics. Prerequisite: 98.331.

98.340 Law and Literature (3) - An introduction to law and literature, both as an approach to the reading of legal texts and as a means of addressing issues in law, justice and morality as portrayed in works of fiction and other narratives. Modules include slavery, abortion, the

death penalty, Native American law and literature and international law and literature. Prerequisite: 98.331 or consent of the instructor.

98.407 International Legal Environment of Business (3) - Introduction to public and private international law as applied to the increasingly globalized business environment. Cases include: trade law; extraterritorial application of U.S. law; treaty law; U.S.-Japan structural impediments talks; the GATT; the European Community; multinational corporations; and environmental regulation. Prerequisite: 98.331 or consent of the instructor.

98.450 Legal Environment of Business (3) - Advanced coverage of topics in government regulation of business through administrative law, legislation, and judicial intervention. May include issues in the law of corporate securities, antitrust, environmental regulations, and other aspects of legal regulation of the competitive process. Prerequisites: 98.331 and Economics 40.212.

98.460 Employment Discrimination and Affirmative Action (3) - A survey of major federal laws that address equal opportunity in employment and focuses on types of job discrimination outlawed by Title VII of the 1964 Civil Rights Act. Legal and ethical issues relating to affirmative action programs are discussed, as are state and local laws addressing employment discrimination.

Administration, Staff and Instructional Faculty

Names and titles of Bloomsburg University administrative staff are listed by division; names, titles, rank and academic credentials of full-time, permanent instructional faculty appear in alphabetical order in the following section, and are current as of April 1, 1997.

To obtain the most current information, students with the university's World Wide Web site at

<http://www.bloomu.edu>

Official information relating to faculty and staff titles and rank is maintained by the Office of Human Resources.

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Planning, Institutional Research, and
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Karen L. Slusser, B.A., Assistant Director,
Planning, Institutional Research, and
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 Radio Services

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 Accounting, Collections and Office
 Management
 Barbara Stiner, B.S., Assistant Comptroller,
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 Academic Computing
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 Carol Barnett, M.A., Director, Career
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 Career Development Center
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 Activities and Kehr Union

Michael Sowash, M.S., Associate Director,
 Student Activities and Kehr Union
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 Student Activities and Kehr Union
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 Community Activities and Kehr Union
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 Aid
 John Bieryla, M.A., Assistant Director,
 Financial Aid
 Carl Hinkle, M.S., Director, Intramural
 Sports Program
 Lynda Michaels, M.E., Interim Director,
 Orientation
 Roy Smith, M.A., Director, QUEST and the
 Corporate Institute
 Linda Sowash, M.Ed., Director, Residence
 Life
 Thomas Kresch, M.S., Associate Director,
 Residence Life
 Donald Young, M.S., Assistant Director,
 Residence Life

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 Susan R. Hicks, Ph.D., Assistant Director,
 Development
 Theodore R. Kocher, B.S., Assistant Director,
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 Relations and Marketing
 Geoffrey Mehl, B.S., Director, Publications
 Scott Leightman, B.S., Director, Sports
 Information
 Joan T. Lentzner, M.S., M.A. Director,
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Library Faculty

Robert Dunkleberger, M.L.S., University
 Archivist/Coordinator of Special
 Collections/Reference Librarian
 William J. Frost, M.S., M.A., M.L.S., associate
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 Charles L. Lumpkins, M.L.S., M.A., assistant
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 Cataloging
 Janet R. Olsen, M.S.L.S., assistant professor,
 Administrative Services Librarian
 Aaron Polonsky, A.B., B.S.L.S., assistant
 professor, Collection Development and
 Acquisitions Librarian

Anatole Scaun, M.A., M.L.S., associate professor, Reference Librarian/Subject Specialist
 Nancy S. Weyant, M.S.L.S., M.A., assistant professor, Coordinator of Reference Services
 Stephen Wiist, A.M.L.S., M.L.S., M.A., Advanced Certificate in Librarianship, assistant professor, Coordinator of Access Services
 Brad MacDonald, M.L.S., M.S.Ed., Reference Librarian, Subject Specialist

Noninstructional Faculty

Ronald V. DiGiondomenico, M.S.W., assistant professor, Academic Advisement

Center for Counseling and Human Development:
 Kambon Camara, M.S., assistant professor
 Barry L. Jackson, Ph.D., professor
 Venus Hewing, M.S., assistant professor
 Shell E. Lundahl, assistant professor, M.A., M.Ed.
 Paul Quick Sr., M.S., assistant professor, Director, Curricular Materials Center
 Peter B. Walters, M.A., assistant professor, Director, Accommodative Services
 Maureen L. Mulligan, M.S., assistant professor, Director, Upward Bound
 James Worth, M.M., Assistant Director, Upward Bound

University Instructional Faculty

April 1, 1997

Harold C. Ackerman, assistant professor, Developmental Instruction - B.S. Ed., Bloomsburg State College; M.A., University of Kansas
 Mainuddin Afza, associate professor, Management - B. Com., University of Rajshahi; M. Com., University of Rajshahi; M.B.A., Youngstown State University; Ph.D., National Academy of Science, Yerevan, Armenia
 George Agbango, associate professor, Political Science - Specialist Certificate (Geography), University of Cape Coast, Ghana; M.P.A., Atlanta University; Ph.D., Clark Atlanta University
 S. Ekema Agbaw, associate professor, English - B.A., University of Yaounde; M.A., University of Leeds; Ph.D., University of Connecticut
 Thomas F. Aleto, associate professor, Anthropology - B.A., University of Notre Dame; M.A., Ph.D., University of Illinois, Urbana-Champaign
 M. Christine Alichnie, R.N., chairperson professor, Nursing - B.S., University of Pittsburgh; M.S., Wilkes College; M.S., Ph.D., University of Pennsylvania
 M. Ruhul Amin, professor, Management - B.A., M.A., The University of Dhaka; M.A., D.P.A., Carleton University; M.A., Ph.D., The University of Akron
 Shahalam Amin, assistant professor, Geography and Earth Science, Ph.D.
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 M. Dale Anderson, associate professor, English - B.S.L., Nebraska Christian College; M.A., Fort Hays Kansas State College; Ph.D., Indiana University
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 Dianne H. Angelo, professor, Communication Disorders and Special Education - B.S., M.Ed., Clarion University; M.S., Ph.D., University of Pittsburgh
 Richard M. Angelo, professor, Clinical Director, Communication Disorders and Special Education - B.S., Mansfield State College; M.Ed., Bloomsburg State College; Ed.D., Lehigh University; Ph.D., University of Pittsburgh
 Karen Anselm, costume designer, associate professor, Communication Studies - B.A., University of Pittsburgh; M.F.A., Carnegie Mellon University
 Joseph P. Ardizzi, associate professor, Biological and Allied Health Sciences - B.S., St. Joseph's University; Ph.D., Cornell University
 Christopher F. Armstrong, professor,

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- Mary-Jo Arn, associate professor, English - B.A., Westminster College; Ph.D., State University of New York at Binghamton
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- Richard L. Baker, professor, Accounting - B.S., M.B.A., Bloomsburg State College; Ph.D., The Pennsylvania State University; C.P.A., C.M.A., C.I.A.
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- Walter M. Brasch, professor, Mass Communications - A.B., San Diego State University; M.A., Ball State University; Ph.D., Ohio University
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- Kay F. Camplese, associate professor, Biological and Allied Health Sciences, M.A.
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- Robert Dunkelberger, instructor, Andrus Library - B.A., M.A., Bowling Green State University; M.L.S., University of Illinois
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- Michele Egan, instructor, Communication Studies and Theatre Arts - B.A., M.A., State University of New York at Buffalo
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- Solange Garcia-Moll, assistant professor, Languages and Cultures - B.A., M.A., University of Puerto Rico; Ph.D., Temple University
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- William T. Green, associate professor, Mass Communications - A. B., Heidelberg College, M.A., Ph.D., University of Toledo
- David E. Greenwald, associate professor, Sociology and Social Welfare - B.A., University of Pennsylvania; M.A., Ph.D., University of California at Berkeley
- JoAnne S. Growney, professor, Mathematics and Computer Science - B.S., Westminster College; M.A., Temple University; Ph.D., University of Oklahoma
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- Steven D. Hales, assistant professor,

- Philosophy - B.A., Southwestern University; Ph.D., Brown University
- Christopher P. Hallen, associate professor, Chemistry - B.A., Assumption College; Ph.D., University of New Hampshire
- Mehdi Haririan, professor, Economics - B.A., National University; M.A., Iowa State University; Ph.D., New School for Social Research
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