# BGSU 1997-1998-1999 Undergraduate Catalog 

Bowling Green State University

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Bowling Green State University 1997-99 Undergraduate Catalog

## Hseful Phone Numbers

Admission Information
Advising, Academic (College Offices)
Arts and Sciences
Business Administration
Education and Human Development
Health and Human Services
Musical Arts
Technology
Pre-Major Advising
Campus Safety
Changing Majors
Counseling
Career Services
Counseling Center
Psychological Services
Drop/Add
Employment, Student
Financial Aid
Housing
ID Cards
Registering for Classes
STAR Telephone Registration
Transcripts

110 McFall Center

| 205 Administration Building | $372-2015$ |
| :--- | :--- |
| 371 Business Administration Building | $372-2747$ |
| 365 Education Building | $372-7372$ |
| 101 Health Center | $372-8242$ |
| 1031 Moore Musical Arts Center | $372-2181$ |
| 105 Technology Building | $372-7581$ |
| 101 University Hall | $372-2677$ |
| Commons | $372-2346$ |
| College Offices |  |

360 Saddlemire Student Services Building
320 Saddlemire Student Services Building 372-2081

309 Psychology Building

372-208
$372-2540$
372-8441
372-2865
372-2651
372-2011
372-6081
372-8441
372-8966
372-8441
372-2086
372-2015
372-2747
$372-8242$
372-2181
372-7581
372-2677
372-2346

## 1997-98 Academic Calandar

Summer Session 1997

| June 16 8-week term begins <br> July 4 Independence Day; no <br> classes  |  |
| :--- | :--- |
|  |  |

August 9 Commencement
Fatil Semestor 1997
Aug. 27 Classes begin
Sept. 1 Labor Day, no classes
Nov. 26 Thanksgiving recess begins
Nov. 31 Classes resume
Dec. 12 Classes end
Dec. 15 Examinations begin
Dec. 19 Fall semester ends
Dec. 20 Commencement
Spring Semester 1998
Jan. 12 Classes begin
Jan. 19 Martin Luther King Day, no classes
March 7 Spring recess begins
March 16 Classes resume


## 1998-99 Academic Calendar

## Summer Session 1998

June 15 8-week term begins
Aug. 8 Commencement
Fall Semester 1998
Aug. 26 Classes begin
Sept. 7 Labor Day, no classes
Nov. 25 Thanksgiving recess begins
Nov. 30 Classes resume
Dec. 11 Classes end
Dec. 14 Examinations begin
Dec. 18 Fall semester ends
Dec. 19 Commencement
Spring Semester 1999
Jan. 11 Classes begin
Jan. 18 Martin Luther King Day, no classes
March 8 Spring recess begins
March 17 Classes resume
April 30 Classes end
Mays Examinations heoin


# Chapman Learning Community Course Descriptions Bowling Green State University 

Chapman Learning Community (CLC) secks to educate the whole person. This means that one, we attempt to create a seamless learning cnvironment that permeates all aspects of students' lives, engaging them in learning activitics in and outside the classroom: throughout the wock and on weekends. Two, all Chapman courses provide gencral education credit, so we have students from many majors. Three, our courses are all integrated. avoiding the -fragmentation and incoherence of so much standard university education. The interlinking is based on the twin themes of reason and imagination, with anchor courses each semester which teach boch skills and contents related to critical thinking (in fall) and the creative arts (in spring). All courses link to freshman composition, and composition instructors play an integral role in CLC. Chapman freshmen take about half their courses in CIC. Chapman sophomores are required to take only one CLC course, but participate in peer mentoring and in community service learning outside of BGSU.

## Anchor (Required) Courses

RESC 201_Asking the Right Questions (4). Offers Social Science General Education credit: Invites students to develop: a skill that will apply widely in their lives, the ability to understand our beliefs. Beliefs are in many ways the foundation of the decisions we make, and our decisions shape who we are. Beliefs come in a variety of forms, everything from whether to go to class today, to take a drink, to oppose prayer in the schools, or to select a certain career. The course, more technically speaking, applies critical thinking skills to arguments, values and social controversies. We will be intcrested in applying the thinking skills to a limited number of social themes. specifically sexual issues, race and ethnicity, the death penalty, and politics and censorship. We evaluate reasoning problems in various arguments by analyzing their structure, as well as their value and descriptive assumptions. Wc will also examine ambiguous language, faulty assumptions, misleading evidence, logical fallacies and misleading analogies and metaphors. The culminating event will he the group's construction of an argumentative case using the tools of the coursc.

RESC 210 Journeys of the Jmagination (4). Offers Arts/Humanities General Education credit. . The course encourages learners io think about the world from an aesthetic viewpoint. To do this, it will engage a pan of the mind often neglected in school, the imagination. The course will explore art, music, theater, film, literature and dance from boh an arts appreciation point of view as well as a means by which one may develop and apply aesthetic perception as a discipline that is as basic as language or math. Learners will reffect on questions of form and content as they think aboul and practice the arts and put thesc reffections into cultural and nistorical contexts.

Ereshman_Composition courses are an integral part of the CLC curriculum. Most Chapman students will take ENG 110 or 111 in fall and ENC 112 in fall. Those who place into ENG 112 in fall or who are excmped from Freshman Composition entirely are still welcomed into the CLC community. These courses provide the foundation, in both communication skills and content, of a liberal cducation. CLC has recruited some of the most effective composition faculty io join the CLC faculty. These courses are offered with special Chapman-only sections:
ENG 110 R (Developmental Writing)
ENG 111 R (Introductory Writing)(3)
ENG 112 R (Varieties of Writing) (3)

## Electives Courses

ART $101 . R(3)$ Introduction to Art Offers Arts/Humanities credit.
Come and explore the world of art! Do you like to get your hands dirty. or do you prefer to talk to share ideas? This gencral education art course offers both possibilities. The studio scgment provides experience with various materials and techniques including batique, drawing, painting. printmaking and bookarts. On the other hand, we will also have discussions and explore both contemporary and ancient issues. like what is art really'? Is art a thing (an object, a painting) or an experience, a creation? How docs an function in society? Is an capable of taking a critical view? This is iniended as an introductory course (for non-art majors) for pcople curious about art and in search of a hands-on learning environment.

English 150 R (3) Response io Literature Offers Arts/Humanities general education credit. A general education course emphasizing discussion of humanistic themes based on student responses to readings in fiction, drama, poetry and nonfiction. Prerequisite: enrollment in or completion of. ENG 111.

PSYC 201 (4) General Psuchology Scientific approaches of the study of behavior of organisms. Application 10 personal and social behavior. Required in a number of university majors. CLC offers one of the few small (28 persons maximum) section on campus.

RESC 220 (3) -- Journeys into Science Offers general education science credit. Scudents learn how science differs from other ways of knowing, how science functions and grows, how scientific information is organized how it can be retricved and understood, how it is used to solve human problems and make decisions and form beliefs, the capabilitios and limitations of science and some of the major accomplishments since the sixieenth eentury. The course will focus on the science of medicine.

## Theater 215R. (3) Cultural Diversity through Performance Ofers

 Cultural Diversity gencral education credit. MF 2:30-4This course is designed 10 introduce students to the diverse cuhtures of the U.S. ihrough the medium of performance. It allempts to broaden the aditional thearical canon to include texts that give voice to communitiods as diverse as Jewish-Americans. Alrican-Americans. Native-Americans. Asian-Americans. Latino/Latina Americans, say/losbian/bisexual Americans. and disabled
populations. Scudents will tead both dramatic and critical works. discuss notions of culture, identity and chnicity, and engage with various expressive forms by viewing and responding to performances. Students will also priactice different ways of performing though creative responses to readings. Experience in theater is not required.
 While the following courses are NOT restricted to Chapman students. CLC recommends them highly. Each belongs to a group roughly described as an oricntation to the college experience.

ESYC 240_R (1) "Springboard_10l" (Highly recommended)
The course heips students devclop in six core arcas; communication, analysis, problem solving. judgmen, leadership and self-assurance. It encourages students to go beyond knowing-to be able to do what they know. It reveals one's hidden potential, and links college courses with the lessons of personal experience. Students write, read, speak, discuss. plan, judge, imagine, create and perform, individually and in small groups. Students see themselves growing, since many activitics are recorded on videotape. Springboard section will include CLC and non-CLC students.

UNIY 100 University Success (2) Introduction to higher education. Development of skills in oral and written communication, time and stress management, interpersonal relations, personal wellness, library research, studying/test taking. Awareness of social issues such as AIDS, alcohol and substance abuse, acquaintance rape, race relations.

UNIV 131 Career and Life Planning (2) Helps students assess personality. interests, values. aptitudes and abilities. explore world of work and requisite academic preparation, generate occupational and academic options. make knowledgeable and appropriate decisions.

## 1997-99 <br> Bowling Green State University Undergraduate Catalog

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The Undergraduate Catalog is on the World Wide Web at http://www.bgsu.edu/catalog/

## About This Catalog

1. Students are responsible for knowing all requirements and policies in this catalog, particularly those academic policies on pages 5-12.
2. All information in this catalog was correct as of April 30, 1997, and is subject to change. Except as specifically stated herein, Bowling Green State University makes no representation or contract that following a particular course or curriculum will result in specific achievement, employment or qualification for employment, admission to degree programs or licensing for particular professions or . occupations.
3. Programs are listed in this catalog under colleges in alphabetical order. Under each program, courses are identified by a three- or four-letter abbreviation and a number. Course descriptions are listed in the back of this catalog in alphabetical order by subject area.
4. The semester schedule of classes should be used in conjunction with this catalog to determine course availability since all courses are not offered every semester.
5. The University reserves the right to change its course offerings, academic policies and requirements for the baccalaureate and associate degrees. To protect students from unnecessary penalty where changes in degree requirements occur, the following policies in regard to the Undergraduate Catalog are in effect:
a. Students who do not change their BGSU college follow the degree requirements'specified in the Undergraduate Catalog in use during their first academic term at BGSU. If the initial term of enrollment is during the second academic year of a twoyear catalog, students follow the approved degree requirements in effect at the time of enroliment.
b. Students may elect to complete a degree program under the most recent Undergraduate Catalog. If this choice is made, then the student must complete all degree requirements specified in the selected catalog.
C. Students who transfer from one BGSU college to another follow the Undergraduate Catalog in effect at the time of the transfer. If the transfer is made during the second year of a two-year catalog, students follow the approved degree requirements of the new college in effect at the time of the transfer.
d. Students who transfer from another institution follow the Undergraduate Catalog in effect at the time of their initial registration for courses at BGSU. If the transfer is made during the second year of a two-year catalog, students follow the approved degree requirements in effect at the time of the transfer.
e. Students who initiate but do not complete a program and return to the University follow the degree requirements specified by the dean of the college in which they are enrolled at the time of their return.
f. Questions concerning catalog policy should be directed to the appropriate college advisement office.
6. The BGSU ID number is used for identification and record-keeping purposes throughout a student's attendance at the University. However, in addition, federal and state laws and regulations require the University to retain a student's social security number for identification and record-keeping purposes. Students are requested to report their social security number voluntarily upon enrollment at the University.
7. Bowling Green State University provides equal educational and employment opportunity regardless of race, sex, color, national origin, geographical area, religion, creed, marital status, mental or physical handicaps or veteran status. The University will not knowingly cooperate with, support or employ the services of other organizations that discriminate against persons on such grounds. However, if any student with a physical disability requires special individual services or equipment, the student will be responsible for the expenses thereof. This policy includes the expense of providing personal tutors, personal attendants, medical technicians and so forth. The University will assist such students in communicating with proper community or government agencies to secure any available financial assistance to meet their needs.

# The University 

Bowing Green State University is situated on a 1,338-acre campus, which includes 113 buildings. The University offers more than 165 undergraduate degree programs, 13 master's degree programs in more than 60 fields, two specialist degree programs and 14 doctoral programs with more than 60 areas of specialization. More than 16,600 students, including about 2,500 graduate students, attend classes on the main campus. The University enrolls an additional 1,350 students at the Firelands College and varicus off-campus centers. At the center of the University's academic community are the 700 full-time faculty members, who are engaged in teaching, research and scholarship activities.

Established in 1910 as a teacher-training institution, Bowling Green held its first classes in 1914, but it was not until the following year that the first two buildingsnow University Hall and Williams Hall-were ready for use. Student enrollment for that Initiai year totaled 304, with a faculty of 21. The first bachelor's degrees were awarded in 1917.

In 1929, the functions of Bowling Green were expanded to provide four-year degree programs in the College of Education and the College of Liberal Arts. The College of Business Administration and graduate progiams were added in 1935, the year in which Bowling Green attained full university status. In 1947, the Graduate School was formed, and BGSU awarded its first doctoral degrees (in English) in 1963.

Beginning in 1946, extension programs of the University were offered in Sandusky, Ohio. During the next two decades, course offerings there were expanded and in 1965 a branch campus of the University was established to serve Erie, Huron and Ottawa counties. That branch campus is Firelands College, located in Huron, Ohio. Firelands College, which opened for classes in 1967, offers career and technical education leading to associate degrees in 18 areas, as well as the first two years of baccalaureate degree programs.

In the 1970s, three new colleges were added to the University's curricular offerings. In 1973, the College of Health and Human Services was established to provide degree programs in specialized areas in various health and community service fields. In 1975, the School of Music was expanded into the

College of Musical Arts, and in the same year the Graduate School became the Graduate College. The School of Technology was granted college status in 1985.

In addition to its degree programs, the University offers diverse opportunities for educational and cultural enrichment to the people of the area through its regional and continuing education programs, as well as through the inteilectual and cultural activities that are an integral part of campus life.

## The Campus

Included among the more than 100 buildings on the Bowling Green campus are some that were completed as early as 1915; many of these have been recently refurbished to preserve their original structure. Most are equipped with ramps and ground-level entryways for the disabled.

Jerome Library is the heart of the academic community. Open stacks, reading lounges and study areas support independent and group study. BGSU Libraries house collections of more than 6 million items including books, journals, periodicals, microforms, government documents, sound recordings and other research materials. The library is linked by computer (BG LINK) to a powerful statewide library and information system. In addition, the library is nationally known for its special collections, particularly in popular culture, popular music and and the Great Lakes. The Center for Career Resources, located in the Saddlemire Student Services Building, offers students career related services and materials. The Center for Archival Collections, located in the Jerome Library, houses materials relevant to northwest Ohio history. Instructional Media Services, located in the Education Building, provides services, equipment and materials to produce instructional and presentation materials for class projects or teaching.

Among the facilities in the scienceresearch complex are the Psychology Building, the Mathematical Sciences Building, the Life Sciences Building, Overman Hall, the Biological Sciences Laboratory Annex and the Physical Sciences Laboratory Building. These provide specialized research equipment and laboratories to serve the needs of students in a variety of
disciplines.
Olscamp Hall, opened in 1994, is a distance learning center, housing three teleteaching rooms as well as traditional classrooms. Each teleteaching room contains VCRs, slide projectors, an audio system, a computer with graphics capabilities and a remote video camera. Microphones are built into each student desk and the teaching podium. Communication can take place remotely via cable, telephone lines and satellite, bringing together classes at remote sites in interactive learning.

The Technology Building contains a robotics center and specialized laboratories in design, electronics, manufacturing, visual communications and other technologies.

Art facilities include individual studios for design and workshops for such areas as jewelry making, woodworking, painting, drawing, enameling, weaving, sculpture, ceramics and glass blowing. Photography laboratories are also available. Two art galleries located in the Fine Arts Center annually feature works by faculty and students, as well as traveling exhibits.

The campus radio stations, WFAL-AM and WBGU-FM, provide students with practical experience in daily station operations. Students also support the protessional staff in the programming and activities of WBGU-TV, a public television station located on campus serving northwest Ohio.

Theatre students at the University have many opportunities to participate in all phases of the theatre experience through annual productions held in University Hall's Eva Marie Saint Theatre as well as the Joe E. Brown Theatre.

The Moore Musical Arts Center provides extensive and modern facilities for the University's music programs and activities. Constructed around an open courtyard, the music center includes an 850 -seat conceri hall, a 250 -seat recital hall, as well as practice rooms, rehearsal halls, classrooms, studios and a variety of special facilities designed for specific areas of performance and instruction.

Athletic facilities at the University include: the Bowling Green University Field House, which has an indoor track, basketball court:a wing with a 70-yard artificial turf field for football, soccer, baseball and softball; an 18hole golf course; a 5,000-seat ice arena; 25 outdoor tennis courts; the Eppler Complex;

5,000-seat Anderson Arena (basketball and volleyball); 30,500-seat Doyt Perry Stadium; fller Field, which seats 2,000 for baseball; alcon Softball Complex; Whittaker Track; Cochrane Soccer Field; numerous activity and practice fields; and Cooper Pool at the Student Recreation Center where the swimming teams compete.

The Student Recreation Center features exercise facilities in a four-level complex, including two swimming pools, a whirlpool/ spa, 14 handball/racquetball courts, Universal/Nautilus areas, courts for basketball, volleyball, tennis, squash and badminton, FITWELL Lab, aerobics, and an outdoor lighted "Pace Trail."

The University Union is a center for social and cultural activities on campus. There are three food service facilities and 26 guest rooms in the Union, and a wide range of lectures, concerts and other activities are presented in the Lenhart Grand Ballroom, located on the second floor.

The Mileti Alumni Center is the hub for the many activities of the University's alumni. It contains meeting rooms, a library and a gallery.

Other campus buildings house classrooms and facilities for programs in business administration, education and the humanities.

## fademic goals of the University

Bowling Green State University is dedicated to providing quality academic programs in a learning environment that promotes academic and personal excellence in students, as well as appreciation of intellectual, ethical and aesthetic values. Wisdom, sound judgment, tolerance and respect for other persons, cultures and ideas are the halimarks of an educated person and the characteristics that the University hopes to develop in its students.

The extent to which these goals are met depends upon the intellectual and cultural environment of the University, the wisdom and dedication of its faculty and the intellectual curiosity, ability and energy of its students. To achieve this end the University strives to attract the most qualified students and faculty committed to the goals of quality education, productive research and scholarly achievement:

Through a vigorous program of curricular evaluation and development, Bowling Green State University seeks to ensure that those who earn a baccalaureate degree from any of the colleges of the University will have acquired practical and theoretical understanding in a specific area of specialization;
ionstrated competency in critical thinking, Sblem solving, reading, writing, speaking, computation and mathematics; acquired a fundamental breadth of knowledge in literature, the fine arts and the other
humanities, as well as in the natural, social and behavioral sciences; experienced personal growth through interaction with all elements of the University community and through exposure to other cultures; and enjoyed the opportunity to explore diverse individual academic interests through the variety of courses and programs available at the University. To encourage further these qualities, a cultural diversity component has been added to the University's general education program. The University's emphasis on multiculturalism is intended to demonstrate that society is best șerved when its citizens are broadly educated.

## Accreditation and recognition

The University is fully accredited at the bachelor's, master's and doctoral levels by the North Central Association of Colleges and Schools. In addition, the College of Business Administration is accredited by the American Assembly of Collegiate Schools of Business (AACSB); teacher education, by the National Council for Accreditation of Teacher Education (NCATE) and the Ohio Department of Education; the College of Musical Arts, by the National Association of Schools of Music (NASM); art, by the National Association of Schools of Art and Design; chemistry, by the American Chemical Society; communication disorders, by the Educational Standards Board American Speech-Language-Hearing Association; dietetics, by the American Dietetics Association; environmental health, by the National Environmental Health Science and Protection Accreditation Council; health information technology (Firelands), by the Committee on Allied Health Education of the American Medical Association; health, physical education and recreation, by the National Athletic Training Association; journalism, by the American Council on Education for Journalism and Mass Communication; medical record technology (Firelands), by the American Medical Record Association; medical technology, by the Committee on Allied Health Education and Accreditation, National Accreditation Association for Clinical Laboratories; nursing, by the National League for Nursing; physical therapy by the American Physical Therapy Association; psychology, by the American Psychological Association; rehabilitation counseling, by the Council on Rehabilitation Education; respiratory care technology (Firelands), by the Joint Review Committee for Respiratory Therapy Education; social work, by the Council on Social Work Education; technology, by the National Association of Industrial Technology and the American Council for Construction Education; and theatre, by the National Association of Schools of Theatre.

## Academic organization

Courses of instruction leading to baccalaureate degrees are provided through: the College of Arts and Sciences, which includes the School of Art and the School of Mass Communication; the College of Business Administration; the College of Education and Human Development, which includes the School of Health, Physical Education and Recreation; the College of Health and Human Services, which includes the School of Nursing; the College of Musical Arts, and the College of Technology. Associate degrees are available through Firelands College. Graduate degrees are offered through the Graduate College.

An undergraduate student enrolls in one of the seven colleges-Arts and Sciences, Business Administration, Education and Human Development, Firelands, Health and Human Services, Musical Arts or Technology. An undergraduate student who is undecided as to college enrolls in the Office of PreMajor Advising.

The University emphasizes a liberal education for freshmeń and provides advising services for them, especially for those undecided about their major. The Office of Pre-Major Advising assists students in meeting the requirements of the specific degree-granting undergraduate colleges.

## Degrees offered

Four-year undergraduate programs are available leading to the following degrees:

Bachelor of Applied Health Sciences Bachelor of Arts
Bachelor of Arts in Communication
Bachelor of Fine Arts
Bachelor of Liberal Studies
Bachelor of Music
Bachelor of Science
Bachelor of Science in Art Therapy
Bachelor of Science in Business Administration
Bachelor of Science in Child and Family Community Services
Bachelor of Science in Criminal Justice
Bachelor of Science in Communication Disorders
Bachelor of Science in Dietetics
Bachelor of Science in Economics
Bachelor of Science in Education
Bachelor of Science in Environmental Health
Bacheior of Science in Gerontology
Bachelor of Science in Journalism
Bachelor of Science in Medical Technology
Bachelor of Science in Nursing
Bachelor of Science in Physical Therapy
Bachelor of Science in Social Work
Bachelor of Science in Technology

## 4 The University

Two-year programs are available at Firelands College leading to the following , associate degrees:

Associate of Applied Business
Associate of Applied Science
Associate of Arts
Associate of Science
Associate of Technical Sțudy
See the Graduate Catalog for a list of graduate degrees offered by the University.

# Academic Policies 

## Baccalaureate degree

The baccalaureate degree program should enable all students to achieve the intellectual, ethical and cultural maturity that will allow them to become responsible participants in our society. The University curriculum for the degree has three components: general education, which focuses on basic skills and understandings; the major, which may include a minor area of concentration; and the elective courses, which enable students to explore fields outside the above components.

General education addresses the acquisition of basic skills in reading and writing, computation and mathematics, problem-solving and critical thinking; tegrating values in decision-making, and the acquisition of functional understandings in literature, the fine arts and other humanities; the natural sciences; the social and behavioral sciences; an understanding of at, least one culture other than one's own; and an understanding of cultural diversity in the United States.

The major provides the student with indepth practical and theoretical knowledge in one particular area of study. Some degree programs also require the student to complete a minor. Students not required to do so may voluntarily complete a minor offered by another academic unit. Electives allow the student to explore. diverse individual academic interests or interests that relate to the major.

## Duall degree programs

A candidate for an undergraduate degree who desires to take a second degree from a different college within the University may:

1. take work in the second college after graduating from the University; or
2. qualify for the dual degree program by meeting the requirements listed below.

A student desiring a dual degree must: secure permission of the deans of both colleges before the end of the junior year;
2. complete the requirements of both colleges for the degrees sought; and
3. complete at least 20 hours of credit beyond the hours required for a single degree.

## General requirements for the baccalaureate degree

A candidate for a baccalaureate degree must complete the requirements listed below and any additional requirements set by the colleges for the specific degree sought. Check the appropriate sections of this catalog for additional degree requirements. The general requirements are:

1. Satisfy all University entrance requirements. See Articulation Policy.
2. Earn a minimum of 122 semester hours of credit, at least 30 of which must be - completed at Bowling Green immediately before graduation (some degrees require more than 122 hours of credit):
3. Earn an accumulative grade point average of at least 2.0 ("C") for all course work attempted.
4. Complete the University's General Education Core requirement. See General Education Core Curriculum.
5. Complete the freshman English composition sequence, preferably in the freshman year. See Requirement of Writing Proficiency for penalty if this requirement is not completed before junior or senior year.
6. Complete at least 40 hours of credit in courses numbered 300 and above. If a senior takes a course numbered 100-199 (except foreign language or computer science), an additional hour must be taken as a graduation requirement.
7. Satisfy all course requirements for the degree as listed in the appropriate sections of this catalog.
8. File an application for graduation according to the following schedule:
a. For graduation in December, an application must be filed by the end of the second week of the fall semester.
b. For graduation in May, the deadline for filing an application is the end of the second week of the spring semester.
c. For graduation in August, the filing date deadline is the end of the first week of the summer session.

An application form and information may be obtained at the student's college office. Completed applications are to be turned in at the student's college dean's office with the
exception of those students in the College of Education and Human Development who turn the applications in at the Program Advisement Office, 365 Education Building. A student not accepted as a candidate under the above procedure or who does not fulfill requirements toward a degree within four weeks after commencement must apply again for graduation at the next commence: ment.

## General education core curriculum

A general education core curriculum supports Bowling Green State University's mission in liberal education for all undergraduate students. The core is designed to give students an understanding of the multiple realities of a complex and culturally diverse world. It provides an introduction to the modes of inquiry in four areas of functional understanding: Natural Sciences, Social and Behavioral Sciences, Humanities and Arts, and Cultural Diversity in the United States. Each course in the core emphasizes the development and enhancement of one or more of the following five skills: written communication, oral communication, computation and mathematics, critical thinking and problem solving, and decision making and values analysis.

All candidates for the baccalaureate degree at Bowling Green State University must take at least eight courses from the University General Education Core Curriculum distributed as follows:

- two from the natural sciences,
- two from the social and behavioral sciences,
- two from the humanities and arts,
- one from cultural diversity in the U.S.,
- one remaining course from any of the functional understanding areas.
- In addition, at least one of the courses from either the social and behavioral sciences or the humanities and arts must contain an international perspective. Courses satisfying this international perspective requirement are marked with an asterisk (*) in the general education course list below.

Courses included in the General Education Core serve as a foundation in the selected area of understanding. Additionally, each course emphasizes the development and enhancement of one or more of the following five skills: written communication, oral communication, computation and mathematics, critical thinking and problem solving, and decision making and values analysis. Courses at the 300 and 400 level integrate two or more disciplinary perspectives on the topics, issues or problems under consideration in the course, and require extensive writing, reading and research. It is suggested, although not required, that students complete at least one general education course at the 300 or 400 level.

Core areas of Functional Understandings are listed below. Students should check with their college office for specific details regarding General Education Core requirements.

## Punctional Understandings in the 

Core courses in the natural sciences make clear the important role of experimentation and observation in the sciences and the way in which these observations of the physical and biological world lead scientists to formulate principles that provide universal explanations of diverse phenomena. These courses have as a goal the development of an understanding of how scientific principles are utilized in the modern world and of the impact of science on society and the human health and well-being of individuals.

## Biology

BIOL 101, 104, 204, 205
Chemistry
CHEM 100, 109 \& 110,117 \& 118, 125, 127
$\& 128,135,137 \& 138$
Geography
GEOG 125
Geology
GEOL 100, 104, 105, 205, 215, 322

## Honors

HNRS 250
physics and Astronomy
PHYS 101, 201, 202, 211, 212
ASTR 201, 212

## Functiona! Understandings in the

 Social and Behavioral SciencesThe principal objective of general education courses in the social and behavioral sciences is to explain through empirical investigation and theoretical interpretation the behavior of individuals and various groups in societies, economies, governments and subcultures. Courses in these social sciences will identify significant patterns of human behavior and provide means of inquiry by which these patterns may be explored.

## Ares and Sciences

A\&S 250

## Canadian Studies

CAST 201*

## Economics

ECON 100, 200, 202, 203
Environmental Health
ENVH 210*

## Environmental Studies

ENVS 101, 301

## Geography

GEOG 121*, 122*, 225, 230*, 325*, 331*. $343^{*}, 344^{*}, 346^{*}, 349^{*}, 426,435$

## Gerontology

GERO 405*

## History

HIST $151^{*}, 152^{*}, 180^{*}, 205,206,310^{*}, 311^{*}$, 370*, 377*, 382*, 411*, 429, 470*

## Honors

HNRS 201, 240
Political Science
POLS 110, 171*, 172*, 301*, 335, 351*, 361*, 372*, 402, 403

## Psychology

PSYC 201
Sociology
SOC 101, 202, 231*, 361

## Technology

TECH 302

## Functional Understandings in

## Humanities and Arts

General education courses in the humanities further an understanding of humanistic approaches to knowledge. They develop skills in analysis and interpretation of philosophy, literature, music and visual arts, as well as an understanding of the social context in which philosophical and cultural works arise. Courses in the arts develop a critical understanding of artistic expression, the creative process, the formation of aesthetic values and the complex interdependence of art and society.

American Culture Studies
ACS 200, 230, 300
Art
ART 101
Art History
ARTH 145, 146
Arts and Sciences
A\&S 250
Classical Civilization
CLCV 241, 242
English
ENG 150, 200/203, 261*, 262*, 264, 265 , 266, 267, 269*

Ethnic Studies
ETHN 220*
French
FREN 284*

Foreign Languages
Intermediate French, Greek, Italian, Latin, Spanish (FREN, GRK, ITAL, LAT, SPAN 201*, 202*)
French and Spanish Cultural Series (FREN, SPAN $212^{*}$ )
Intermediate German, Russian, Japanese, Chinese (GER, RUSN, JAPN, CHIN 201*, 202*)
Intermediate Conversational German (GERM $\left.217^{*}, 218^{*}\right)$

## German

GERM 260*

## Honors

HNRS 260

## Music

MUCH 101, 125*, 221, 233*, 234*, 235*
Philosophy
PHIL 101, 102, 103, 204, 211, 212, 230, 325
Popular Culture
POPC 160, 165, 220

## Theatre

THEA 141, 202, 261, 347, 348

## Functional Understandings int Cultural Diversity in the United States

Core courses in cuitural diversity in the United States develop awareness of the multicultural nature of American society. All courses examine the methods of cross cultural analysis and investigation through the study of such concepts as stereotyping and culture mapping.

## American Culture Studies

ACS 250
Educational Foundations and Inquiry EDFI 408

English
ENG D200, 424
Ethnic Studies
ETHN 101, 120, 130, 210, 260, 301, 302, 361, 410

Geography
GEOG 337
Gerontology
GERO 301
History
HIST 319
Human Development and Family Studies
HDFS 107, 408
Music Composition and History
MUCH 237, 431
Popular Culture
POPC 170
Sociology
SOC 316

Theatre
THEA 215
omen's Studies
WS 200

## Articulation policy/ removal of articulation deficiencies

All students graduating from high school after April 15, 1986, who desire to pursue a four-year baccalaureate degree at BGSU are to fulfill a specified collegiate preparatory program. These standards require specified units ( 1 unit equals 1 year of high school course) as follows:

- four units of high school English
- three units of high school mathematics
(algebra I, algebra II, geometry)
- three units of science (with at least two lab sciences)
- three units of social science
- two units of the same foreign language
- one unit of visual or performing arts (art, dance, film, music, theatre)

Students must make up all deficiencies by taking courses in the areas of deficiency; these courses may be used to satisfy general education requirements in most cases. All deficiencies must be completed within the st 60 hours of credit at BGSU or the student will be placed on probation. For each two units of deficiency, graduation requirements will increase by three credit hours: These additional hours must be taken from. the General Education Core Curriculum (page 6). A student may not graduate until deficiencies are removed. Students pursuing two-year associate degree programs are exempt from this policy. If they decide, however, to pursue a baccalaureate degree at a later date, the policy will apply.

## Removal of deficiencies

Students admitted to the University who have not met the specified criteria are notified in writing of their units of deficiency by the Office of Admissions. Students who question the specified deficiencies may complete an Articulation Deficiency Request-for-Review, available in and returnable to the college office in which the student is enrolled. The college offices collect the forms and forward them to the Office of Registration and Records where a copy of each student's high school transcript is attached. All Articulation Deficiency Request-for-Review Forms are then forwarded for review/action to the Faculty Articulation Resource Committee; students will be notified of this committee's action. (Please note that the college offices re not involved in the appeals process.) Students with identified deficiencies must remove them by taking specified coursework; this coursework must be completed before the student has accumulated 60 semester hours. Applicability of this coursework
toward graduation requirements depends on the major/degree being pursued. Each student should, therefore, become familiar with the graduation requirements of the major being pursued. Deficiencies can be removed in the following ways:

Deficiency in English-Satisfactory completion of English 112. (All students must take a placement test in English; enrollment in ENG 110 and/or ENG 111 may be required prior to enrollment in ENG 112.)

Deficiency in Mathematics-Satisfactory. completion of MATH 095/098 or satisfactory completion of a college mathematics course at the 100 level or above (except MATH 111 and MATH 241). All students must take a placement test in mathematics; placement in mathematics courses is dependent on the test results.

Deficiency in Social Science*-Satisfactory completion of one of these courses for each unit of social science deficiency: A\&S 250; ECON 100; ETHN 101; GEOG 121, 122, 230; HIST 151, 152, 180, 205, 206; POLS 110, 250, 171; PSYC 201; SOC 101, 202, 231; University honors social science courses.

Deficiency in Science*-Satisfactory completion of one of these courses for each unit of science deficiency: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109 \& $110,117 \& 118,125,127 \& 128,135,137 \&$ 138; GEOG 125; GEOL $100,104,105,205$; PHYS 101, 201, 202, 211, 212; University honors science courses.

Deficiency in Foreign Language Two units of deficiency may be removed by successful completion of one of the following sequences: ARAB, CHIN, FREN, GERM, ITAL; LAT, JAPN, RUSN, SPAN 101 and 102 (each of these courses is four credit hours).

One unit of deficiency may be removed by continuing the language previously studied through successful completion of the 102 courses indicated above, OR GERM 117 plus 118 (GERM 117 and 118 are two credit hours each).

Before continuing in a language previously studied, a student must take a placement test. If test results demonstrate that a student is not prepared for the second course in a language sequence, the student will be advised to take both the first and second course in the sequence to remove the deficiency.
Deficiency in Visual or Performing Arts*Satisfactory completion of one of these courses: ART 101, 102; ARTH 145, 146; MUCH 101, 110, 112, 116, 125, 221, 401; THEA 141, 202; TCOM 261; University honors courses in art, music, theatre.

Courses in dance, film and performance may also be used to remove deficiencies in this area. Such courses, however, will not apply to general education requirements.

* Some colleges accept additional coursework in these areas; for specific information regarding the additional courses that the individual college accepts, contact the college office.

Reading Skills-Students are required to take a reading test prior to initial registration. Students must demonstrate competency on this reading test to be advanced to sophomore standing (i.e., 30 semester hours). Students who do not demonstrate competency via successful completion of a reading test or successful completion of EDCl 100 will be subject to dismissal from the University. Foreign students will be given one additional semester to complete this requirement, if needed.

## Requirements for advancement to sophomore and junior standing

English/Writing: Students must take a placement test administered by the Department of English prior to initial registration. Those students who place in English 110 or 111. must complete either English 110 or 111 before advancement to sophomore standing (i.e., 30 semester hours). Students who do not complete English 110 or 111 or its test equivalent prior to advancement to sophomore standing will be subject to dismissal from the University. Foreign students who place in English 100 will have one additional semester to complete these requirements (See Requirement of Writing Proficiency).
Mathematics: Prior to advancement to junior standing (i.e., 60 semester hours) all students must demonstrate competency in mathematics, either by completion of two years of algebra (algebra I and II) and one year of geometry in high school or by successful completion of a mathematics proficiency examination administered by the Department of Mathematics and Statistics. Students who do not demonstrate proficiency on this examination will be subject to dismissal from the University.

Reading: Students are required to take a reading test prior to initial registration. Students must demonstrate competency on this reading test in order to be advanced to sophomore standing (i.e., 30 semester hours). Students who do not demonstrate competency via successful completion of a reading test or successful completion of EDCl 100 will be subject to dismissal from the University. Foreign students will be given one additional semester to complete this . requirement, if needed.

## Requirement of writing proficiency

Recognizing that the ability to communicate in writing is a valuable skill and a halimark of an educated person, the University requires that each student enrolled in a baccalaureate or associate degree program complete satisfaciorily ENG 112 or give evidence of proficiency in written expression equivalent to that attained by the student who complates this course. No student can be excused from meeting this requirement, nor can the requirement be postponed.

The courses and services designed to aid students in meeting the writing requirement are coordinated through the General Studies Writing program. The English Placement Test, administered through this program, assesses the writing skills of entering siudents. On the basis of this test, students are placed in ENG 110/110S (Developmental Writing), ENG 111 (Introductory Writing) or ENG 112 (Varieties of Writing). A student may be required to take two or three of these courses, but no more than six hours of credit earned in these courses may be applied toward graduation. The writing proficiency of students is evaluated at the end of each course until students have reached the University proficiency requirement expected upon completion of ENG 112. Students who wish to receive transfer credit for English composition and communication courses may be tested for writing proficiency to determine whether credit will be awarded. Students who wish to be exempted altogeiher from English composition are also tested for writing proficiency.

Special courses and services designed to ald international students (i.e., non-native speakers of English) in improving their English proficiency are coordinated through the Program in English as a Foreign Language. Upon reporting to the University and before registering for classes, all entering international students admitted through the Office of International Programs and the Office of Admissions, except those whose rative language is English, are required to take on-campus proficiency tests; international students transferring from other colleges and universities in the United States as well as sludents from Puerto Rico are aiso required to take these tests. On the basis of these tests, the University reserves the right to place students in ENG 100 (English as a Foreign Language I) or ENG 101 (English as a Foreign Language II). A student may be required to take one or both of these courses, but no more than four semester hours of credit may be applied toward graduation. The English proficiency of students is evaluated at the end of each course until the siudents have reached the level of English language proficiency expected upon completion of ENG 101. The University also reserves the right to require enrollment in the special section for
international students of ENG 110 if the student has no transfer credit for the course.

To encourage all students to pass ENG 112 prior to the beginning of the junior year, three credit hours are added to the graduation requirements of students who pass ENG 112 after accumulating 60 credit hours; four hours to the graduation requirements of those with 90 or more credit hours. This requirement applies only to students who enter the University on or after September 1, 1981.

The following are exempt from this penalty:

1. Students transferring to BGSU with 31 or more credit hours, provided that ENG 112 is passed within the first 30 credit hours earned at BGSU after the transfer, and
2. International students who transfer to BGSU with 21 or more credit hours and for whom English is a second language. Exemption from the penalty must be recommended by the director of international programs and ENG 112 must be passed within the first 40 credit hours earned at BGSU.

## General requirements for the associate degree

A candidate for an associate degree must complete the requirements listed below and any additional requirements set by the colleges offering this degree. The requirements are:

1. Satisfy all University entrance requirements.
2. Earn a minimum of 62 semester hours (some degrees require more than 62 hours of credit).
3. Earn a cumulative grade point average of at least 2.0 (C) for all coursework attempted.
4. Complete the freshman English composition sequence, preferably in the freshman year.
5. Complete all course requirements for a degree program as listed in the appropriate section of this catalog.
6. File an application for graduation according to the following schedule:
a. For graduation in December, an application must be filed by the end of the second week of the fall semester.
b. For graduation in May, the deadline for filing an application is the end of the second week of the spring semester.
c. For graduation in August, the filing date deadline is the end of the first week of the summer session.
An application form and information may be obtained at the Registration Office in the East Building at Firelands. The completed applications are to be turned in at the college deans' offices.

A student not accepted as a candidate
under the above procedure or who does not fulfill requirements toward a degree within four weeks after commencement must apply again for graduation at the next commencement.

## Other policies

## Classification of students

Classification of a student as a freshman, sophomore, junior or senior is determined on the basis of credit hours earned.

In a baccalaureate degree program a student is classified according to hours earned as follows: freshman, $0-29$ hours; sophomore, $30-59$ hours; junior, $60-89$ hours; senior, 90 hours to hours required for graduation.

A student who is enrolled for undergraduate coursework but who does not have a degree goal is a guest undergraduate. A student who has earned a degree and who desires to register for undergraduate courses without pursuing another degree enrolls as a guest degree-holder.

## Stafus change to partothme

A full-time student normally should be registered for 15 to 16 hours per semester. For certification purposes, a full-time undergraduate student is one registered for 12 or more hours. During the summer session, a full-time student is one enrolled for six or more hours during the eight-week term, four or more hours during a six-week term and three or more hours during a fourweek term. A part-lime student is one enrolled for fewer than the minimum number of hours outlined above.

A full-time student who drops sufficient hours during a semester to become a paritime student is subject to the following restrictions:

1. Ineligibility for intercollegiate athletics.
2. Possible reduction of financial aid awards. Check with the Office of Financial Aid and Student Employment for details on this policy.

Such students are still eligible to remain in University-owned housing and to retain. membership in University organizations. Further questions on this policy should be addressed to the Office of the Vice President for Academic Affairs.

## Change of college or major

A student whose goals have changed may wish to change to another college or major. Before changing, a student should explore the requirements of the desired college. To change to another college, a student must have at least a 2.0 accumulative grade point average and obtain the approval of the college to which the student is transferring. The transfer also must be officially recorded by the dean's office of the college from which the student is transferring.

A student who wishes to change a major ithin a college should notify the college fice. At that time an appropriate adviser is assigned.

Academic advisers are available in the college offices to help students select the degree program that best meets individual needs and interests.

## Withdrawal from the University

A student who wishes to withdraw from the University in good standing must obtain the permission of the dean of the college in which the student is enrolled. If a student leaves the University without proper notice and permission, a mark of WF is recorded in all courses for which the student is currently enrolled. The student is not entitled to any refund of fees.

A student who' withdraws with permission from the University will have all courses from the semester dropped and no grades recorded unless the student has previously withdrawn from a course with a WF. A student who withdraws from the University during the last five weeks of classes at the end of the semester is not permitted to enroll for the next semester except by special permission of the dean of the college. A student is not permitted to withdraw from the University during the final exam period.

When, in the judgment of the medical staff of the Student Health Service, the hysical or mental condition of a student hight be disadvantageous to the health or welfare of that student or others on the campus, the University may require the withdrawal of the student from the University.

See Refund of Fees under Fees and Charges.

## Grading policies

Courses are graded as follows: A-excellent; B-good; C-acceptable; D-poor but passing; F-failure; WF-withdrawn failing; INCincomplete, and 1 -incomplete calculated as $F$. Certain courses (including student teaching, some internships, remedial courses. and required physical education courses) are. graded S/U only and are so indicated in the . course descriptions. S means satisfactory and indicates course credit was earned. $U$ means unsatisfactory and indicates no credit. A student may also elect the $\mathrm{S} / \mathrm{U}$ grading option in no more than 16 credit hours in a - baccalaureate degree program (beyond those hours graded $S / U$ only). Any $S / U$ hours beyond this limit will not count toward graduation. The grading option must be declared at the Office of Registration and Records no later than seven calendar days. gfter the beginning of classes for a semester. Many departments do not accept courses taken under the S/U option for credit in major
or minor requirements; students should consult departmental officials. More than 12 semester hours of S/U grades may increase the grade point average needed for graduation with honors. Courses taken under advanced placement, credit by exam, CLEP, etc., are considered S/U and do not count as letter-graded hours. See Graduation with Honors.

The grade of $S$ is interpreted as falling within the range of $A$ to $C$ and carries full credit. A grade of $U$ is interpreted as $D$ to $F$ and carries no credit. $S$ and $U$ grades do not affect the accumulative grade point average.

A student who wishes to attend a class without receiving credit for it may register to audit that course (see Registration and Records).

A student who withdraws from a course may receive a grade of WP (withdrawn passing) or WF (withdrawn failing). WP is assigned when a student withdraws in good standing during the second through the ninth week of a course in the fall and spring semesters, the fourth class day through the twenty-first class day of the eight-week summer term, the fourth class day through the eighteenth class day of a six-week summer term, and the fourth class day through the fourteenth class day of a fourweek summer term. WF is assigned if the student is failing at the time of withdrawal from the course prior to the WP deadline, withdraws after the deadline for WP has passed, or stops attending but does not process an official withdrawal in the Office of Registration and Records. This provision applies to all grading options, including $S / U$. The grade of WF is used in computing the grade point average.

A student who officially withdraws from the University receives a $W$ in all courses, unless the student has previously withdrawn from a course with a WF.

See Incomplete Marks.
See Withdrawal from the University.

## Grade point average

For averaging grades, the following quality points are assigned to each letter grade:

| For each hour of $\mathrm{A}-$ | 4 points |
| :--- | :--- |
| For each hour of $\mathrm{B}-$ | 3 points |
| For each hour of $\mathrm{C}-$ | 2 points |
| For each hour of $\mathrm{D}-$ | 1 point |
| For each hour of F or WF- | 0 points |
| For each hour of $\mathrm{I}-$ | 0 points |

A student's grade point average is obtained by dividing the total number of quality points earned by the total number of hours taken, excluding courses in which the marks $S, U$, P, INC, W or WP are recorded. The hours for which a mark of iNC is recorded are excluded from grade point average computation until the deadline for removal.

As an example, suppose a student receives the following grades for a semester:

| French | (a 4-hour course) | C |
| :--- | :--- | :--- |
| Health | (a 3-hour course) | A. |

First, determine the number of quality points earned for each course. For example, each hour of $B$ is worth 3 points and a 4 -hour $B$ is worth 12 points ( $3 \times 4$ ).

Therefore, the above grades translate into quality points as follows:

| 4 times $3(B)$ | $=12$ |
| ---: | :--- | ---: |
| 3 times $3(B)$ | $=9$ |
| 4 times $2(C)$ | $=8$ |
| +3 times $4(A)$ | $=12$ |
| 14 hours |  |

Now, divide the number of quality points by the number of hours taken for a letter grade. The grade point average for this sample schedule is 2.9285 or 2.92 . Grade point averages are not rounded up to the nearest hundredth of a point.

## Incomplete marks

The mark of INC (incomplete) is given when, for some acceptable reason, a student fails to meet a definite requirement in a course as established by the instructor. The mark of INC may be removed and a grade (if taken for a grade) or the letter $S$ (if taken $S / U$ ) may be substituted for it by a student making. up the deficiencies to the satisfaction of the instructor.

Unless an extension of time is granted by the academic dean, a mark of INC must be removed by March 1, August 1 and November 1 for the fall and spring semesters and summer session, respectively. For courses taken S/U, any mark of INC not removed by these deadlines will change to $U$. For courses taken for a letter grade, any mark of INC not removed by these deadlines will change to $I$ and be calculated as $F$ in the cumulative grade point averages of all. undergraduate students with or without an extension of time. The student who has been granted an extension, however, will have the opportunity to have his or her grade point average recaiculated and the I changed to the grade assigned.

## Grade appeals

. Students have a right to appeal decisions on grades. The student should first contact the department from which the grade was received. A member of each department, who is not a major departmental administrator, is designated to hear complaints, gather information, talk with both students and faculty, mediate disputes or identify appropriate channels for solving problems. If the dispute cannot be resolved at this level then the student should state the full particulars of the appeal in writing and submit them to the department chair or policy committee: If the matter is not resolved at the department level, the student may request a hearing before the academic arbitration board of the appropriate school or college. However, the sole responsibility and authority for determining grades rests with the faculty member who
assignect the grade. This appeals procedure also may be used if a student believes an opportunity should be provided to make up work missed during absence from classes.

The grade appeals procedure must be started by the end of the seventh week of the spring semester for grades received during fall semester, and by the end of the seventh week of fall semester for grades received during the spring semester or during the summer session. All actions for grade changes must be completed during the semester in which the grade is appealed. Gradie and absence grievances may not be appealed beyond the coliege level.

## Academic forgiveness

Academic forgiveness aliows a student returning to the University after a period of time the option of having his or her grade point average calculated from the point of readmission without losing credit for all previous coursework with a grade of S or C or beter.

The acadernic forgiveness policy and its conditions are as follows:

1. To be eligible for academic forgiveness a student must be readmitted to the University after at least a five-year absence and request academic forgiveness in writing from the registrar. The student inust complete a minimum of 30 credit hours at BGSU after returning to the University prior to the awarding of the baccalaureate degree.
2. A request for academic forgiveness must occur within one year of readmission and applies only to courses taken before readmission.
3. Atter a student elects academic forgiveness and eligibility is verified, a notation will be added to the student's transcript indicating that all EGSU credit hours eamed prior to readmission will be subject to the following conditions: a. the previous GPA is eliminated. b. credit earned at BGSU with a grade of $D$ is forfeited.
c. credit earned at BGSU with a grade of at least S or C is carried over at the time of re-entry.
d. However, grades from all coursework taken at BGSU will be used in calculating eligibility for membership in honor societies and graduation with honors.
4. Academic forgiveness is applicable only to the first undergraduate degree.

Sudents apply for academic forgiveness
through the Office of Registration and Records. The policy went into effect fall semester 1986 and is not retroactive. This means. that it will apply only to those persons requesting readmission beginning fall 1986 and thereafter. The conditions of the policy cannot be appealed.

## Academic honors

## Dean's list

Full-time undergraduate students who demonstrate a high level of excellence in academic work have their names placed on the academic dean's list. The requirement for achieving the academic dean's list is a grade point average of 3.5 or above in the preceding semester with no fewer than 12 credit hours per semester included in the grade point average computation.

## Graduation with honors

The record of each undergraduate candidate for graduation with a very high point average is carefully reviewed by the University Committee on Honors and Awards so that appropriate recognition and honor may be accorded each student who has achieved outstanding academic success throughout his or her undergraduate years. The tentative honor announced at commencement and released to the newspapers is figured without the grades from the student's last academic term. The final honor which is put on the permanent record and diploma is based on the student's entire academic record.

In determining academic honors, total letter-graded credits (TLC) are credits for those courses that determine the student's grade point average. The GPA requirement will be higher than the minimum of $3.50,3.75$ or 3.90 for those students who have completed fewer than 110 TLC (or 55 TLC for associate degree candidates). See formula below.

## With distinction

With distinction signifies a high level of academic achievement in an associate degree program and graduation with praise. The honor requires a minimum of 28 TLC and a cumulative GPA at least as high as the larger of 3.5 and [4.5-(TLC/55)].

## With highest distinction

With highest distinction signifies the highest level of academic achievement in an associate degree program and graduation with great praise. This honor requires a minimum of 50 TLC and a cumulative GPA at least as high as the larger of 3.9 and [4.9(TLC/55)].
More than 12 semester hours of $S / \cup$ grades may increase the grade point average needed for graduation with honors. Courses taken under advanced placement, credit by exam, CLEP, etc., are considered SIU and do not count as letter-graded hours.

## Cum laude

Cum laude signifies a high level of academic achievement in a baccalaureate degree program and graduation with praise. This honor requires a minimum of 55 TLC and a cumulative GPA at least as high as the larger of 3.5 and [4.5-(TLC/110)].

Magna cum laude
Magna cum laude signifies a very high level of academic achievement in a baccalaureate degree program and graduation with great praise. This honor requires a minimum of 83 TLC and a cumulative GPA at least as high as the larger of 3.75 and [ 4.75 - (TLC/110)].

## Summa cum laude

Summa cum laude signifies the highest level of academic achievement in a baccalaureate degree program and graduation with great praise. This honor requires a minimum of 99 TLC and a cumulative GPA at least as high as the larger of 3.9 and [4.9 - (TLC/110)].

## Transfer credit

In the case of transfer credit, each record is studied and evaluated individually. In general, the following principles serve as guides:

1. A student entering the University with transferred credit must meet the cumulative grade point average standard for honors in all hours completed, transferred and otherwise, which are considered jointly. In addition, the point average of all work taken at Bowling Green State University must be of honors quality;
2. A student must have completed at least 56 hours at BGSU ( 28 hours for an associate degree candidate). At least 30 of these hours ( 21 hours for an associate degree candidate) must be in lettergraded courses.
3. A candidate should be in residence at least one academic year (one academic term for an associate degree candidate) or 30 hours in consecutive summers (attending either the full summer session or both of the terms each summer) immediately preceding graduation. A student with written permission to participate in an approved combination curriculum in cooperation with a professional school or college of another institution is exempt from this requirement.
In reviewing the record of a candidate for honors, each case is judged on its own meril.

## Retaking a course

Students must report each retake registration to the Office of Registration and Records.

A student may retake a course in which a grade of $D, F, I, U$ or $W F$ was received. If a student retakes such a course at the University, it must be retaken under the same grading option as selected initially. If the course is retaken for the purposes of auditing, no grade will be given.

If a student retakes a course at the University in which a grade of D, F, I or WF was received, then the credit hours and quality points for the original registration and all subsequent retake registrations will be
used in computing the student's cumulative rade point average, with the following kception:

- For the first two such courses retaken at the University (they must be two different courses), the credit hours and quality points for the original registration will not be used in computing the student's accumulative grade point average. For these two courses, the credit hours and quality point's for each retake registration. will be used in computing the student's cumulative grade point average.
- If a student retakes a course at the University in which a grade of $U$ was received, it will have no effect on the cumulative grade point average.
- Except for the purpose of auditing, a student may not retake a course in which a grade of $C$ or better (including $S$ ) was received.
- No grade is removed or erased from a transcript by retaking a course.
- If the student retakes a course in which a grade of D was received, no additional credit hours are thereby earned.
- If a student receives a grade of $D, F, I$ or WF in a course and then receives credit for that course by successful completion of a similar course at another institution, the credit hours and quality points for the first registration will continue to be used in computing the student's grade point average.


## Unsatisfactory academic progress

Students whose cumulative grade point average falls below 2.00 will be notified of unsatisfactory academic progress through a warning, probation or suspension. These classifications are intended to inform the student that academic improvement is needed to regain good standing at BGSU. Students who receive such notitication, as they continue their studies, are encouraged to make full use of the academic and personal support services provided by the University and to reduce their academic loads as well as their involvement in extracurricular activities. Students not in good standing can obtain information about support services by contacting their college office.

The following table establishes the criteria for the unsatisfactory progress notifications which will be provided to students at the end of each semester:

| Standing | Hours <br> earned | Warning | Probation/ <br> Suspension |
| :---: | :---: | :---: | :---: |
|  |  | GPA of |  |
| reshman | $0-29$ | $1.50-1.99$ | $0.00-1.49$ |
| Sophomore | $30-59$ | $1.70-1.99$ | $0.00-1.69$ |
| Junior | $60-89$ | $1.80-1.99$ | $0.00-1.79$ |
| Senior | $90+$ | $1.90-1.99$ | $0.00-1.89$ |

A student whose cumulative BGSU GPA falls in the probation/suspension range at the end of the first term of attendance at BGSU will be placed on academic probation. A student whose cumulative BGSU GPA falls in the probation/suspension range at the end of any term other than the first term of attendance at BGSU will be placed on academic suspension.

## Academic warning

Students who are warned of unsatisfactory academic progress are encouraged to limit their enrollment to no more than 15 hours in a given semester until they are again in good standing. Students on academic warning are encouraged to seek appropriate advice and. services from their college office.

## Academic probation

It is recommended that students on academic probation not enroll for more than 12 semester hours. They should also seek appropriate advice and services from their college office.

Students on academic probation may not participate in intercollegiate activities and must adhere to any additional conditions as determined by the dean of their college.

## Academic suspension

Students who have been suspended may not return to the University in the semester immediately following their suspension except that:

1. students may attend any summer session at BGSU, and
2. students may attend the subsequent semester following favorable action on a written appeal to the dean of their college.

Students who return to the University following academic suspension will return under the following conditions (or such additional conditions as determined by the dean of the college in a reinstatement decision):

1. such students may not participate in intercollegiate activities.
2. such students may continue in the subsequent semester if they earn a semester or session GPA of at least 2.00 OR if their cumulative GPA is again raised to or above academic warning status. At that point, a student is removed from academic suspension.

Failure to meet these conditions will constitute academic dismissal from the University. It is recommended that students on academic suspension not enroll for more than 12 semester hours in any given term.

## Academic dismissal

Students who fall under academic suspension for a second separate occasion will be dismissed from the University. Students who have been academically dismissed may not enroll again at the University for a period of five calendar years from the date of dismissal unless they have received
favorable action on a written appeal to the dean of the college in which they were enrolled. Students are allowed to exercise this right to a written appeal only once during the five-year dismissal period.

Students who return following such an appeal are subject to all conditions listed above under Academic Suspension.
Students who return to the University after five years or more are eligible for academic forgiveness (see Academic Șuspension).

## Transfer credits

Students who are not in good standing at the University may not transfer credits from another institution until they have returned to good standing at BGSU. In addition, grades are not transferred to BGSU from other institutions. Hence, courses taken at another institution may not be used to remove a D, F or WF received at BGSU or to otherwise improve the student's GPA at BGSU.

## Advanced standing

Advanced standing may be achieved in seven ways:

1. Demonstrating appropriate achievement on Bowling Green placement tests, which leads to exemption from courses but not credit.
2. Passing an examination administered by an academic department of the University; see Credit by Examination.
3. Completing a college-level course in high school and earning a prescribed grade in an Advanced Placement examination administered in the high school through the College Entrance Examination Board (CEEB). This leads to college course credit and/or exemption. (For more information contact the Office of Academic Enhancement on the main campus, or the Office of Student Services at Firelands.)
4. Attaining appropriate scores on the general examinations of the College Level Examination Program (CLEP). This leads to general elective credit; see Credit by Examination. Also, see Continuing Education, International and Summer Programs, page 16-17.
5. Attaining appropriate scores on specific CLEP subject examinations. This leads to credit as approved by appropriate academic departments. (Not all academic departments accept credit for completion of CLEP Examinations.) Students should contact the Counseling Center.
6. Passing a higher level course in sequence with a grade of C or above and thereby earning credit for lower level sequence courses in prescribed departments.
7. Satisfactory completion and assessment of a student portfolio; see Portfolio Assessment.

## Credit by examination

An undergraduate student currently registered for at least two semester hours may gain credit by examination with the approval of the student's dean and the department involved. The minimum registration level must be maintained for the entire term. The student wishing credit in a course must not have enrolled in the course previously and must present sufficient evidence of prior study or experience. The course cannot be a prerequisite for any course the student has completed. Once approved, the examination must be completed within four weeks of the approval. This option may not be repeated. A $\$ 50$ fee is assessed for a credit-by-exam course. Credit by Examinations are graded on an $\mathrm{S} / \mathrm{U}$ basis Further information on procedures is available at the student's college office.

Credit may be earned by attainment of appropriate score levels on selected subject examinations of the College Level Examination Program (CLEP). See Continuing Education, International and Summer Programs.

A student may also receive credit for coursework taken at another institution, in which the final grades were equivalent to C or better but which did not transfer because of BGSU policies, by taking a validation examination.

A student in the School of Nursing may take the National League for Nursing exam to validate coursework taken before entrance into BGSU's baccalaureate program in nursing.

## Portfolio assessment

Admitted adult students with considerable worklife experience matching specific course content may be eligible for credit through writing a portfolio about what they have learned. Contact Adult Learner Services in Continuing Education.

## Graduate courses for undergraduates

Under specified circumstances it is permissible for undergraduate students with excellent scholastic records to register for graduate coursework prior to having received the baccalaureate degree. For further information, see Graduate Catalog, "Graduate courses for undergraduates."

# Special Academic Programs and Services 

Bowling Green State University provides a variety of academic services to assist students in their educational development.

## Academic advising

Each student at the University may seek assistance from an assigned academic adviser. The adviser assists students in planning their schedules, checking their progress toward completing graduation requirements and helping them in the longrange planning of their programs. It is the student's responsibility to contact the adviser; names and locations of advisers are available in the college offices.

Academic advising and help in career nning are also available in each college uffice and in the Academic Enhancement. Office. College office locations and telephone numbers are as follows:

Arts and Sciences, 205 Administration Building, 372-2015
Business Administration, 371 Business Administration Building, 372-2747
Education and Human Development, 365 Education Building, 372-7273
Firelands, 150 North Building, 433-5560
Health and Human Services, 101 Health Center, 372-8242
Musical Arts, 1031 Moore Musical Arts Center, 372-2181
Technology, 105 Technology Building, 3727581

Entering freshmen may be unsure of their major area of study. A number of options are therefore offered for these students. Some freshmen will know that they want to enter a particular college but be unsure of the major they want to follow. Each college has academic advisers to work with these students. Freshmen who are not sure of their college choices may be counseled in the Office of Pre-Major Advising, 101 University Hall, (419) 372-8943.

In addition to these academic advising services, the Career Planning and Placement pnter maintains information on a variety of ajors and careers and has available careerrelated interest and value inventories.

Also, a course entitled Career and Life Planning (UNIV 131) is offered each semester.

## Academic Enhancement

101 University Hall, 372-8943
This University-wide program provides academic programs for new and continuing University students, as well as for high school students. These programs are designed to assist students in enhancing their educational experiences. The freshman year is an important one during which many students lay the foundation for their remaining years at the University. By using the services available in the Office of Academic Enhancement, many students are assisted in making a successful transition to the University.

## Office of Pre-Major Advising

Many students entering the University are unsure of their choice of undergraduate college and/or major area of study. Other students may not know enough about the many options available at Bowling Green State University to feel that they have enough information to make a good choice. Still other students may just be unsure of how their interests, abilities and values relate to different majors in the undergraduate colleges at the University. The Office of PreMajor Advising provides a program designed to assist students in the decision making process. Academic advisers in this program help students select classes from the University-wide general education core. These classes help students develop important skills, become exposed to new areas of study as well as meet requirements for the baccalaureate degree. In addition to academic advising, students in this program are also assisted by their adviser in selecting an undergraduate college.

## Learning Laboratories

Three University-wide learning laboratories are housed in Academic Enhancement-the Mathematics Laboratory, the Study Skills Laboratory and the Writing Laboratory.

The Mathematics Laboratory supports campus-wide learning in mathematics and statistics. Tutoring is available in the Mathematics Laboratory as well as other types of academic support including videos of lectures, reference materials and computer assisted instruction.

- The Study Skills Laboratory provides
academic support in a variety of disciplines including the natural sciences and social sciences. Structured study groups led by outstanding undergraduate students are available in a number of freshman level classes. These groups meet throughout the semester to assist students in both study and reading strategies.

The Writing Laboratory provides one-onone tutoring and small group instruction in composition to any writer on campus. In addition, this laboratory also provides instruction in word processing on personal computers.

## Student Support Services

This federally funded program provides special academic support services to disadvantaged students enrolled at the University. Special developmental classes, academic counseling and tutoring are available for participants in this program.

## Post Secondary Enrollment Options Program

This program offers outstanding high school students the opportunity to strengthen and enrich their educational programs by enrolling in regular University courses for high school and/or college credit.

## Advanced Placement

The Advanced Placement Program (AP) enables entering students to earn University credit for college-level courses taken in high school based upon the scores achieved in final examinations. Advanced Placement courses and exams are offered through high schools. The score reports are then sent to BGSU for credit review.

Current credit guidelines are available from the Office of Academic Enhancement.

## Language Laboratory

303 University Hall, 372-8146
The Language Laboratory serves the departments of romance languages and German, Russiàn and East Asian languages, as well as the ESL (English as a Second Language) program. It is primarily an audio laboratory with some video capabilities, providing intensive practice in listening and audio-active recording. The tape programs
are coordinaled with the basic foreign language courses at BGSU. Students use the open access laboratory as part of their course assignments, usually on an unscheduled basis. The laboratory is open 40 hours per week (M-F) during the academic terms. The language-trained staff assists students inltially and monitors them while they do their assigned audio-lingual practice. The laboraiory, however, is not a remedial or tutoring center.

Foreign language placement advising sessions for entering students are conducted by the laboratory as part of the orientation and registration program.

## University Honors <br> progeram <br> 104 University Hall, 372-8504

Tho University Honors Program provides enriching and intellectually stimulating classes, af no additional cost, for academically talented students who are interested in participating. The program is optional and open to any eligible student within any academic discipline. Actual registration for any University Honors class requires approval of the Honors director or associate director.

The Honors Program accepts incoming students based upon the following criteria:

1. Placement in, or exemption from, English 112 as deiermined by a written essay judged by the English department;
2. ACr composite score of 27 or above or SAT composite score of 1200 or above;
3. High school grade point average of 3.5 or better on a 4.0 point scale; and
4. Two favorable letters of recommendation from toachers.
Beginning students who wish to apply must complete the application process by early May of the year they intend to enter the University. There is a separate application process for transfer students.

Continuing students must have at least a 3.5 GPA and be registered for or have completed English 112. Continuing students should make an appointment with the director or associate director to discuss the Honors Program and course enrollment.

Once admitted, students must enroll in a minimum of two Honors courses every three semesters until a minimum of 15 Honors hours have been successfully completed.

Most of the classes offered through the Honors Prograrn are sections or seminars which satisfy general education requirements for all students. Additionally, some upperdivislon seminars and courses are offered which may qualify as electives. Each term consists of different course offerings. The classes are small and are taught by professors with high academic standards who are particularly interested in professional interaction with highly motivated
students. Whenever possible, there is an effort to make the courses interdisciplinarythat is, the content is approached from the perspective of at least two different disciplines. Because the classes are small, there is more responsibility placed on the individual student, more individual attention and the atmosphere tends to be more free and interactive.

A student may graduate with University Honors by:

1. Earning a minimum 3.5 GPA overall and a minimum 3.2 in University Honors courses;
2. Completing at least 17 semester hours of University Honors courses (including an interdisciplinary seminar) with at least a B in each course and no more than 10 of the 17 hours in any single general education category,
3. Completing a three-hour Senior Honors Project (normally HNRS 499).
Application for graduation with University Honors must be made (to the Honors Program director) no later than the tenth class day of the term in which the student plans io graduate.

Some departments also offer departmental honors programs, which complement the opportunities available through the University Honors Program. Any student interested in departmental honors should discuss the possibilities with his/her department.

An Honors housing option is available in Darrow Hall in Kreischer Quadrangle. Students interested in this option must apply both through the Honors office and the OnCampus Housing Office.

The Honors Program also features an Honors Student Association to which any University student may belong. The HSA offers a variety of educational, social and cultural activities, some of which take place in the Honors Center on campus.

For more information, contact the director or associate director of the University Honors Program, 104 University Hall, Bowling Green State University, Bowling Green, Ohio 43403-0014, (419) 372-8504.

## Center for International Programs

1106 Offenhauer West, 372-2247
International students currently studying at BGSU and American students seeking to study abroad can find answers to questions and other assistance at the Center for International Programs. The center also serves as the key programming office for intercultural activities at the University.

The staff is responsible for the recruitment and admission of BGSU's international students. in addition, immigration documents for international students are prepared and distributed from the center, and immigration
assistance and advice are provided for sfudents during their stay at BGSU. Both arrival and on-going orientation and cultura. adjustment programs are provided for international students.

## Study Abroad

The center also provides in-depth assistance to American students seeking to study abroad and in student exchange programs. A study abroad resource library containing current printed materials and videos about the numerous opportunities for study abroad experiences is also available.

Students are encouraged to meet with the associate director starting in their freshmen year. Early planning for a study abroad experience is of utmost importance so that it becomes an integral part of the degree program. BGSU sponsors the following study abroad programs or students. may get assistance in designing their own study abroad experience in other countries or schools.

## Australia-Lismore

An exchange program exists for sport management and exercise science majors with Southern Cross University of Lismore, Australia. This study abroad is usually arranged for the junior and senior years. For more information call (419) 372-2876 (sport management), (419) 372-6905 (exercise science), or (419) 372-0309 (International Programs).

## Austria-Graz

The Department of American Studies at the University of Graz and the American culture studies program at BGSU will exchange up to three students each year. To enroll at the University of Graz, the Bowling Green student must have two years of German and must pass a German entrance exam. Academic credit is transferable. Exchange sfudents will pay tuition at their own institution and be exempted from tuition at the host university. Room and board will be the responsibility of the student. For more information, call (419) 372-0309.

## Austria-Salzburg

As part of BGSU's official partnership with the University of Salzburg, the Department of German, Russian and East Asian Languages offers an academic year abroad in Salzburg, Austria, a center of German-speaking culture at the heart of Europe. All courses in the twosemester (three-quarter) program are conducted in German and include German language and literature as well as ants and humanities and social sciences. Qualified music students may also take courses al the Mozarteum, Salzburg's famous conservatory. The wide spectrum of courses and appropriate planning allow students of any major to a full year of study abroad into a four-year graduation schedule. An American program director resides in Salzburg, but Austrian faculty feach the courses. Students live in
dormitories, in most cases with an Austrian ommate. Cultural travel (e.g., to Vienna Berlin), concert tickets. and local field tifips are included in the program cost. The program usually runs from October 1 through June 30. Applications are accepted starting in September of the previous academic year. Applicants in good academic standing who will be at least sophomores will be accepted regardless of major if they have completed two years of college German, or the equivalent, with a B average by the time the program starts. The grade limit may be observed less strictly if the applicant has strong recommendations.

In addition to the academic year abroad in Salzburg, three- and six-week German language and culture programs are offered each summer in Salzburg during July and
August. These are open to students at all levels of language study, from beginning to advanced. For more information, call (419) 372-2268.

## China-Shandong

Through the Asian studies program, outstanding undergraduates may study for one academic year at Shandong University in the People's Republic of China. A BGSU exchange student will be granted a waiver of tuition, room and board but will be responsible for airfare and personal expenses. All credits earned at the host institution are
unted toward graduation at BGSU. For re information, call (419) 372-8362.

## China-Xi'an

In cooperation with Xi'an Foreign Languages University (XFLU), this program offers complete immersion in a different cultural environment. Xi'an, the old imperial capital of China, is now the capital of Shaanxi province. The program is recommended for all majors with a special interest in Asian studies and China in particular. It offers a balanced curriculum of courses in Chinese language, arts and culture, as well as history, music, political science, current events, martial arts and geography. A one-semester program as well as intensive summer programs are available. However, a full year of study is recommended. Students should have some prior coursework in Chinese language and/or culture. Full BGSU credit is granted for the courses taken at XLFU. Students are housed in a modern foreignstudents dormitory; ample opportunity is given for communication with Chinese students. Some travel within the cultural environment is included in the program costs.

For further information, call the Department of German, Russian and East Asian Languages at (419) 372-2268.

## rance-Nantes

hrough the College of Business Administration, undergraduate and graduate students may enroll in a six-week summer session at the Nantes Atlantique School of Manage-
ment, a leading business school in France. Students of any major are eligible. The program is taught in English by European professors. Knowledge of French is not required. Topics covered include European history, culture and government; European integration; European banking and finance; European markets; and European management strategy. A separate program taught in French is also available. The program includes five weeks of classes in Nantes, France, and a three-day trip to Brussels, Belgium, during which students visit European institutions. Classes meet Monday through Thursday mornings, freeing afternoons and weekends for independent travel. Students receive six semester hours of credit. Students live with carefully selected French families.

For more information, call (419) 372 2646.

## Germany

In cooperation with the Federation of German American Clubs (West Germany), BGSU maintains a direct student exchange with German universities. This program brings two or three German students to BGSU each year, in exchange for two or three BGSU students going abroad to one of 13 cooperating German universities. BGSU students must have approximately a 3.0 grade point average and fluency in German. Preference is given to students entering their junior year. The program is open to all students, regardless of major area of study.

For more information, contact the Center ior International Programs, (419) 372-0309.

## Ghana

The Department of Music Composition and History offers a three- to four-week summer program (mid-May to early June) at the Dagbe Cultural Institute and Arts Center in the village of Kopeyia in southeast Ghana. The student will earn three credits by studying traditional arts from throughout the region. In addition to daily classes, there are numerous opportunities to attend events (funerals, rituals, festivals) or learn crafts (weaving, carving, drum making) in and around the village. Students will also spend time in Accra, the capital of Ghana. While there, they can visit museums, markets, the University of Ghana or arrange a trip to one of the former slave forts. For more information, call (419) 372-2519.

## Indonesia-Bali

Students learn about the music and culture of Bali during a summer workshop in Indonesia. The Music and Culture of Bali is open to all undergraduate and graduate students. No prior musical knowledge is required. The workshop is centered in Peliatan, a Balinese village which'specializes in the arts and is well known for welcoming visitors. Students will explore the famous gamelan tradition, attend music and ritual festivals, tour cultural attractions in the
various villages and train with specialists in music, dance, att or religion. They will enjoy a unique experience with Balinese culture at minimal costs while earning three credit hours.

For more information, call (419) 372-8487 or email dharnis@bgnet.bgsu.edu.

## Italy-Florence

Students can satisfy a portion of their undergraduate degree and master of fine arts degree requirements in Florence, Italy, at Studio Art Centers International (SACI). Students can take up to two semesters and one summer session at SACI.

The program provides a stimulating educational experience that draws upon the rich cultural resources of both past and present Italy. Its well-equipped facilities are located near Michelangelo's Medici Chapel, the Laurentian Library, FRA Angelico's masterpieces in San Marco and the bustling activity of Florence's central market.

For more information, call (419) 3722821.

## Japan-Kakegawa

The Asian studies program sends one to two students to Bridgestone, Inc. in Kakegawa, for a six-month business internship. Student interns pay airfare and receive a monthly stipend and free housing. The program is open to any major.

For more information, call (419) 3728362, (419) 372-7136 or (419) 372-8764:

## Japan-Komatsu

The Asian studies program sends one student to Tokai Rubber Industries, inc. for a six-month business internship. Student interns pay airfare and receive a monthly stipend and free housing.

For more information, call (419) 3728362, (419) 372-7136 or (419) 372-8764.

## Japan-Nanzan

The Asian studies program sends one student to Nanzan University each year. The exchange student receives a waiver of admission fee, general fee and tuition, but pays for room and board for two academic semesters to Bowling Green State University before participating in the program, plus round trip airfare. The applicant must complete Japanese 102, and one course with a component on Asian culture, society or history and maintain a 3.0 or higher GPA to be eligible. Open to any major.

For more information, call (419) 3728362, (419) 372-7136 or (419) 372-8764.

## Japan-Saitama

The Asian studies program sends orie student annually to Saitama University. The exchange student receivés a waiver of admission fee, general fee and tuition, but pays room, board and travel expenses. Open to any major.

For more information, call (419) 3728764, (419) $372-6808$ or (419) 372-8362.

## 6arsa-seou

To be eligible for this program at Keimyung University a Bowling Green student must have a 3.0 GPA and be nominated by the dean of the College of Business Administration. Fuition will be waived at the host institution for a maximum of four semesters.

For more information, call (419) 3722747.

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The Asian studies program sends one student annually to Yonsei University. The exchange student receives a waiver of admission fee, general fee and tuition, but must pay for room, board and travel expenses. The applicant must have a 3.0 GPA and should have completed at least History 180 or one course with a component on Asian culture, society or history. The program is open to any major.

For more information, call (419) 372--8362.

## Waxico-Guadalaiara/期exico City

Students may earn six semester credits in ethnic studies and popular culture in a fiveweek summer study program. Because the program is intended to introduce the student to the Mexican culture, the classes are taught in English and the credits are based in BGSU. Students in the program spend four weeks in Guadalajara and eight to ten days in Mexico City.

For more information, call Department of Ethnic Studies, (419) 372-2796 or (419) 3727119.

An exchange student program has been established with the Autonomous University of Guadalajara. Students interested in spending a semaster at UAG in Guadalajara, Mexico, should contact the Department of Etnnic Studies at (419) 372-7119.

## 蛙ssia-St. Petersburg

A one-semester program in Russian language and culture (and other fields if the student has sufficient language background) is offered at St. Petersburg University. Courses ( 15 or more credits) may be transterred to BGSU. Room and board in a dormitory or with a lamily are arranged individually.

For more information, call the Russian prograrn, (419) 372-8028 or (419) 372-7135.

## Russia and Ukraine-Summer Study

A five-week program is available which earns a student six to nine semester credit hours in Russian language and culture. Ukrainian language and culture courses are also available. Courses are conducted by specialists in teaching Russian or Ukrainian as a foreign language and by BGSU faculty. The program sites are St. Petersburg and Kiev, with excursions to other cities.

For more information, contact the

Russian program, (419) 372-8028 or (419) 372-7135.

## Spain-Alcalá de Henares

The Department of Romance Languages conducts a year-round study program in Alcalá de Henares, 20 miles from Madrid, Spain. The curriculum for the program, which runs for two semesters and the summer term, includes coursework in the Spanish language and literature, as well as in the arts, history and geography of Spain. All courses are taught in Spanish and are approved by the respective departments at BGSU. The teaching faculty is drawn from the staff of the University of Alcalá de Henares. An American program director resides in Alcalá and supervises the academic program. The program is open to any qualified student regardless of major area of study.

The department also offers a graduate study program for students enrolled in the M.A. degree program in Spanish. For high school students, a four-week summer program is offered, as well as a four- or eight-week program for high school teachers.

For more information, call (419) 372 8053.

United Kingdom-Brighton, England
An exchange program exists for sport management and physical education majors with Brighton Polytechnic of Brighton, England. This study abroad is usually arranged for the junior and senior years. For more information, call (419) 372-2876 (sport management), (419) 372-6905 (physical education) or (419) 372-0309 (International Programs).

United Kingdom-Norwich, England The Honors Program sponsors an academic program in England at the University of East Anglia in Norwich, England. Norwich, one of Britain's major provincial cities, is steeped in tradition and history. It is located less than two hours from London. UEA has a reputation as being one of the top universities in the United Kingdom. Students have the opportunity to study for one semester or the entire year. UEA offers excellent academic opportunities in the humanities, social sciences and is especially known for its programs in creative writing and literature, environmental sciences, English and American studies. Students live in dormitories and study with students and faculty from around the world.

For more information, call the Honors Program, 372-8504.

## United Kingdom-

## Staffordshire, England

Keele University and BGSU annually exchange up to six students for one semester of full-time study. Students may choose courses at an appropriate level in the departments of their choice, subject to approval of the chairs of these departments
at the host institution. Exchange students will pay tuition at their own institution and be exempled from tuition at the host university. Room and board will be the responsibility of the student.

For more information, call (419) 3720309.

## Student teaching abroad Brazil-Rio de Janeiro

Students in the College of Education and Human Development may apply for student teaching in Rio de Janeiro, Brazll. While completing the student teaching requirements, students live in an apartment building located on the school premise. All instruction is in English. This program is available during fall and spring semestors.

For more information, call (419) 3727407.

## Canada-Montreal Area

Most elementary, secondary and specialized majors in the College of Education and Human Development are eligible for student teaching in the Montrea! area. Instruction will be conducted in English. Student teachers will live with host families. This program is avaitable during fall and spring semesters.

For more information, call (419) 3727407.

## Cooperative Education Programs

## University-wide

310 Saddlemire Student Services Building, 372-2451

The Cooperative Education Program offers graduate and undergraduate students an opportunity to integrate classroom theory with practical, on-the-job realities through work assignments with employers in business, industry, government and the nonprofit sector that alternate with formal coursework. Employers assign students work which is relevant to each student's academic degree program or career interests, provide on-the-job supervision, evaluate the student's performance on a regular basis and usually pay each student a fair wage.

The program is optional (except for College of Technology majors) and open to any student, within any academic discipline on campus, who chooses to participate. Academic credit may be awarded for the work experiences subject to departmental approval.

## College of Technology

102 Technology Building, 372-7580
College of Technology majors are required tc participate in three semester-long, paid, fulltime co-op work assignments which alternate with semesters spent on campus. The
college requires that the last semester be spent at BGSU attending the student's final semester of on-campus coursework. The Technology Cooperative Education Program requires that each student's employment be directly related to his or her academic program.

The program also requires that work experiences increase in difficulty and responsibility as the students progress through their college curriculum.

## National Student Exchange

310 Saddlemire Student Services Building, 372-2451

The National Student Exchange offers BGSU students the opportunity to take coursework at another college or university in the United States without losing progress toward a BGSU degree. The program encourages students to experience and learn from different regional and cultural perspectives and to broaden their educational backgrounds, frequently through courses of study not available at their home campus. Bowling Green is a participating member of the NSE consortium of 120 colleges in the United States and its territories.

A qualified, full-time student may participate for up to one academic year. Out-of-state tuition fees are waived at the host institution and NSE șudents take courses which transfer back to BGSU. Students must have at least a 2.5 grade point average, be enroiled full-time at BGSU and must exchange prior to their last 30 hours before graduation. Interested students should consult with the NSE coordinator about costs, course selection, choice of host university and planning the best time for exchange.

## Washington Center Internships

 310 Saddlemire Student Services Building, 372-2451The Washington Center Internship program offers internships for students of all majors in Washington, D.C. Participating students work full-time in their chosen fields in one of more than 2,000 placements chosen to match their individual interests and skills. While gaining valuable work experience in his or her career area, the student receives $12-15$ hours of BGSU credit.

The program includes placement, orientation, evaluation, counseling, small group discussions, a lecture series, special events and support services. Scholarships are offered and housing is provided if desired. Minority students are especially urged to apply for a scholarship and to take advantage of The Washington Center's Minority Mentor Program which matches the minority student with a minority professional in his or her field for support and career guidance.

Information on the various opportunities is available in the Cooperative Education

Program office. Interested students with a minimum 2.5 GPA are urged to contact the coordinator at least six months prior to the term in which they would like to intern.

## Continuing Education, International \& Summer Programs

40 College Park Office Building, 372-8181
Continuing Education, International \& Summer Programs extends the educational resources of the University to traditional and nontraditional students through off-campus courses and summer credit classes, Adult Learner Services, Computer Training Centers in Bowling Green, Maumee and Perrysburg and the OPTIONS program for children and adults.

## Summer Programs

The academic summer term is fully integrated into the academic. program of the University. It offers basic academic courses for students while also presenting seminars and workshops for individuals and groups from northwest Ohio and throughout the United States.

Summer courses are offered either in sixweek or eight-week timeframes or in a workshop format. A student may enroll in a maximum of six semester hours during a sixweek session and a maximum of nine semester hours during an eight-week session. During the special Summer Freshman Program; students pursue a regular freshman course of study while receiving tutorial and other academic support not readily available during the academic year.

## Evening Credit Program

The Evening Credit Program offers a wide variety of undergraduate courses for students who attend the University after 4:30 p.m. Students may take courses to update skills, to explore a new career or to work toward a degree. Undergraduate programs in liberal studies, electronic technology, manufacturing technology, social work, general business and marketing may be completed in the evening. While determining academic interests and possibilities, an individual may enroll as a guest student and accumulate up to 16 hours of credit before being admitted to the University and declaring a major. Course offerings are advertised each semester and a special evening registration is held each semester before classes begin. Program advising is available during evening registration, or by appointment through Continuing Education, International \& Summer Programs. The evening student can obtain necessary forms, and parking stickers, register for courses, drop or add courses and obtain general information about University procedures and programs.

## Adult Learner Services

This branch of Continuing Education, International \& Summer Programs recruits nontraditional students for the University. It assists students with financial aid, housing, day care and class planning and provides information about programs and admissions procedures for daytime, evening, full-time or part-time students at BGSU and other area educational institutions.

Any adult interested in returning to school, returning to work or changing careers may use these services. An adviser will help adults think through the options and problems involved in career decisions. Interest testing is available for a nominal fee. Adult Learner.Services also conducts education workshops on career development at northwest Ohio regional libraries, businesses and civic organizations.

Nontraditional students may be able to receive college credit for knowledge gained outside school through the prior learning assessment program administered by the director of Adult Learner Services. Credit may be earned through Credit by Examination, for which a $\$ 50$ fee is assessed for each successful validation of a course. Portfolio assessment is another experiential learning option. Students are required to take an English course and are assessed $\$ 70$ for each course for which portfolio credit is requested.

Book scholarships from the Cormier/ Pallister funds will be selectively granted to qualified nontraditional students pursuing their first undergraduate degree.

## College Level Examination Program (CLEP)

Selected subject examinations grant credit for courses in the areas of accounting, biology, chemistry, computers, literature, Western civilization, American history, human development, business law, marketing and sociology. To be eligible for an area of the CLEP exams a student must not have done college-lèvel work in that specific area. The policies governing the administration of CLEP examinations are subject to change. To set up a testing date, contact the Counseling Center. Other questions about CLEP should be directed to Continuing Education, International and SummerPrograms.

## Senior Adults Grants Program

Any individual age 60 or older who has been a resident of Ohio for at least one year may enroll in any BGSU credit course in which space is available on a noncredit basis. Students should call or come to the Continuing Education, International \& Summer Programs office to register for courses before. the first day of classes.

## Off-Campus Programs

Off-Campus Programs provides sequences of courses which progress toward competency, certification or a degree to students at
sites in 25 Northwest Ohio counties. These courses are usually scheduled after 5 p.m. and generally meet once or twice a week. This broad-based program supplies academic support services as well as offering continuing education units (CEUs) for teachers and other professionals who need additional training. The program schedules a selected number of upperdivision courses at the Firelands College. Consortia arrangements with other institutions of higher education provide senior-level programs leading to the baccalaureate degree at numerous Ohio locations.

## Computer Training Centers

At computer training centers in Bowling Green, Maumee and Perrysburg, individuals, businesses, schools and government and sucial service agencies can receive personaiized, hands-on training in computer basics as well as many sophisticated software packages. Instruction can be customized to suit the needs of a particular business or industry.

## prefessioñal Programs and Customized Training

Conferences, customized training and various cerifificate programs enable individuals, business, social service and government agencies to upgrade their skills and increase their knowledge in both general and specialized fields. Through these public service programs the University offers its educailonal resources to career-oriented adults who cannot take time from their occupations to pursue a formal degree.

## OpyIDAS Program

Children and adults can participate in these University-sponsored arts, entertainment, travel, sports, cultural and educational noncredit courses.

## Center for <br> Environmental Programs

153 College Park Office Building, 372-8207

The Center for Environmental Programs is responsible for coordinating, facilitating and monitoring two degree programs in the College of Arts and Sciences designed to train environmental professionals. Other programs are available in the College of Health and Human Services. The center also promotes environmental awareness and education on campus and in the local community.

Advisers in the center assist students in selecting programs that can best fulfill their personal goals and career objectives. An Environmental Resource Room (ERR) is maintained by the center. The ERR contains more than 12,000 items including current periodicals, technical reports, general environmental literature and curriculum materiais for environmental education.

Information on environmentally related employment opportunities is also maintained there. An index of books and monographs in the collection is stored on a computerized database which may be used for topical searches. The center offices are open from 8 a.m. -5 p.m. daily with extended hours for the Resource Room during the academic year.

## ROTC (Reserve Officers Training Corps)

## Air Force ROTC

372-2176
The Air Force Reserve Officers Training Corps (AFROTC) program, offered by the Department of Aerospace Studies, provides college-level education to prepare interested men and women for commissioning as second lieutenants in the United States Air Force. The program emphasizes the development of each student's sense of personal integrity, honor, individual responsibility and potential as a leader and a manager.

The AFROTC program consists of a General Military Course (GMC) offered to freshmen and sophomores, and a Professional Officer Course (POC) offered to selected juniors and seniors. Admission to the GMC is open to most U.S. citizens, male and female, over the age of 14. The student must be regularly enrolled in the university and registered for a minimum of 12 academic hours. The student spends two hours per week in AFROTC courses. A uniform and AFROTC textbooks are provided without cost while enrolled in the GMC. Enrollment of foreign students is governed by Air Force regulations.

Admission to the POC is on a competitive basis for those students who successfully complete the GMC. Requirements for selection to the POC include successful completion of the Air Force Officer's Qualifying Test (general knowledge and aptitude), completion of a four-week summer field training camp and an Air Force medical examination. The student must be of high moral character and demonstrate outstanding leadership potential. The student spends four hours per week in AFROTC. While enrolled in the POC, students receive $\$ 150$ per academic month (tax-free) and free AFROTC uniforms. Enrollment of foreign students is governed by Air Force regulations.

A two-year program is available to students who have two years remaining to complete either an undergraduate or graduate degree. In addition to meeting physical requirements for selection, the student must attend a six-week summer field training camp prior to admission to the twoyear program.

Students enrolled in Aerospace Studies may substitute these courses for courses as
prescribed by the individual colleges. AFROTC leadership training activities (leadership laboratory) are a part of each course and offer opportunities for practical leadership training and experience in a supervised environment. Certain selected students are eligible for two-, three- and fouryear ROTC scholarships. Scholarships provide full college tuition, required fees, textbook allowance and pay the recipient $\$ 150$ per academic month (tax-free).

The student who successfully completes the AFROTC program and graduates from the university is commissioned as a second lieutenant in the U.S. Air Force and will be called to active duty. Commitment incurred is normally four years; however, students designated for pilot or navigator training will serve a longer time, based on the current AF requirements.

## Army ROTC <br> Department of Military Science 372-2476

Army ROTC at BGSU provides an opportunity for men and women to participate in practical management and leadership activities designed to enhance the student's other academic pursuits. Upon successful completion of the Army ROTC program, graduates may be commissioned as second lieutenants in the Active Army, the Army Reserve or the Army National Guard. All ROTC courses are fully accredited.

Both two-year and four-year programs are offered at BGSU. The traditional fouryear program consisis of a basic and an advanced course. The basic course is completed by enrolling in a 100 - or 200 -level military science course each semester during the freshman and sophomore years. Freshman and sophomore classes focus on leadership development, management skills, wilderness survival skills and general knowledge of the Department of Defense. Special emphasis is placed on exciting hands-on activities such as rifle marksmanship, rappeling, tactical movement techniques and land navigation. These activities are encouraged, but optional. Participation in the basic course entails no military obligation, no uniform wear and no military drill.

Upon successfui completion of the basic program, students become eligible to enroll in the advanced course provided they have demonstrated officer potential, met physical standards, passed a general aptitude test and been accepted for enrollment by the military science department. Once accepted into the advanced course, a military obligation is incurred and the student has the privilege of wearing the uniform. The advanced course is normally completed in the last two years at BGSU. In addition to one military science course each semester, it includes a six-week advanced camp, for which students are paid, during the summer after the junior year. All advanced course students receive a monthly allowance of
$\$ 150$ (tax-free). Textbooks and course materials for military science courses are free, as are uniforms.

The two-year program is a special option program designed for students who did not complete the two-year basic course.
Students interested in the two-year program should contact the Department of Military Science.

All BGSU students (even those who have had no previous connection with ROTC) may compete for ROTC scholarships. Scholarships are awarded on demonstrated performance and leadership potential. These scholarships are designed to cover tuition. Additionally, students also receive $\$ 150$ each month for living expenses and $\$ 450$ a year for books and supplies. Limited programs are available to assist qualified students in graduate study.

Students who are not U.S. citizens must obtain permission from the military science department prior to enrolling in any ROTC course.

## Academic Support Centers

## Center for Archival Collections

The Center for Archival Collections, located on the fifth floor of the Jerome Library, is responsible for preserving and making available to researchers archival and manuscript material relative to northwest Ohio and the University. Much of this is maintained through an extensive paper preservation and archival microfilm program.

Among the materials available are local government records, newspapers, manuscripts, census records, photographs and rare works concerning the 19 counties served by the center, as well as photographs, books and pamphlets. University Archives is responsible for the preservation and care of all BGSU institutional records deemed of historical value, including the $B G$ News, yearbooks and other University publications, as well as the records and correspondence of campus organizations and offices.

The center also houses rare books and special collections which support numerous academic programs of the University.

## Center for Photochemical Sciences

The Center for Photochemical Sciences is a prototype research and teaching entity which focuses on chemical reactions initiated by light. Research concentrations include photochemistry, photophysics, photobiology, photopolymer science, spectroscopy, photoelectron microscopy and optoelectronics. Educational programs of the center prepare students at all levels for careers in academia and industry. An interdisciplinary
Ph.D. degree in the photochemical sciences is offered to students with baccalaureate degrees in chemistry, biological sciences or physics. The center also provides a vital
academic link to industry in the development of new technologies. One of the center's functions is to serve as a clearinghouse for information in the photochemical sciences primarily through a quarterly scientific newsletter which is distributed to 8,000 scientists worldwide.

## Center for Quality, Measurement and Automation

This applied manufacturing research center is located in the College of Technology. The CQMA was created in 1991 to help build and maintain a competitive edge in area manufacturing companies. Some of the services provided are program development, inspection and gauging systems design, coordinate measurement, manufacturing process and quality system development and customized training.

Independent research conducted by student and faculty teams with manufacturing companies focused on quality opportunities is welcome. Affiliated with the applied quality science curriculum and laboratory, the machine tools, equipment, hardware and software have supported applied research in reverse engineering, rapid prototyping, assistive/rehabilitative technologies, various contact and noncontact measurement system and CAD-CAM applications associated with quality systems.

## Clinical Laboratory

Located within the College of Education and Human Development, the clinical lab maintains computer classrooms/labs to support technology experiences and clinical experiences which are a part of students' education. The lab houses a collection of media (audio tape, video tape, sound-slides, filmstrips, associated hardware, multimedia hardware and software, and computer journals), as well as a Macintosh computer network. Students use the lab to complete course assignments, using the computers housed there and using any of the media available across a wide range of subject areas.

## Management Center

A division of the College of Business Administration since 1969, the center offers management development, consulting and research assistance to business, industry and other public and private institutions. No geographical limitation is placed upon the clients for these services, although the Management Center emphasizes assistance to clients located in Ohio. The center has assisted many clients in such areas as strategic planning, business start-up, financial restructuring, market analysis, feasibility studies, acquisition analysis, regional economic development, profit improvement, management development, employee involvement, sales forecasting, inventory management and other areas.

Using faculty resources of the University, the Management Center, located in 367

Business Administration Building, (419) 3722807, also provides assistance in specific problem solving for business, industry and public institutions.

## MidAmerican Center for Contemporary Music

MACCM supports a variety of activities to foster creativity, performance, research and education in twentieth-century music, expanding the activities of the College of Musical Arts' New Music and Art Festival. The festival is an annual forum for contemporary music and art and has garnered national attention through its radio series and recording projects. Supported by a state-of-the-art music technology studio, MACCM sponsors the contemporary-music concert series Mostly MIDI and Music at the Forefront.

## National Drosophila Species Resource Center

The center contains 400 species of fruit flies in 4,000 strains and is the largest scientific facility of its kind in the world. Flies are bred and supplied for international research in basic genetics, genetic engineering, evolution and cancer. The center was transferred to Bowling Green in 1982 from the University of Texas at Austin. It is located in the Life Sciences Building.

## National Institute of Physical Education for Children

The institute promotes skill development, healthy life styles, personal meaning and cognitive understanding as necessary components of a quality physical education experience for children. The faculty of the institute are devoted to practice and scholarship in elementary school physical education that encourages collaboration among the university, public and private schools, professional organizations, international educational institutions and the general public carried out through teaching, research, conferences, facuity exchanges, field experiences and community outreach.

## Philosophy Documentation Center

The Philosophy Documentation Center is a specialty press and resource center that produces and distributes philosophical reference materials, scholarly philosophy journals and instructional sofware for philosophers. The center maintains an extensive database of ongoing philosophical activity in this country and'abroad and provides a variety of professional services to the philosophical community. These services include an electronic journals project and an online philosophy bookstore, as well as subscription fulfillment, marketing and desktop publishing.

## Population and Society Research Center

The PSRC serves the public and private social research needs of organizations within Ohio and, in particular, the greater metropoli-
tan area of Toledo. The survey branch provides survey research services inciuding research design, questionnaire development, sampling, data collection, database construction, data entry, data manipulation, data analysis and technical reporting of survey resulis, Sophisticated methodologies are used to research subjects such as employee satisfaction, consumer preferences, market penctration and local and regional needs assocsments.

The demographic analysis branch houses complete census holdings for northwest Ohio and is affliated with the Ohio Data Users Center. This branch responds to a range of populaton-related data requests, from current esimates to detailed site location analysis.

Socia Established in 1981, the center is devoted to research in political philosophy and the examination of public policy issues (e.g.. economic regulation, welfare, scientific innovation) trom a philosophical perspective. The center, which is maintained by foundation granis, sponsors national conferences, publishes a journal, Social Philosophy \& Policy, and other topical literature, and supports visiting scholars.

## 

Since 1966. Bowling Green has operated the ceriter which is a repository for the world's largest collection of a specific research/fruit fly species, Drosophila melanogaster. Each year the center, which is funded by the National Science Foundation, supplies quantities of the species to accommodate nearly 1,000 requests from scientists in this country and around the world.

Bowling Green's tuition is broken down into .two charges: instructional fee and general fee. The instructional fee, supplemented by state appropriations, finances the University's educational programs and the general fee pays for most student services and activities. In addition, those students living on campus pay room and meal charges.

The following table shows what undergraduate students, registered for at least 11 but no more than 18 hours, paid on the main campus for the two semesters of the 1996-97 academic year:

|  | Semester | Year |
| :--- | ---: | ---: |
|  | Instructional fee <br> General fee | $\$ 1,732$ |
| Room charge | 363 | $\$ 3,464$ |
| Registration fee | 1,136 | 726 |
| Residence hall | 7 | 2,272 |
| technology fee |  | 14 |
| Meal (board) charge | 771 |  |
| TOTAL | $\$ 4,059$ |  |

Any student registered within the range of $11-18$ hours is assessed at the rate in the table above. These charges are typical for an Ohio student living on the main campus in standard housing and subscribing to the basic meal plan. There are different housing and meal plans available which, depending upon the plan selected, will alter the above fee schedule. See Housing for a description of room and meal plans. Please note that these fees are subject to change and do not include any special course fees that may be associated with a particular class.

There is a surcharge for all out-of-state students. Nonresident students paid a surcharge of $\$ 4,740$ during the 1996-97 academic year or $\$ 2,370$ per semester.

A préviously enrolled student may be denied readmission after payment of fees for several reasons, one of which is failure to maintain a satisfactory academic standing. In such cases, a full refund is made of fees paid for that academic term.

The Board of Trustees reserves the right to make adjustments in fees or charges when deemed necessary. Current ee information can be obtained through the Office of Admissions or Office of the Bursar.

## Part-time and combination fees

A student who is an Ohio resident and is registered for 10 credit hours or less pays on a per-credit-hour basis. A nonresident part-time student pays an additional per-hour surcharge.

If a student drops a course which reduces the fee status from 11-18 hours to 10 or fewer hours, the per-credit-hour rate schedule will be applicable to the remaining hours. The refund schedule for the dropped courses is based on a class-by-class reduction schedule; see "Refund of Fees" on the next page.

If a student is registered for any combination of courses (main campus, extension/offcampus, Firelands/branch, resident credit center), fees are determined based on the per-credit-hour rate for each area in which a course is taken. The standing of the student (undergraduate or graduate) is used to determine the applicable rate (11-18 hours). For example, undergraduates will be charged the graduate-level rate for any graduate courses taken but the 11 -to-18-hour rate will be no higher than if all courses were taken as undergraduate courses.

## Selective service compliance

The State of Ohio requires that all male students between the ages of 18 and 26 must register with the Selective Service (the draft). As a result of this requirement, all male students not complying with this law will be assessed a fee equivalent to the nonresident fee for each semester of noncompliance (in 1996-97 \$2,370 for a student registered for 11-18 hours or $\$ 226$ per hour for a student registered for 10 or fewer hours).

Questions about selective service status should be directed to the Office of Registration and Records, 110 Administration Building, (419) 372-8441.

## Summer term fees

Summer term students paid a \$1,732 instructional fee and a $\$ 218$ general fee for a total of $\$ 1,950$ in 1997. The nonresident fee was an additional $\$ 2,370$. Students registered for 10 or fewer credit hours paid $\$ 171$ per credit hour for instructional fees, $\$ 22$ per credit hour for general fees, $\$ 226$ per hour for the nonresident fee and $\$ 7$ per semester for the registration fee.

## Graduate fees

For complete information regarding graduate fees, consult the Graduate Catalog:

## Other fees, charges and deposits

Application fee- $\$ 30$ (nonrefundable) to be paid when application for admission is submitted.
Audit credit-charged at same per-hour rate as credit class registration.
Automobile registration- $\$ 33$ per year. main campus (fall semester through summer term); $\mathbf{\$ 3 0}$ per year at Firelands.
Clinical lab fee- $\$ 10$ assessed to all education majors each semester enrolled (not assessed in the summer term).
Course fees-assessed in some courses with special costs associated with instruction. Courses with fees are noted in course descriptions.
Credit by examination-\$50 for each special examination.
Driver education fee- $\mathbf{\$ 2 5}$ for HED 362; $\$ 20$ for HED 462.
Excess credit fee- $\$ 50$ per hour for each hour over 18 taken each semester. No student is allowed to request more than 18 hours during course requesting without written permission of his/her college dean. This permission must be turned in at the Office of Registration and Records, 110 Administration Building.
Late payment charge- $\$ 5$ for each day late (including Saturdays and Sundays) to a maximum of $\$ 25$ at the beginning. of a term when payment of tuition charges are not made prior to the first day of classes.
Late registration fee- $\$ 25$ beginning the eighth day of the semester through the fourteenth day, $\mathbf{\$ 5 0}$ for the next 15:44 days and $\$ 75$ thereafter for initial registration.
Music fees-
Music equipment fee $\$ 35 /$ semester assessed all music majors for five or more hours of registration; \$15/ summer term assessed all music majors for five or more hours of registration
Applied music
private lessons . \$45/cred. hr. Applied music classes $\$ 22.50 / \mathrm{cred}$. hr .

Music technology lab fee
\$30/semester
Recording technology lab fee
MUED 402
Tools for plano tuning
Registration fee
$\$ 7 /$ semester dence hall technology fee $\$ 60 /$ semester assessed to all students living on the main campus \$45/
summer term assessed to all students living on the main campus
(The residence hall technology fee is refunded $100 \%$ through the first week of clesses and is pro-rated after the first week on a weekly reduction schedule.
For the summer term, the residence hall technology fee is refunded $100 \%$ prior to and including the first day of classes and at $0 \%$ beginning with the second day of classes.)
Return check service charge- $\$ 20$ assessed for each check returned by the bank as uncollectible.
Service charges will be assessed to those accounts not paid by the official due dates to help offset additional billing and collection cosis.
Siudent teaching laboratory fee-\$5 per credit hour, per course.
Physical education course fees:

| Billiards | $\$ 20$ |
| :--- | ---: |
| Bowing | $\$ 25$ |
| Beginning golf | $\$ 22$ |
| Intermediate golf | $\$ 37$ |
| Advanced golf | $\$ 42$ |
| lce skating, curling, hockey | $\$ 15$ |
| Downhill sking | $\$ 92$ |
| Colorado ski week | $\$ 294$ |
| Horsemanship-Western | $\$ 135$ |
| Horsemanship-English | $\$ 150$ |
| "Seo the Office of the Bursar for a |  |
| $\quad$ complete listing of PEG course fee |  |
| charges. |  |

The student is held responsible for lost or damaged apparatus and for material wasted in laboratory classes. The student pays for all materiais used in making articles or items that become personal property.

The Doard of Trustees reserves the right to make any changes or adjustments in fees when such changes are deemed necessary.

## Payment of fees

All fees and charges are payable prior to the beginning of the semester for which the student is enrolled. Fees may be paid at the Office of the Bursar on the first floor of the Administration Building between 8 a.m. and 5 p.m., Monday through Friday, or you may maii your payment to: Office of the Bursar, Sowling Green State University, PO Box 993, Bowling Green, OH 43402-0993. Payments may be paid by cash, check or credit card. Checks and money orders should be made payable to Bowling Green State University. Students attending classes
at the Firelands campus may pay their fees at the Office of Registration on the Firelands campus.

Credit card payments for fees and University charges may be made by MasterCard, Visa or Discover. Credit card payments may also be made by FAX (419) $372-7665$ or by voice mail (419) 372-0111. Both are 24 -hour open lines. Please note that any refund due to a student whose account was paid with a credit card will be reimbursed with a credit to the appropriate credit card.

The final date for payment of fees for each semester is the next to last business day before the official date for the beginning of the semester. Failure to pay fees before the beginning of a semester may result in the cancellation of a student's registration and/or assessment of late payment fees. A student registering and/or paying fees beginning with the first day of classes (including summer) is assessed a late payment fee of $\$ 5$ for each late day including Saturdays and Sundays to a maximum of $\$ 25$ and a late registration fee ranging from $\$ 25$ to $\$ 75$, depending on the date of registration. Service charges will also be assessed to those accounts not paid by the official due dates to help offset additional billing and collection costs.

More information about fees can be obtained from the Office of the Bursar, 132 Administration Building, (419) 372-2815.

## Installment payment plan (IPP) fali/ spring

BGSU students and their parents have the opportunity to participate in an optional installment payment plan (IPP). The IPP is available for the fall and/or spring semester and requires an application each semester (since the plan is optional). The IPP permits on-campus students to divide their fall semester room, meal and fee charges into four equal installments in July, August, September and October. The IPP for spring semester also allows four payments: November, December, February and March. The IPP permits off-campus students to divide their fees into three equal payments for fall and/or spring semsters (last three months as indicated above for each semester).

A nonrefundable finance charge is assessed on the amount financed each semester regardless of early payment of the financed amount or pending financial aid. The interest rate is not detailed here because it is set by the Ohio Student Aid Commission and is subject to change.

Participation in IPP is not required. Students may continue to pay University expenses in full by the due date but no later than the last business day before classes begin. Information relative to IPP can be obtained from the Office of the Bursar, (419) 372-2815.

## Refund of fall and spring <br> semester fees

In the case of the voluntary dropping of a course or courses or the voluntary withdrawal of a student from the University, fees, except for the application fee and registration fee, are refunded on the following basis:
$100 \%$ prior to the first day of classes
$90 \%$ during the first calendar week in which semester begins
$80 \%$ during second calendar week of classes
$60 \%$ during third calendar week of classes
$40 \%$ during fourth calendar week of classes
$0 \%$ after the fourth calendar week of classes.

This schedule pertains to instructional, general and nonresident fees (where applicable); a separate refund schedule for room and meal plan charges is outlined in the housing acceptance agreement. No deduction is granted because of late entrance.

A student who stops attending classes and does not complete a formal withdrawal notice is not entitled to any refund. A student withdrawing under discipline iorfeits all rights to the return of any portion of fees. However, in the event of academic dismissal, all monies prepaid for a semester are refunded in full.

A student who voluntarily drops a course and remains registered for between 11-18 hours is not entitied to any refund of fees. If a student drops a course which reduces the fee status from full-time to part-time, the per-credit-hour rate schedule will be applicable to the remaining courses. The refund schedule for the dropped course is based on a class-by-class reduction schedule according to the schedule listed above. Any refund is subject to the percentage refund schedule.

In a change of program involving the dropping of a course in which a special course fee has been paid, the fee is refunded in accordance with the schedule given above. Refunds normally take a minimum of four weeks to be processed. Refunds of payments made with a credit card will be credited to the appropriate credit card number.

## Refund of summer term fees

Drop or withdrawal from an eight-week summer session:
$100 \%$ prior to the firsi day of classes
$90 \%$ during the first calendar week of
classes
$80 \%$ during the second calendar week of classes
$60 \%$ during the third calendar week of classes
$40 \%$ during the fourth calendar week of classes
$0 \%$ after the fourth calendar week of classes.

Drop or withdrawal from a six-week ummer session:
$00 \%$ prior to the first day of classes $90 \%$ during the first and second day of classes
$80 \%$ during the third through the fifth day of classes
60\% during the sixth through the tenth day of classes
$0 \%$ after the tenth day of classes.
Drop or withdrawal from a summer workshop:
$100 \%$ prior to the first day of classes $90 \%$ during the first day of the class $0 \%$ after the first day of the class.

A student who voluntarily drops a course and remains registered for between 11-18 hours is not entitled to any refund of fees.

## Delinquent accounts

Students experiencing financial difficulties should contact the Office of the Bursar promptly to arrange for the payment of their outstanding balance to avoid the following collection actions.

When University charges (room, meals, fees and others) are not paid on a timely basis, the Office of the Bursar will seek to collect the past due monies in a prompt business-like manner. As part of this process, service charges will be assessed und it is possible that a student's grades, diploma, transcript and/or other services may be withheid. Rooms, meals and/or registration could be cancelled. If satisfactory arrangements cannot be made, as a last resort the account will be referred to a third party for collection and the delinquency reported to the credit bureau.

## Validation stickers

Validation stickers are issued each term to all registered and-paid students. This sticker verifies enrollment in and payment for the particular term and includes the student's name, identification number, class, college, hours registered, term and year. Stickers are . only issued to students determined by the bursar to have paid accounts.

The validation sticker should be attached to the reverse side of the photo ID. This sticker is not generally required by most areas until two weeks after classes begin. A printed class schedule and a photo ID will permit student usage at the library and Student Recreation Center prior to receiving the sticker. Approximately two weeks after classes begin, the validation sticker is required by all areas across campus as proof of registration and payment of fees:

The address to which the validation stickers are mailed is selected in this order: (1) a student's on-campus residence hall iddress, (2) on-campus mailbox in Moseley Hall, (3) department address, (4) billing address, (5) permanent address. Validation stickers printed with an out-of-state address are held in the Office of the Bursar at the cashier windows for pick-up.

During the fall and spring semesters, through the second week of classes, validation stickers are mailed to the oncampus mailboxes. After the second week of classes, they are collected from the oncampus mailboxes and taken back to the Office of the Bursar for distribution at the cashier window stations. During the summer term all the validation stickers are distributed at the Office of the Bursar through the cashier windows.

Validation stickers are not required for the use of meal plans. The meal system is updated on a daily basis and the dining services staff will activate meal accounts as soon as they are requested to be opened.

Validation stickers may be replaced if lost for a $\$ 2$ charge. If the information on the validation sticker is not correct, the student should contact the Office of the Bursar, 132 Administration Building.

## Nonresident fee regulations

A student classified as a nonresident of Ohio for fee purposes who is entering or reentering the University is assessed a nonresident fee in addition to the instructional and general fees.

The responsibility of indicating proper residence at the time of registration is placed upon the student. If there is any question regarding the students' state of residence, the Residence Status Review Committee in the Office of Registration and Records, 110 Administration Building, should be contacted. Any student who registers improperly with respect to legal residence under the rules identified below shall be required to pay all applicable nonresident fees. Students who fail to pay this fee within 30 days after having been notified of the assessment may have their registration in the University automatically nullified.

The University reserves the right to make a final decision in any case of disputed residence for the student as a condition of admission. In determining the student's proper residence, University officials use the following regulations approved by the Ohio Board of Regents effective spring semester 1990.
(A) Intent and authority

1. It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education.
2. This rule is adopted pursuant to Chapter 119. of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section, 3333.31 of the Revised Code.
(B) Definitions

For purposes of this rule:

1. A "resident of Ohio for all other legal purposes" shall mean any person who maintains a twelve-month place or places
of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability under Section: 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.
2. "Financial support" as used in this rule, shall not include grants, scholarships and awards from persons or entities which are not related to the recipient.
3. An "institution of higher education" as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college or private medical or dental college which receives a direct subsidy from the State of Ohio.
4. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, "domicile" is a person's permanent place of abode; there must exist a demonstrated intent to live permanently in Ohio, and a legal ability under federal and state law to reside permanently in the state. For the purpose of this policy, only one domicile may be maintained at a given time.
5. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

## (C) Residency for subsidy and tuition surcharge purposes

The following persons shall be classified as residents of the State of Ohio for subsidy and tuition surcharge purposes:

1. A dependent student, at least one of whose parents or legal guardian has been a resident of the State of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
2. A person who has been a resident of Ohio for the purpose of this rule for at least twelve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
3. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in

The State of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation of full-time employment and domicile shall include boh of the following documents:
(a) a sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent or spouse of the studient is employed full-time in Ohio.
(b) a copy of the lease under which the parent or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent or spouse is the owner and occupant; or If the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent or spouse resides at that residence.
(D) Additional criteria which may be considered in cetermining residency for the purposs may include but are not imited to the following:

1. Criterie evidencing residency:
(a) if a person is subject to tax liability under Section 5747.02 of the Revised Code:
(b) if a person qualifies to vote in Ohio;
(c) If a person is eligible to receive state welfare benefits:
(d) If a person has an Ohio driver's ucense and/or motor vehicle registration.
2. Criterie svidencing lack of residency
(a) if a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of welfare benefits, or student toan benefits if the student qualified for that loan program by being a resident of that state or nation);
b) if a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting or raceipt of welfare benefits (see paragraph (D)2.(a) of this rute).
(E) Exceptions to the general rule of residency for subsidy and fuition surcharge purposes:
3. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.
4. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or har dependents shall be considered residents of Ohio for these
purposes as long as Ohio remains the state of such person's domicile.
5. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.
6. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile as long as such person has fulfilled his or her tax liability to the State of Ohio for at least the tax year preceding enrollment.
7. A person who has been employed as a migrant worker in the State of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

## (F) Procedures

i. A dependent person classified as a resident of Ohio for these purposes under the provisions of paragraph (C) 1 . of this rule and who is enroiled in an institution of higher education when his or her parents or legal guardian removes their residency from the State of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.
2. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C) 1 . or (C) 2 . of this rule.
3. For students who qualify for residency status under paragraph (C) 3 . of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than 12 months after accepting employment and establishing domicile in Ohio.
4. Any person once classified as a nonresident, upon the completion of twelve consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident.

Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student's actual financial support.
5. Any reclassitication of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.
6. Any institution of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

## Freshmen

For admission to Bowling Green State University a freshman applicant must:

1. be a graduate of a senior high school approved or accredited by the department of education of the state in which it is located; or
2. have earned high school equivalency through the General Educational Development (GED) testing program (issued by the state department of education); or
3. present GED test results and ACT or SAT test results, if the student completed secondary education through an alternative program such as home schooling; or
4. present an international Baccalaureate Diploma or Certificate.
Applications for admission are accepted and processed each semester of the academic year and the summer term until the capacity of the freshman class is reached on the Bowling Green campus and at the Firelands College campus in Huron, Ohio. Admission is competitive and is based on grade point average, standardized test scores and class rank.

High school students are encouraged to apply for admission beginning August 1 between their junior and senior years. Since housing accommodations and classroom facilities are limited, students should submit their applications as soon after receiving them as possible. All credentials should be on file by February 1 of the senior year to assure consideration for admission.

Although the largest number of new students enters in August, it is possible to enter in the spring semester or the summer term. The application and credential deadline (freshman and transfer, main campus) for the spring semester is December 15, and for the summer term, May 15. Transfer students applying to the fall have until July 15 to submit all credentials. Firelands College observes the above application deadlines, ut the credential deadline is extended to One day prior to the beginning of the term.

An Admissions Application packet is available from the director of admissions, Bowling Green State University, Bowling Green, Ohio 43403. Applicants should complete the Application for Undergraduate Admission and the College Preparatory Curriculum Completion Form. They should take these, with a $\$ 30$ check or money order made payable to BGSU (no cash, please) for the nonrefundable application fee, to the high school counselor or principal to be forwarded with transcripts. All transcripts, test results and other academic credentials must be mailed from the school or agency to the Office of Admissions to be accepted as official. Academic credentials mailed by a student will be inadequate for evaluation for an admissions decision. All admission credentials submitted to the Office of Admissions become the property of Bowling Green State University and cannot be returned. Any misrepresentation of credentials will be cause for refusal or cancellation of admission or expulsion from the University if discovered subsequently. Students may also apply electronically by visiting BGSU's World Wide Web site at http://www.bgsu.edu/ and following the instructions provided.

Applicants who have already graduated from high school may send their completed applications and application fee directly to the BGSU Office of Admissions. An official final high school transcript should be sent from the high school to the Office of Admissions. Also, the College Preparatory Curriculum Completion Form should be given to the high school counselor or principal for completion.

Applicants who have earned high school equivalency through the General Education Development (GED) testing program should send their completed applications and application fee directly to the BGSU Office of Admissions. Both an official copy of the GED results and an official high school transcript of all work completed must be sent to the Office of Admissions.

A student who has not taken coursework anywhere (high school or college) during the past five years prior to enrollment is eligible for admission to the University. Under this five-year admission policy, a student receives admission and is required to take courses
under the close supervision of his or her college academic adviser.

Applicants may fulfill the requirements for admission by presenting an International Baccalaureate Diploma or Certificate. Grades of four through seven in higher level subjects may be considered for individual course credit. Students with questions about the IB should contact the Office of Admissions.

The American College Test (ACT) or the Scholastic Aptitude Test (SAT) is required of all freshmen except those who have been out of high school for three or more years. Either test will fulfill this requirement. International applicants are not required to submit ACT or SAT results.

All non-native speakers of English are required to take the TOEFL test, or if unavailable, the Michigan Test. This is required of international students issued immigrant visas, those transferring from another American college or university, those (with English as a foreign language) coming from U.S. territories (such as Puerto Rico) and those granted U.S. citizenship within recent years.

As a condition of admission to the University and reflecting the educational philosophy of the institution, all freshmanand sophomore-level students are required to live in University residence halls except for students commuting daily from the home of a parent, legal guardian or spouse (commuters must live within 50 miles of Bowling Green), or unless they have attained 60 academic semester hours or four semesters of campus residency on or before their first day of classes. See the section on Housing on page 29 for more details.

For residency requirements for Ohio residents and nonresidents, refer to residency regulations under Fees and Charges, page 21.

## Recommended high school subjects and articulation policy

Bowling Green State University endorses the college preparatory curriculum as set forth by the Ohio Advisory Commission on Articulation between secondary schools and Ohio colleges. A strong high school curriculum is essential to a student's success at the

University.
Al students graduating from high school giter April 15, 1986, who desire to pursue a four-year baccalaureate degree at BGSU are to fultil a specified college preparatory program. See Academic Policies.

## Transfer Students

## Candidates ior admission who have

 attempted 12 or more college-level hours since high school graduation are considered transfer applicants. Candidates enrolled in their first collegiate term immediately prior to the term for which they are seeking admission will be considered based on their high school record and collegiate performance. Sudente not admissible on their high school record must complete 24 semester hours or 36 quarter hours of collegiate-level work and have an accumulative grade point average equivalent to a 2.5 to be considered for admission. Ary questions regarding these transfer policies should be directed to the Office of Admissions before submitting an application. A transfer student who wishes to enroil at Bowing Green as an undergraduate must submit an application for admission and a monrefundable $\$ 30$ application fee. The Universly requires an official final high school transcript sent from the school by the high school counselor or principal. A transfer student who has eamed a baccalaureate degree from an accredited college or university does not need to submit high school records. Transfer students are not required to submit American College Test (ACT) or Scholastic Aptitude Test (SAT) results.An official transcript of credit is required from each college or university the student has attended. This transcript must be mailed to the Office of Admissions by the institution and is not accepted from the student. Failure to indicate previous college attendance may result in refusal of admission, no transier of credit andior expuision from the University if discovered subsequently. The transfer application and credential deadine (main campus) for the fall semester is July 15, and for the sping semester, December 15. Transfer students applying to the summer ierm have until Mey 15 to submit all credentials. Firelands Coilege observes the above application deadines, but the credential deadine is extended to one day prior to the beginning of the term.

Transfor students interested in the physical therapy program should contact the College of Health and Human Services for information 419/372-8242. Out-ot-state students musi have earned 15 hours at Bowing Green (or another Ohio-assisted college or university) before being formally admited to the physical therapy major.

Transfer students applying to the nursing program professional curriculum must apply
to the University by December 1 so that they may be granted formal admission before applying to the nursing program. January 1 is the deadline for applying to the nursing professional curriculum.

Transfer students interested in criminal justice must take $\mathbf{2 5}$ graded hours in BGSU coursework to be eligible to apply. Transfer students should be aware that while grades do not transfer to BGSU, the entire transcript of all work attempted at other institutions will be considered in computing grade poini average for admission to the program.

A student who has attended another accredited college or university and is in good standing is considered for admission:
i. if the student has most recently earned an associate degree or at least 60 semester hours (or 90 quarter hours) with an accumulative grade point average equivalent to a 2.0 in a 4.0 system; or,
2. if the student has earned fewer than 60 semester hours (or fewer than 90 quarter hours) with an accumulative grade point average equivalent to a 2.5 in a 4.0 system.

A student who has completed fewer than 60 semester hours ( 90 quarter hours) and whose accumulative grade point average is between 2.0 and 2.5 may appeal for admission. After evaluating the student's completed admissions credentials, an appeal form will be sent to the student. Upon return of the completed appeal form, an admission recommendation is made by the dean of the college to which the student is applying, in consultation with the director of admissions. Appeals will not be sent after the application deadline has passed. An applicant who is too late to appeal will be denied admission for that term.

A student who does not meet the above requirements AND who has not attended another college or university for one or more years may be considered for probationary admission by appealing to the dean of the college to which the student is applying. An appeal form will be sent to the student after an evaluation of the student's completed admissions credentials is completed. Appeais for probationary admission will not be sent after the application deadline has passed.

Transfer students must demonstrate competence in English/writing, mathematics and reading before advancing to sophomore and junior standings.

A person receiving probationary admission is restricted to no more than four courses during the first semester at Bowling Green.

A transfer student who has not taken coursework anywhere (high school or college) during the past five years prior to enrollment is eligible for admission to the University. Under this five-year admission policy, a student receives admission and is required to take courses under the close
supervision of his or her college academic adviser.

BGSU's College of Technology offers upper division (junior/senior) programs designed specifically for transfer students. A transfer student who has received an associate degree with a technical specialization from an institution accredited either regionally or by the Ohio Board of Regents may apply for admission to one of these programs.

Please note: Admission to Bowing Green State University does not ensure acceptance into all undergraduate programs/majors. Candidates should thoroughly read the information contained in the Transfer Student Application Packet regarding Special Transfer Admission Requirements. If adiditional clarification is needed, students should contact the appropriate college office or the Office of Admissions.

## Transfer of creait

Bowling Green State University awards transfer credit for formal coursework of baccalaureate level completed with a grade of C or better (or a mark of pass/credit on a pass/fail graded course) which is judged to be equivalent to the University's own courses or which can be assigned to a BGSU department, school or program. Crodit may also be awarded for experiential learning tha meets the guidelines and is validated by procedures as described below.

## Acceptable Coliegiate Sources

Universities and colleges with accredilations or which are candidates for accreditation by one of the regional accrediting associations, (such as North Central Association of Colleges and Schools) and colleges and universities in foreign countries which hold official recognition in the specific country in which located:

1. Credit is accepted generally. Credit awarded may be exact BGSU course equivalent credit when a course is subsiantially equivaleni to an existing BGSU course. (Example: History of U.S. to Civil War $=$ History 205)
2. When a course is in a department existing at BGSU but is not equivalent to a specific course, credit may be awarded in that department but with no course number assigned, i.e. non-equivalent credit. (Example: History of India would equal history elective.)
3. When the course is in a department not existing at BGSU, credit may be awarded in a different depariment. (Example: anthropology assigned to sociology, some architectural courses assigned to art or technology.)
4. Credit may be deferred when a course is of college level and in a department
offered at BGSU but when equivalency cannot be determined by the Office of Registration and Records. Procedures exist for the further evaluation of deferred credit by faculty members in an appropriate department.

Community and technical colleges with accreditation or which are candidates for accreditation by one of the regional accrediting associations:

1. Credit for basic education courses is accepted generally (with some specific exceptions).
2. Credit granted may be course equivalent and non-equivalent credit, or credit may be deferred.
3. Coursework in technical or specialized disciplines may be subject to approval by faculty members in appropriate departments.

Technical colleges, business colleges and other schools lacking regional accreditation but having accreditation by another agency recognized by the Council on Post-Secondary Accreditation (COPA):

1. Credit may be accepted only upon the recommendation of the specific department and/or college/school in which the coursework is offered.
2. Before credit is awarded, previous coursework may be subject to validation by examination if recommended by department/college/school. Procedures for validation of credit are in existence.

## Acceptable Noncollegiate Sources

 Program on Noncollegiate Sponsored Instruction (PONSI). The American Council on Education (ACE) acts as a recommending agency for coursework offered by diverse noncollegiate organizations (such as the National Security Agency, General Motors, American Institute of Banking, etc.). Course descriptions, together with credit recommendations, are available in ACE's National Guide to Credit Recommendations for Noncollegiate Courses.1. Credit is accepted generally as recommended by ACE for lower-division (100200 level) courses at BGSU.
2. Course credit recommendations for work which is on the upper-division (300-400 level) at BGSU may be subject to - validation by appropriate departments before credit can be granted.

## Educational experiences in the armed

 services. The American Council on Education (ACE) also accredits work offered by the U.S. armed services. Course descriptions and credit recommendations are available in its publication Guide to the Evaluation of Educational Experiences in the Armed Services.1. Credit is accepted generally as recom-
mended by ACE.
2. Normally, all credit accepted is nonequivalent course credit.
3. Equivalent course credit where appropriate may be subject to evaluation and recommendation of appropriate departments.

## Experiential Learning.

1. Credit for experiential learning may be granted for educational experience outside the classroom that corresponds to material taught at the University.
2. Credit for experiential learning may be granted through Credit by Examination.
3. A $\$ 50$ fee is assessed for each course granted for successful completion of the Credit by Examination for validation of experiential learning.
4. Experiential learning is also measured by portfolio assessment. For information about the program, contact the Director of Adult Learner Services/Continuing Education International and Summer Programs.
5. Portfolios are written in a three-semester credit hour English course; in addition, a $\$ 70$ fee is assessed for each course for which portfolio credit is requested.

## Institutional transfer

The Ohio Board of Regents, following the directive of the Ohio General Assembly, has developed a new statewide policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. The purpose of the state policy is to avoid duplication of course requirements and to enhance student mobility throughout Ohio's higher education system. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to an independent institution are encouraged to check with the college or university of their choice regarding transfer agreements.

## Transfer module

The new Ohio Board of Regents' Transfer and Articulation Policy established the Transfer Module, which is a specific subset of the entire set of a college or university's general education requirements. The Transfer Module contains 54-60 quarter hours or 36-40 semester hours of specified course credits in English composition, mathematics, fine arts, humanities, social science, behavioral science, natural science, physical science, and interdisciplinary coursework. Information regarding Bowling Green State University's transfer module can be obtained from the Office of Admissions, the Office of Registration and Records or the college offices.

A transfer module completed at one
college or university will automatically meet the requirements of the transfer module at the receiving institution, once the student is accepted. Students may be required, however, to meet additional general education requirements that are not included in the Transfer Module.

## Conditions for transfer admission

Students meeting the requirements of the Transfer Module are subject to the following conditions:

1. The policy encourages receiving institutions to give preferential consideration for admission to students who complete the Transfer Module and either the Associate of Arts or the Associate of Science degrees. These students will be able to transfer all courses in which they received a passing grade of $D$ or better. Students must have an overall grade point average of 2.0 to be given credit for the Transfer Module.
2. The policy also encourages receiving institutions to give preferential consideration for admission to students who complete the Transfer Module with a grade of C or better in each course and 90 quarter hours or 60 semester hours. Students must have an overall grade point average of 2.0 to be given credit for the Transfer Module and only courses in which a C or better has been earned will transfer.
3. The policy encourages receiving institutions to admit on a non-preferential consideration basis students who complete the Transfer Module with a grade of $C$ or better in each course and less than 90 quarter hours or 60 semester hours. These students will be able to transfer all courses in which they received a grade of $C$ or better.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors or fields of concentration at that institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be accorded the same class standing and other privileges as all other students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of the degree.

## Responsibilities of students

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and
major to which they desire to transfer. Futhermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are oncouraged to seek futher information regarding transfer from both their adviser and the college or university to which they plan to transfer.

## Ahomat process

A muithlevel, broad-based appeals process is required to be in place at each institution. A student disagreeing with the application of - treneter credil by the receiving institution shall bo informed of the right to appeal the decision and the process for filing the appeal. Each institution shall make available to seudents the appeal process for that spectic college or university. See "appeal of - transfor oredit" below.

If a hranster student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the instituion shall advise the student in writing of the availability and process of appeal to the stete level Articulation and Transfer Appeals Feview Committee.

The Appeals Review Committee shall review and recommend to institutions the resolution of individual cases of appeal from transler sudents who have exhausted all local appeal mechanisms concerning applicablity of ransfer credits at recelving instituitons.

## 

Students or institutions wishing to challenge a Bowling Green State University transfer of credit decision may submit a written appeal to the Otfice of Pegistration and Records, Which will determine whether a policy is at issue. If a policy is at issue, the Office of Registration and Records will perform the epproprite research and send the appeal to the Undergraduate Council. The Undergraduate Council will review all available intomation and make a recommendation to the Office of Academic Affairs. The Office of Acadamic Affairs will give final approval or disapproval of the Undergraduate Council's recommendation.

## Ohnor admission -ategories

## Hoterneficnat stumants

Students from more than 80 countries are untrled at the University. Well qualified international students are welcomed. Their participation is oagerly sought to ennich educational opportunities for all students. International students applying for admission should white the Center for International Programs, Bowing Grean State University,

Bowling Green, Ohio 43403, or call (419) 372-2247.

For admission purposes, applicants whose native language is not English are required to take an English proficiency testeither the official Test of English as a Foreign Language (TOEFL) or the official Michigan Test. Arrangements to take the TOEFL must be made by the applicant in direct communication with the Educational Testing Service, Box 899, Princeton, New. Jersey 08541, U.S.A. Although the TOEFL is preferred, the University also accepts results of the Michigan Test. Arrangements to take it must be made by the applicant in direct communication with the Testing and Certification Division, English Language Institute, University of Michigan, Ann Arbor, Michigan 48109, U.S.A.

Upon reporting to the University and before registering for classes, all entering international students admitted through the Office of International Programs and the Office of Admissions, except those whose native language is English, are required to take additional English tests; international students transferring from other colleges or universities in the United States as well as students from Puerto Rico are also required to take these tests. On the basis of these lesis, the University reserves the right to require enrollment either in ENG 100 (English as a Foreign Language) or in the Special Section for International Students of ENG 110 (Developmental Writing) and to limit the courses taken for credit.

## 害vening and part-time students

Prospective students who plan to take evening classes only (4:30 p.m. or later) can apply for admission to the Evening Program or, if space allows, enroll as undergraduate guest students before seeking admission to the University.

## concurrent enroliment

Concurrent enrollment at Bowling Green State University and the University of Toledo allows a student with at least a 2.0 GPA to take courses at both universities and receive credit toward a degree. To be enrolled concurrently during a single term, a student must be registered for at least one course at both institutions. If a Bowling Green student takes all courses at Toledo during a single term, then that student must register at the University of Toledo as a transient or guest student. See section on "BGSU students enrolled as guests at another institution" on the next page.

Under this policy, the university that has most recently granted formal admission to the student is designated as the home university, The other university is the host institution.

A student registering for eight hours or more of coursework at the home university shall pay all fees to the home university. If a student registers for fewer than eight hours,
instructional, general and nonresident fees are to be paid at the separate universities. (Special course fees are payable to the teaching institution.)

All coursework taken under concurrent registration will be registered at each university. If will be included in the calcuiation of a student's grade point average at his home university. Seniors within the last 30 hours before graduation must receive permission from their deans before enrolling in concurrent courses at the University of Toledo.

Coursework completed at the University of Toledo may not be used to delete F's and other low grades previously earned at Bowling Green State University in grade point average computation.

Concurrent enroliment forms are available through the Office of Registration and Records of either institution.

## Guest students

Any person who has graduated from high school (or earned the GED equivalent) or any person who has attended another university may apply as a guest student. Such a student is not required to submit a high school transcript or ACT (American College Test) results. Guest students are not eligible for financial aid. Any coursework taken as a guest student will be applicable to a degree program once the student is formally admitted. A guest student is limited to taking 16 hours of credit without formal admission to the University. The 16-hour credit limit shall include all credit hours attempled by the student. If a student fails a class, those hours will be included in the 16 . hour limit. Once the $\mathbf{1 6}$-hour credit limit has been reached, the student must be formally admitted through the Office of Admissions, 110 McFall Center. Permission to exceed the 16 -hour credit limit must be. obtained from the Office of Admissions.

A guest student is required to apply. each term at the Office of Registration and Records, 110 Administration Building. Such : student will register on dates established by the Office of Registration and Records. A guest student may register for undergraduate courses only (400-level courses or below).

Guest student enrollment is not to be used by students who have been denied or refused formal admission to the University. Such a student must contact the undergraduate Office of Admissions, 110 McFall Center, to receive permission to register as a guest student. A guest student's registration will be withdrawn if it is discovered subsequently that he/she has been denied or refused formal admission.

Non-U.S. citizens can apply as guest students only through the Office of Intemational Programs. Students currentiy enrolled in high school who wish to take courses at BGSU should contact the Office of Admissions, 110 McFall Center, (419) 372-2086.

Students wishing to enroll as a guest at the Firelands campus of BGSU may submit the application and obtain registration information from Firelands College, Office of Enrollment Services, 114 East Building, 901 Rye Beach Road, Huron, Ohio 44839, (419) 433-5560 or 1-800-322-4787.

Applications to register as a guest student may be obtained from and must be submitted to the Office of Registration and Records, 110 Administration Building.

## Post secondary enrollment options

The post secondary enrollment options program provides qualified high school juniors and seniors who attend public and chartered non-public Ohio high schools, the opportunity to enrich their educational experience by enrolling in college-level coursework. The application and credential deadline for fall semester is May 1 and for the spring semester, December 1. For additional information, contact the Office of Admissions at (419) 372-2086.

## Guest degree holder

A student who has earned a four-year degree in higher education and who wishes to enroll in undergraduate courses without pursuing another degree may enroll as a guest degree holder. Such a student is not limited as to the number of courses which may be taken at the University. Guest degree holders may register for undergraduate courses only (400-level courses or below).

The only admission requirement for a guest degree holder is official confirmation from the appropriate institution of the highest degree received.

Guest degree holders who maintain continuous attendance at BGSU will automatically be sent registration materials for succeeding terms. Students not in continuous attendance must re-submit the guest degree holder application in order to obtain registration materials for the designated term.

Applications to register as a guest degree holder may be obtained from and must be submitted to the Office of Registration and Records, 110 Administration Building.

## BGSU students enrolled as guests

 (transient students) at another institution Students pursuing a degree at BGSU who wish to earn credit from another college or university may transfer such credits to BGSU if they have a BGSU accumulative grade point average of at least 2.00 and all other criteria for the acceptance of transfer credit are met (see Transfer of Credit). Students are encouraged to verify with the Office of Registration and Records the equivalency of courses from another institution to BGSU courses and to consult with their college advisers concerning the applicability of the courses to their degree program. Grades earned at the other institution do not become part of the student's record at BGSU, but are included in the determination of all honors.
## Readmission of former students

A student who has not been in continuous attendance during the regular academic year and wishes to attend either spring or fall semester must complete the application for readmission form and submit it to the Office of Registration and Records. A copy of this form may be obtained by contacting the Office of Registration and Records, 110 Administration Building, or by calling 3728441. The readmission of a former student is based on past academic and personal records at the University and on the availability of facilities. A former student who has transferred to another college or university since the last enrollment at Bowling Green may be considered for readmission and must submit the application for readmission form and a complete transcript.


## Habrarsity Residences

Bowing Ereen is primarily a residential University, and more than 6,000 undergraduate stidents live in residence.

University residences provide a physical environment designed to further the academic; cultural and personal development of resident students. A wide range of living options is available to sludents and a wide variety of educational and social programs are offered.

Undergraduate students are required ta reside in University-owned living units as a condition of enroliment unless they are commuting dally from the homes of theit parents, guardian or spouse; OR miess they have attained 60 earned academic hours andlor four semesters of on-campus residency on or before the flrst dey of dasses for fall semester. For the purposes of this regulation, a home is defined as the actud and regular place of residence in the community in which the parent guardlan or spouse is eligible to register to vote. A guardian is defined as a person awarded legal guardianship by a gourt ar competent jurisdiction. The onrampus housing agreement is an agreenent for the entire academic year. A student must be in compliance with the University housing policy as a condition for applying to be an exception to the poltses.

Accommodations in University residences are avallable to any University student regardiess of tace, religion, creed, color, national origin, handicap or sexual orientation.

The Depautment of Student Housing and Hesidence Programs, 110 Saddlemire Student Services Building (372-2011), is responsible for the assignment of all students to on-campus housing accommodaHons This office processes all housing applicetions and roommate requesis for assignment to the 18 residence halls and 31 small group fliving units.

Fhe Depatment of Student Housing and Hesidence Programs is responsible for the operation, staffing and programming of all University residences, inciuding sorority and fraterfity houses. A trained housing staff including undergraduate advisers (R.A.s) is
present to help students derive the fullest possible benefits from the residence life experience.

## On-campus housing regulations

## Responsibility for personal effects

During a student's residence on campus, every effort is made to provide a safe and supportive environment for students.
However, the University cannot assume responsibility for loss or damage to personal effects of the student or guests of the University. If a student's parents have a blanket homeowner's insurance policy, the student's personal effects may be listed and covered in such a policy.

Generally, each room is completely furnished except for linens, pillows, blankets and personal toiletries.

For detailed information regarding services and accommodations available contact the Department of Student Housing and Residence Programs.

## Occupancy of rooms

Each student is required to vacate and remove personal belongings from the University residence after the close of final examinations for the spring semester, except for the student who receives a degree at the May commencement. Such a student may remain in the University residence up to a designated hour on commencement day.

A student in good standing with the University is not required to clear the room of possessions at the close of the fall semester unless that person has failed to acquire a paid on-campus housing reservation for the succeeding semester. A resident who has not paid for additional accommodations, however, is required to vacate the room and remove personal belongings within 24 hours after the close of semester examinations.

The University undertakes at all times to maintain pleasant living conditions in its residences, and the right is reserved to remove an occupant at any time for violations of University and/or residence policies. Anyone found residing in University facilities who has not paid for accommodations, who is not a lawful resident of that facility or who is found in a closed building
may be charged with trespassing. The University reserves the right to assign, inspect, maintain and make repairs in residences at any time during the school year.

## Vacation pertods

Most University residences are closed during vacation periods. However, certain designated buildings are open during vacation periods and residents may remain over the Thanksgiving and spring recesses or between semesters for a nominal daily fee. The dining halls will not be open during the vacation periods. The Department of Student Housing and Residence Programs can assist in making these arrangements.

## Change of assignment

If, for some reason, a student should find it necessary to change his or her on-campus assignment, such a change must be approved and processed by the Department of Student Housing and Residence Programs in advance of the proposed move.

## Off-campus housing

The Off-Campus Housing Office, located in Moseley Hall within the Off-Campus Student Center, cooperates with stuents eligible to live off campus (equivalent of four semesters and/or 60 earned academic hours) by providing housing information from rental agencies and private individuals on a regular basis.

The office provides information concerr: ing subletting an apartment, public utilities, roommate locater information, a LandlordTenant booklet compiled by the city's Housing Commission and a checklist for students moving into off-campus housing. Information on the Student Legal Service and a sample copy of a lease agreement are also available.

No facilities in town are inspected by University or city officials. Rental agencies must agree to the rules of the Ohio LandlordTenant Act, Chapter 5321 of the Ohio Revised Code.

A student who lives of campus does so accepting individual responsibility. A contractual agreement exists between the student and the landiord exclusive of the University.

## Room and meal plan charges

A student who wants to live on campus must apply for housing and sign a residential agreement card. Dates and procedures for payment are outlined in the acceptance agreement.

Several different living options are available to students. Priority of assignments is given to continuing upperclass students with seniors, juniors, sophomores and incoming freshmen assigned in that order.

Room rates vary based on the amenities in the building (air-conditioning or suite-style housing) and type of meal plan the student chooses. Most of the fraternity and sorority houses, as well as the French House, operate their own dining facilities and therefore, the room cost is paid to the University and the meal plan is paid to the house. If a house does not have its own meal plan, residents' participation in the minimum on-campus meal plan is required.

All students living on the main campus are assessed a residence technology fee each semester (see Fees and Charges). The fee is used to upgrade and maintain computing resources, services and technologies within the University's residences. Room and meal rates are established annually by the University Board of Trustees. Information regarding living options and rates can bebtained from the Department of Student Housing and Residence Programs, 440 Sadddlemire Student Services Building, (419) 372-2011.

## Payment schedule

Since arrangements for residence on campus must be made before the opening of the semester and the University wishes to accommodate as many students as possible, a forfeiture schedule for late cancellations is maintained. This schedule appears in the acceptance agreement which is provided when the residence hall agreement is accepted. The acceptance agreement should be read thoroughly by both student and parents or guardian and retained for future reference. A residential agreement card accompanies the agreement. It must be signed and returned with the initial payment, indicating acceptance of the provisions of the agreement. Full payment may be made in advance for the semester, or entire academic year, or in accordance with an optional Instaliment Payment Plan described in the acceptance agreement. The initial payment date appears on the residential agreement card.

## Refunds

Adherence to the payment schedule is a rerequisite for admission. Should it be tcessary for a student to withdraw from the University after the acceptance agreement has been executed, the refund schedule outlined in the agreement is followed.

For more information regarding other fee refunds see Fees and Charges.

## Meal plan

Dining Services offers flexible hours and varied menus in pleasant dining areas conveniently located in University residences. The facilities are managed by University professionals who are dedicated to providing quality food services.

At Bowling Green students use their student photo I.D. to purchase snacks and meals. The I.D. serves as a debit card when presented to the cashiers in campus dining centers. With each purchase, the total is deducted automatically by computer from the prepaid meal account. Parents and friends are welcome to eat with students, either on their meal plans or by paying with cash.

Bowling Green's award-winning dining services offer a wide variety of menu items. Vegetarian soups and entrees, as well as lowfat selections are offered daily, along with featured entrees, sandwiches, salads and desserts. Carry-out service is available. In addition to the traditional cafeteria service, Dining Services provides alternative services in the nighttime snack bars, dinner restaurant service, convenience stores and a deli. Students living in most University residences are required to purchase at least the minimum meal plan each semester in order for Dining Services to meet its financial obligations.

Financial aid, which includes scholarships, grants, loans and work opportunities is coordinated by the office of Student Financial Ald (SFA). Detailed information about individuel programs as well as innancial aid counseling is avallable on a walk-in basis or by appointment. Office hours are a.m. -5 p.m. Monday through Friday.

The need-based financial aid programs are based on the philosophy that the primary responsibility for a student's educational experises (also called cost of attendance) belonge to the student and the student's family. The family's ability to contribute mard educational costs is called the expected famity contribution, and is determined by filing the Free Application for Sudent Aid (FAFSA). Calculation of the farnily's expected contribution is based on a formula estabished by the U.S. Congress. The cost of attendance is determined by the University, When the student's calculated family contribution does not meet the cost of attendance, SFA attempts to make up the difference by providing financial aid from federal, state, Institutional and private sources. Because institutional-based funds are offered on a first-applied, first-considered basis, students are encouraged to file the FAFSA as soon as possible after January 1 for the following academic year.

Financial aid is offered based on full-time enrollment (12 or more credit hours), but some awards are available for part-time ettendance. Notices of eligibility (award leters) are malled beginning in April and continue throughout the award year. Early application ensures consideration for institutional programs as well as federal and state aid.

## Aㅗㅗ낸zantships

Some academic departments offer undergraduate assistantships to qualified juniors and seniors. Students should consult with and apply in the individual department. Upperclass students are also employed as residence hall advisers. Information about residence hall advisers is available in University residences or in the Department of Sudent Housing and Residence Programs, 440 Gaddlemire Student Services Building.

## Employment

A variety of part-time employment opportunifies are available both on and off campus. At BGSU, students are a vital element of the work force. The Student Employment Program posts on-campus job openings daily. Students contact, apply and interview directly with prospective employers. During the academic year, campus employment is available to undergraduate students who are enrolled on at least a half-time basis. Students are employed University-wide as clerks, custodians, library aides, receptionists, tutors, typists, lab assistants, delivery persons, lifeguards, computer programmers and dining service employees.
In addition to on-campus job postings, the Student Employment Program maintains a list of off-campus jobs in the Center for Career Resources in the Saddlemire Student Services Building.

Students participate in either the Federal Work Study Program, which is a need-based program, or the University's regular work program, which is not based on financial need.

## Grants

Grants are financial aid awards that do not require repayment. They are available to eligible students who have the lowest expected family contribution.

## Federal Penf Grant

The Federal Pell Grant (FPell) program is the largest of the grant programs. It provides a foundation of financial aid for students who have the highest financial need. Students can apply for the Federal Pell Grant by completing the FAFSA.

## Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant (FSEOG) is another aid source for students with high need and who are eligible for the FPell.

## Ohio instructional Guant

The Ohio instructional Grant (OIG) is a statefunded grant availabie to eligible Ohio residents who demonstrate financial need. The OIG is designated to pay instructional and general fee charges. Ohio residents apply for OIG by completing the FAFSA.

Talent Awards aral Crawtsoim- ADed
Students demonstrating special talents or abilities in athletics, music, drama, broadcasting or speech may be eligible for University-funded grants. Recipients apply to and are selected by individual colleges, schools, departments or committees.

## Loans

Loans are available to eligible students and or their parents through a variety of needbased and non-need-based programs. Typically, need-based student loans are offered at low interest rates and need not be repaid while the student is enrolled on a fulitime basis. Interest rates and repayment grace periods vary according to the terms of the individual programs. Most loans require the student to complete the FAFSA.

## Whiliam D. Ford Fedoral Direct Subsidized and Ensubsidized hoans

These are low-interest loans which do not require repayment until six months affer the student no longer maintains al least a halftime enrollment. Subsidized loan borrowers are not charged interest as long as they meet anrollment requirements. The Unsubsidized Direct Loan is not based on need, but requires the student to file the FAFSA to first determine subsidized loan eligibility. Unsubsidized loan borrowers are charged interest regardless of enrollment status. The interest rate varies, but is capped ai $8.25 \%$ annually [at the time of publication].

## Federal Perkins Loans

These are need-based, lower interest ( $5 \%$ ) loans which do not require repayment or accrue interest until nine months atter the student no longer maintains at least a halftime enrollment. Award amounts are determined by SFA. Loans are based on an allocation from a federal allocation plus repayments of prior BGSU students.

- Students file the FAFSA for Perkins Loan consideration.


## arșing Student Loans

Students must be admitted to the School of Nursing to be considered for need-based nursing loans (currently 6 percent). Loans do not accrue interest or require payment while the student is enrolled at least half-time. Special deferment and cancellation options are available depending on the location of the student's employment after graduation. Award amounts are determined by SFA.

## Federal Direct Parent Loans for

 UndergraduatesFederal Direct Parent Loans for Undergraduates are available to parents whose students either do not qualify for need-based financial aid or who need additional assistance above and beyond their determined eligibility. - Applications are available from SFA. Parents applying for the Direct Parent Loan do not have to file a FAFSA form, but should contact SFA for an FPL'US application. Interest rates are variable (not to exceed 12\%); monthly payments are required within 60 days after the loan is disbursed.

## Short-term loans

Short-term loans for personal emergencies are available in SFA. Interest rates range from $0-8 \%$ depending on the amount borrowed. All loans must be repaid within 45
ys or by the last day of the semester, hichever comes first. Application is made on an appointment basis at SFA.

## Scholarships

Scholarships differ from other forms of financial aid. Awards may be based on merit or criteria other than financial need. Like grants, they do not have to be repaid. More than 500 types of academic scholarships are available to students with outstanding academic records: Students who receive the Ohio Academic Scholarship also receive a BGSU supplemental scholarship. Other scholarships, including SFA's University Scholarship, are awarded on the basis of academic achievement and need. Detailed information on scholarship programs may be obtained from BGSU's Scholarship Guide.

## Other programs

Somie students qualify for Veteran's Benefits or Bureau of Rehabilitation Assistance or are eligible to participate in the Job Partnership and Training Act programs. Students are encouraged to consult the yellow pages to contact the local, federal or state sponsoring -ffice in their area.


The Office of Registration and Records, 110 Administration Building, is responsible for each student's class registration and academic record. In addition, the schedule of classes is compiled by this office with the assistance of academic departments and colleges. The office is also responsible for commencement programs and receives applications for graduation. Other services provided are the evaluation of transfer credit, cerification for benefits under the Veterans Education and Social Security Acts, issuance of siudent transcripts, readmission of former students, admission of guest students, corification for eligibility in athletics, mambership in honor societies, clarification of residency, processing of credit-by-exams and various other academic student-related functions.

## Hentinioneation card

Photo identification cards are issued to now freshmen, transier and graduate students during their firsi term of classes. This photo ID is good for the entire length of time a student attends the Universily. The identification card is only valid with a bursar validation obtained each term (see Validation Sticker under Fees and Charges).

Guest students are not issued photo identilicaikon cards except on request. Identification cards may be replaced if lost or defective for a fee.

The photo ID card, with the validation sticker, is needed for eating in the dining facillies, cashing checks, charging items, checking out library books, using computer labs, purchasing athletic tickets, using the recreation center, attending University functions eic. For information concerning office hours, call Photo ID, (419) 372-6081.

## 

An official transcript of a student's record is used for transferring credits to other colleges and universities and for transmitting information to certifying agencies and employgrs. An official transcript is issued only at the written request of the student. A trenscript is not released for a student who is
delinquent in any financial obligation to the University. Requests for transcripts to be picked up in person by the student should be submitted at least 24 hours in advance to the Office of Registration and Records, 110 Administration Building (104 East Building at Firelands). Photo identification is required.

Transcripts from other institutions that have been presented for admission or evaluation become part of the student's permanent academic file and are not returned nor copied for distribution. Students desiring transcripts covering work completed elsewhere should request them from the institutions concerned.

## Academic load

A full-time undergraduate is defined as a student registered for 12 or more semester hours. A full-time student normally should be registered for 15 to 16 hours per semester. The academic load of a regular undergraduate student should not be less than 12 hours at any time. Enrollment for more than 18 hours requires the approval of the office of the dean of the college in which the student is enrolled; such enrollment will be reviewed in accordance with the policies of the respective college. Based upon institutional policy, the following enrollees are involved in a full-time academic experience at BGSU: students registered for COOP 050, TECH 289/389/489, and Academic Year Abroad.

## Registration schedule

All fully admitted students who are enrolled for the current semester are eligible to register for the next semester using the telephone registration system. Registration confirmations are distributed to residence hall addresses, department addresses, local addresses or home addresses two weeks prior to registration. Students who are either not currently enrolled or have not been admitted need to apply for admission or readmission prior to registration.

During fall and spring, registration is divided into five phases: course requests, priority class registration, preferred open, new open and open registration with drop/ add.

Course requests, which are made one term in advance, provide departments with information about the demand for their courses. Only those students participating in course requests are allowed to take part in priority and preferred open registration. During summer term, only open registration is utilized.

Priority registration is the first opportunity for students to register for classes of the specific courses they requested. Access to priority registration is by appointment; each student receives two time periods during which he/she may call and register. Appointments are sequenced by class, and within class by grade point average.

Priority registration is followed by preferred open registration. During preferred open registration, students may complete their initial registration, drop, add or change their grade options, and register for ciasses which they did not request during the course request phase. Access to preferred open registration is by appointment; each student receives two time periods during which he/ she may call and register. Appointments are sequenced by class, and within class by grade point average.

Preferred open registration is followed by new open registration. New open registration is only available to those students ineligible to participate in priority or preferred open registration.

New open registration is followed by open registration with drop/add. Students registering late in the semester must pay their fees by 5 p.m. on the last working day prior to the start of the term or their registrations will be cancelled. Students registering or reregistrering on or after the last working day prior to the start of the ferm must prepay their fees and obtain a bursar clearance prior to registration. These registrations are also subject to late registration and late payment fees.

## Drop/adid

After the initial registration period has been completed, all changes must comply with the policy of the college in which the student is enrolled. An undergraduate may enroll in a course within seven calendar days from the beginning of classes during the semester.

After this time, a student may add a course nly with permission of the college dean. A student may change the grading option graded or $\mathrm{S} / \mathrm{U}$ ) for a specific course only during the first-seven calendar days of a given semester. Seven calendar days are allowed for a student to withdraw from a class with no record on the transcript. After these dates, exceptions may be granted only by the dean of the student's college.

During summer term, students may register for courses, add, change grade options or drop during the first three calendar days of a given session.

An undergraduate who drops a course during the fourth through the ninth week of a semester may either receive a grade of WP (withdrawn passing) or WF (withdrawn failing) according to the student's standing in the course. A grade of WF is assigned to courses, dropped after the ninth week of a semester and to courses that the student ceases to attend without permission. Any student terminating attendance in an $\mathrm{S} / \mathrm{U}$ course without officially dropping the course or withdrawing from the University will receive a WF. This may be appealed through the student's college office.

See change of registration charge under fees and charges, page 21.

## Audit

student who wishes to attend a class without receiving credit for it may register to audit that course. A per-hour instruction fee is charged as if the student had registered for the course for credit. Students may add classes for audit status or change to or from audit status during the first seven calendar days of the fall or spring semesters or the first three calendar days of any summer session. Students may drop classes with audit status during the first seven days of the fall or spring semesters or the first three days of any summer session.

## Registration and Records policies

## Change of address

To assure prompt receipt of grades and schedules, a student should report any change in their address to one of the following offices: Admissions, Bursar, Finançial Aid, Student Employment, Graduate Admissions, Student Housing and Residence Programs or Registration and Records.

## Change of personal information

Changes to student personal information should be reported to the Office of Registration and Records. For name changes, two documents are required: one with the new name and one with the former name. One of these must contain a photo. Documents could include a court order, a marriage license or a driver's license.

For a change of student number or birthdate, the student must provide photo identification and a document containing the correct information.

## Student records policy

The University's Student Records Policy can be found in Part II. A. 8 of the Student Related Policies and Procedures sections of the Student Affairs Handbook which is distributed to students by the Office of Student Affairs.

## Veterans/reservists

The Veterans Affairs Office is located within the Office of Registration and Records. The office certifies all students eligible for Veterans Affairs educational benefits under Chapter 31 (Title 38, Code of Federal Regulations), Chapters 30, 32 and 35 (Title 38, United States code), and Chapter 106 (Title 10, United States Code). Students applying for veterans benefits must provide a copy of member 4 of the DD 214 form,
Report of Separation from the Armed Forces. Questions should be referred to the Office of Registration and Records, 110 Administration Building.

## Certifications

Certification for loan deferments, good student automobile insurance discounts, health insurance, and degree, scholarship and enrollment verifications are processed in the Office of Registration and Records when requested by the student.


The Office of Student Life is the cenier for student organizations, the undergraduate student government, the coordination of campus activities programming and the Freshman Orientation and Registration programs, all of which are designed to aid in the total development of students at BGSU.

##  <br> 405 Saddlemire Siudent Services Building, 372-2343

The rrost successiul students are those who take advantage of the extracurricular activities offered at BGSU through its more than 180 sudent clubs, groups and organizations. involvement in student activities and organizations provides students with valuable experience that supplements their academic regimen while helping them develop into well-rounded graduates. This out-of-class education provides students with invaluable transterrable skills such as time management, leadership, motivation, group communication and goal-setting which can cerry through into future careers.

See the Fitelands College section of the catalog for information on student organizations there.

## Shturcnt orgamizational regulations

Students are tree to organize and join clubs, groups or organizations to promote their common interests provided that these associations are organized for legal purposes and do not conflict with the University's educational objectives.

For purposes of continuity, direction, counseling and fiscal responsibility, each organization must have an adviser who is either a faculity member or an administrative stafl member of Bowling Green State Univarsity.

Organizations shail not discriminate in thelr activilies, programs, operations or membership selection on the basis of race, sex, age, religion, national origin, handicap or sexual preference.

A complete Organizations Policy can be obtained in the Office of Siudent Life.

## Student government

The Undergraduate Student Government provides the student with opportunities for responsible participation in the government of the University community and gives the University the advantage of student views and experience in arriving at the soundest possible policies and practices with respect to issues relating directly to each student enrolled in the University.

In addition to the Undergraduate Student Government, the qualified student may serve on other policy-determining and administrative councils and committees of the Universily.

## Universify Activities Organization

All students may participate in planning and organizing social, cultural, educational and recreational events for the University community through the University Activities Organization.

The entire organization is involved in planning and impiementing programs through the following committees: campus films, campus sales, cultural awareness, contemporary issues, games, Homecoming, mini-courses, outdoor recreation, publicity, publications, public relations, entertainment and travel.

UAO provides students with the opportunity to organize functions affecting the entire student body while developing leadership skills.

## intercollegiate athietics

Participation and excellence are the primary goals of Bowling Green intercollegiate athletics. As one of the largest total-sports programs in the Mid-American Conference, more than 500 men and women compete for championship recognition each year on 22 varsity teams.

Men's and women's teams exist in basketball, cross country, golf, swimming, tennis, track and soccer. Men compete in football, baseball and ice hockey, while women compete in gymnastics, volleyball and softball.

The University is a member of the National Collegiate Athletic Association (NCAA) and the 12 -university Mid-American Conference (MAC). The hockey team participates in the Central Collegiate Hockey Association (CCHA). Bowling Green competes regularly with nationally prominent teams from other major conferences.

To be eligible for intercollegiate athletic competition, a student must meet various academic standards established by the University, the NCAA, the MAC and the CCHA. When a student becomes involved on any of the teams that compete in intercollegiate contests, it is assumed that consent to do so has been received from the student's parents or guardian. Every precaution is taken to safeguard the health of the student athlete and a physician is generally present at intercollegiate contests in the more rigorous sports.

## Recreational sports

Recreational sports provides a broad-based program in the Student Recreation Center and Perry Field House.

Many recreational activities are offered through the Student Recreation Center. All registered full-time students may use the center as often as desired; a usage fee is included in the general fee paid each semester. Part-time students must pay a prorated usage fee. Special plans for spouses and children of students are avaitable. Perry Field House is a scheduled facility and is open on a space-available basis.

A diverse intramural program offors sport opportunities to the University community through individual, dual and team activities. Competition is offered through residence hall, sorority, fraternity, independent and coed leagues.

Sport clubs are established to promote and develop the interests and skills of members in a particular spori. Normally, only those individuals possessing very high interest and/or skill in a particular sport are members of a club. Most sport clubs provide competition outside BGSU with teams from other clubs, schools, colleges and universities.

## Career Services

360 Saddlemire Student Services Building, 372-2356

Career Services provides comprehensive career planning and placement services for students and alumni of the University. The professionally trained staff helps students clarify and implement their career goals. In brief, services include: a Career and Life Planning course offered each semester; individual counseling appointments; personality and occupational interest inventories; SIGI+, an interactive computer career guidance and information system; classroom presentations on all phases of the career decision making process; career search workshops; on-campus interviews nducted by more than 550 recruiters; -career days and job fairs; computerized resume referrals; credential services; the Falcon Career Connection, and alumni placement services.

Career Services is nationally recognized as a leader in educational programming. The College Placement Council, Inc., presented the office with its prestigious Award of Excellence for Educational Programming in Career Planning and Placement.

Any student who needs assistance with selecting an academic major or related career option is encouraged to schedule a counseling appointment, or participate in a career exploration group or course. At the end of the junior year at the University, it is recommended that a student attend career search programs and job fairs, register for resume referral and campus interviewing and utilize placement counseling services.

## Center for Career Resources

300 Student Services Building, 372-2143
The Center for Career Resources provides the most current research materials available for those who are developing their career goals or entering the job market. The ollection includes books, periodicals, VCR lpes, computer programs, employer profile books, company annual reports, job descriptions and many specialized directories. The periodical collection provides
information and current job listings for many career fields.

Other special resources provided by the library are the SIGI PLUS computer program which is designed to aid students in assessing their career goals and interests, and a Resume Expert computer terminal designed to aid students in developing and . writing resumes.

The center's hours are 8 a.m. -8 p.m. Mon.-Weds. and 8 a.m. -5 p.m. Thurs.-Fri., during the academic year, with varying hours during semester breaks, holidays and summer sessions.

## Computer Services

209 Hayes Hall, 372-2911
Bowling Green State University provides students, faculty and staff with access to diverse computing capabilities through several large-scale mini and microcomputers. DEC VAX 8650 and 6620 are available for interactive use with FORTRAN, PASCAL, C and other popular computer languages from terminals located in Hayes Hall and other areas on campus. An IBM 9121 is available for batch processing via a computing service center in the Business Administration lab. An IBM 9221 is available for interactive statistics. The BGNet system is available for Internet access and can be used for electronic mail, news, world wide web, gopher and other services. Other laboratories are equipped with IBM, Gateway and Apple Macintosh microcomputers available for student use.

Students using these facilities for coursework will be introduced to the appropriate computer systems by their instructors. Others should contact the onduty monitor at one of the computing service centers for assistance.

A comprehensive list of available hardware, software and use documentation is available upon request from the on-duty monitor.

Microcomputer sales and rental services are also available to students.

## Counseling Center

320 Student Services Building, 372-2081
The Counseling Center provides individual/ group personal counseling and crisis intervention to enroiled students, and consultation regarding student concerns to faculty and staff. National testing programs are also administered through this office. The staff includes licensed psychologists, graduate student assistants from the clinical psychology training program and a testing coordinator.

In addition to tests that may be administered as adjuncts to counseling, the following testing programs are administered by the center: American College Test (ACT), College Level Examination Program (CLEP), Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), National Teacher's Examination (NTE), Pre-Professional Skills Test (PPST), Medical College Admissions Test (MCAT), Law School Admissions Test (LSAT) and Miller Analogies Test (MAT) and some occupational certification examinations.

Usual center hours are 8 a.m. -5 p.m., Monday through Friday. During the summer the center is open from 7:30 a.m. -5 p.m., Monday through Thursday and 7:30 a.m.11:30 a.m. on Fridays. Students are seen by appointment except for emergencies.

## Disability Resources

705 Administration Building, 372-8495
The Office of Disability Resources provides assistance to persons with disabilities in obtaining reasonable accommodation, counseling, assistance in overcoming architectural and attitudinal barriers, and acts as a liaison between rehabilitation agencies and various University offices.

Individuals living with physical, psychological and/or learning disabilities are encouraged to contact the office for consultation and assistance. Students with temporary difficulties may also contact the office for assistance.

## Insituetional Media <br> Services

101 Education Building, 372-6998
The instructional Media Services provides a vafiety of services to students, faculty and administrators on a campus-wide basis.

The IMS Materials Production Service can produce high quality presentation materials and specializes in graphics and photographic products. IMS also operates the Materials Production Laboratory (206 Education Building, 372-2883) for student and faculy use. Multimedia production assistance is available in the lab which is equipped with copiers, a photographic copy stand, laminators, transparency makers and other equipment.

MS's Technical Services assist in the production of audio and video recordings by faculty and students, in the maintenance and pepair of audiovisual equipment, in conference production work and other special projects.

- The Audiovisual Distribution Services distribute audiovisual equipment and materials (especially films and videotapes) to classrooms and meeting rooms for faculty and students. Equipment includes video, film, stide and transparency projectors; lecterns and PA systems; video and audio playback equipment, etc. A film-video collection is maintained by AVDS and rental films are avaliable from outside sources. In addition to the main service center at 102 Fducation Bullding, service is provided from 116 Olscamp Hail.


##  Genter

110 Mioseley Hall (ground level), 372-2573
The Hazel H. Smith Off-Campus Student Center provides a home base for off-campus and commuting studenis, although all programs and services are open to the University community. Facilities include a study lounge, television lounge, STAR regitstration telephones, refrigerators, microwave, vending machines, storage lockers and photocopier. A computer lab includes Macintosh and IBM personal computers, sotware, pinters and correcting typewiters. Other services include a ride board for carpools and emergency weather assistance. Also housed in the center are the Nontraditional Student Association (NTSA) and the Freshman Off-Campus University Students (FOCUS). Hours of operation are 7:30 a.m to 7 p.m. Monday through Thursday and $7: 30$ a.m. .5 p.m. Friday during fall and spring semosters and 7:30 a.m.-5 p.m. Mondey through Thursday and 7:30-11:30 a.m. Friday during summer term.

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208 Moseley Hall
Mallboxes are assigned to undergraduate
students living off campus. They are assigned at the beginning of fall semester, and students continue to use the same box for spring semester. (The mailroom is closed during the summer term.) A listing posted outside 208 Moseley Hall and in the OffCampus Student Center main office indicates the mailbox numbers for students who have been assigned mailboxes. Students may request or cancel mailboxes through the Office of Registration and Records. The mailroom is used by University offices and organizations to make off-campus students aware of University information and events.

## Parking and Traffic

Commons Building, 372-2776
The University requires that any motor vehicle owned or operated by a student be registered through the Parking and Traffic Office within 48 hours after the time it is initially operated or parked on any property owned or controlled by the University.

An automobile registration charge of $\$ 33$ per year (fall semester through summer term) is required of each student who registers an automobile with the Parking and Traffic Office. A temporary registration can be oblained for $\$ 2$ per week and may be renewed for $\$ 2$ per each additional week. Each automobile on campus must be registered and its decal displayed in accordance with regulations.

## Psychological Services

## Center

Psychology Building, 372-2540
The Psychological Services Center provides services through its doctoral training program to University students on a limited basis. Services include diagnostic evaluations, treatment of behavior disorders through psychotherapy, behavior therapy, biofeedback, marriage counseling, and case and program consultation to University and community agencies.

## Residential Computing Connection

121 Offenhauer West, 372-0525
Electronic Mail: rcc@bgnet.bgsu.edu
Bowling Green State University has extensive information technology resources and services for students living on campus, funded by a residential technology fee and through other University sources. Residential Computing Connection is the unit of Student Housing and Residence Programs responsible for coordinating in-room network connections for student rooms, computer labs in the residence halls and computer resource rooms in on-campus houses.

A large (and increasing) number of oncampus student rooms have Ethernet
connections. Student consultants are available to assist with in room Ethemet connections. A variety of internet software i provided, including software for browsing the World Wide Web and for electronic mail, for which all students can register as a free service.

RCC operates at least one computer lab in every residence hall compiex. Larger complexes have more ihan one lab. All labs have Ethernet connections to BGSU's network and to the internet. BGSU oncampus houses, primarily for fraternity and sorority residents, each have a computer resource room. All labs and all resource rooms have at least one laser printer. Consultants are available in the computer labs to provide assistance. Training is available on a number of software packages.

Computer labs have a mix of Apple Macintosh and PC compatibles. These computers can be used for a variety of application software (including word processing) and internet sotware (including electronic mail, browsing the world wide web, and for connecting to BGSU's on-line library resources).

Usage of residential computing resources is governed by acceptable use policies ouflilined in a pamphiet entitled "Community Living Standards--Policies and Procedures of University Residences at Bowling Green State University." Copies are available either through Residential Computing Connection or through Student Housing and Residence Programs.

## Speech and Hearing Clinic

338 South Hall, 372-2515
The Speech and Hearing Clinic in the Department of Communication Disorders provides screening, diagnostic and treatment services for students with communication problems such as articulation, language, stuttering and voice disorders, foreign dialeci and hearing loss. The clinic is open Monday through Friday, 8 a.m. -5 p.m. Appointments and fee payments are arranged through the clinic. Services are also extended to children and adults throughout northwest Ohio.

## Student Health Service <br> University Health Center, 372-2271

The Student Health Service provides ouipatient care to all currently regisiered students and their spouses. The staff consists of more than 35 health professionals: physicians, nurse practitioners, registered nurses, pharmacists, laboratory anc: radiology technologists and physical therapists. Services include: health care for illnesses and accidents; sports, employmen and school physicals; allergy injections; immunizations, and Women's Clinic.

Regular clinic hours are posted at the Healih Center. Current hours are Monday,

Tuesday, Wednesday and Friday, 8 a.m.-4:30 p.m. and Thursday, 9:15 a.m.-4:30 p.m. In ddition, there is an appointment-only evening clinic until 7:30 p.m. on Wednesdays.

Students are charged for laboratory, radiology, pharmacy and physical therapy services, surgical procedures and sports, school and job physicals. Some laboratory procedures and medical consultations are referred to outside sources at the student's expense.

Students who become ill or are injured at times when the Student Health Service is closed and who believe that immediate medical attention is required should go to the emergency room of Wood County Hospital. Students who use this service will be expected to pay for the cost of treatment.

Nonemergency transportation service to the Student Health Service or to Wood County Hospital may be obtained, without charge, by calling 372-2271 when the Health Service is open, or 372-2346 (Campus Security) at other times. Ambulance service is provided by the City of Bowling Green at the student's expense.

A student group insurance program is available to students at a reduced student rate. Students should check any hospitalization program under which they are covered (generally as a dependent) since insurance companies have varying reimbursement olicies. Students are encouraged to carry ome form of health care insurance.

## UniGraphics

211 West Hall, 372-7418
Open 9 a.m.-5 p.m., Mon.-Fri., this department offers a full range of design and desktop publishing services, including some file conversion and photo/image scanning. Postscript files are accepted for output to a high resolution laser imagesetter. Professionally designed resumes are available for a nominal cost.

## College of Arts and Sciences

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/
G. J. Cranny, Ph.D. dean, 205 Administration Euilding, 372-2340
-Douglas A. Ferguson, Ph.D., assistant dean, 205 Administration Building, 372-2018
mark Cromko, Ph.D., associate dean, 205 Administration Building, 372-2017
Richerd J. Hebein, Ph.D., associate dean, 205 Administration Euilding, 372-2015
Department of Biological Sciences, George Eulleriahn, Ph.D., chair, 217 Life Sciences, 372-2332
Department of Chemisiry, Michael A.J. Hogers, Ph.D., chair, 141 Overman Hall, $372-2031$
Department of Computer Science, Ronaid L. Lancaster, PhD., chair, 221 Hayes Hall, $372-233$ !
Department of English, Richard Gebhardt, Fh.D., chair, 201 University Hall, 372 . 2576
Deparment of Ethnic Studies, Rolando Andrade, Ph.D., interim chair, 228 Shatzel Hall, 372-2796
Department of Geography, Alvar W. Carlson, Ph.D., chair, 305 Hanna Hall, 372-2925
Deparment of Geology, Joseph Frizado, Ph.D., chair, 190 Overman Hall, 372-2886
Department of German, Russian and East Asian Languages, Klaus Schmidit, Ph.D., chair, 103 Shatzel Hall, 372-2268
Department of History, Donald Nieman, Ph.D., chair, 128 Willams Hall, 372-2030
Deparment of Interpersonal Communication, Aberio Gonzaiez, Ph.D., chair, 303 South Hall, 372-2823
Deparment of Joumallsm, Nancy Brendlinger, Ph.D, chair, 319 West Hall, 372.2076

Deparment of Mathematics and Statistics, John t. Hayden, Ph.D., chair, 450 Math Sciences Bullding, 372-2636
Deparment of Philosophy, Marvin Belzer, Ph.D., chair, 305 Shatzel Hall, 372-2117
Deparment of Physics and Astronomy, Robert Boughton, Ph.D., chair, 104 Overman Hall, 372-2421
Deparment of Political Science, Michael Maggiotto, Ph.D., chair, 124 Williams Hent 372-2921
Deparment of Popular Culture, Christopher Geisi, Ph.D., chair, Popular Culture Building, 372-2981

Department of Psychology, William Balzer, Ph.D., chair, 207 Psychology Building, 372-2301
Department of Romance Languages, Henry Garrity, Ph.D., chair, 203 Shatzel Hall, 372-2667
Department of Sociology, Gary R. Lee, Ph.D., chair, 223 Williams Hall, 372-2294
Depariment of Telecommunications, Douglas Ferguson, Ph.D., chair, 322 West Hall, 372-2138
Department of Theatre, Ron Shields, Ph.D., chair, 322 South Hall, 372-2222
School of Art, Louis Krueger, director, 1000 Fine Arts Center, 372-2821
School of Communication Studies, John Makay, Ph.D., director, 302 West Hall, 372-8349

## Academic Objectives

The College of Arts and Sciences has two primary instructional purposes: to provide specialized training for students majoring in the basic disciplines of the arts and humanities, the social and behavioral sciences, and the natural, physical and mathematical sciences; and to provide the basic courses that serve as the foundation for the liberal education of all students in all colleges of the University.

Through a flexible curriculum, the College of Arts and Sciences combines the traditional and continuing values of a vigorous and broad, general liberal education with sound preparation for immediate occupational needs or for advanced graduate or professional education. Attuned to changing needs and times, the College of Arts and Sciences has preserved and strengthened the central values of a liberal education, while providing specializations geared to today's career opportunities.

## Organization of the <br> College

Largest of the collegiate organizations of the University, the College of Arts and Sciences includes two schools (Art and Communicafion Studies), and 21 academic departments, as well as an additional number of formally organized program areas. The academic departments span the range of the traditional disciplines in the arts and humanities,
languages, sciences and mathematics, and social sciences.

A strong facuity of nearly 400 teacher/ scholars offers general and specialized instruction leading to six different undergraduate degrees: the Bachelor of Arts, the Bachelor of Science, the Bachelor of Fine Arts, the Bachelor of Liberal Studies, the Bachelor of Science in Joumalism and the Bachelor of Arts in Communication. Under these six degree programs, students may choose from more than 70 different major fields, and an equal number of minor fields. These wide-ranging choices provide ample opportunity to pursue individual interests and needs. All programs unite the common characteristics of combining breadth of intellectual inquiry with the specialized instructional needs of students seeking either immediate and meaningful post-baccalaureate employment or preparation for graduate or professional study.

## Programs Offered

Miajors and minors are available in all areas listed below unless otherwise noted. The following degree programs are avallable:

## Bachelor of Apts

American Culture Studies
Art
Art History
Asian Studies
Business, General Studies In
Canadian Studies (minor only)
Classical Civilization
Computer Science
Economics
English
Environmental Policy and Analysis Ethnic Studies
Family and Consumer Sciences Apparel Design and History Fashion Merchandising Interior Design
Film Studies
Folklore and Folkife (minor only)
French
Geography
Geology
German
History
Individualized Planned Programs
International Studies
Interpersonal Communication

Italian (minor only)
Journalism (minor only)
Latin
Linguistics (minor only)
Mathematics
Music
Philosophy
Political Science
Popular Culture
Psychology
Russian
Scientific and Technical Communication
Sociology
Spanish
Statistics
Telecommunications
Theatre
Women's Studies

## Bachelor of Science

Astronomy (minor only)
Biological Sciences
Microbiology
Chemistry
Biochemistry
Computer Science
Environmental Science
Geology
Geochemistry
Geophysics
Paleobiology
Individualized Planned Programs
Mathematics
Physics
Psychology
Science (minor only)
Scientific and Technical Communication Statistics)

## Bachelor of Liberal Studies

Bachellor of Fine Arts Creative Writing

Bachelor of Arts in Communication Interpersonal Communication (see School of Communication Studies) Telecommunications (see School of
Communication Studies) Theatre

School of Art
Bachelor of Fine Arts
Ceramics
Computer Art
Drawing
Fiber-Fabric
Glass
Graphic Design
Jewelry and Metalsmithing
Painting
Photography
Printmaking
Sculpture
Teacher Preparation
School of Communication Studies
Bachelor of Arts in Communication Interpersonal Communication Telecommunications

## Bachelor of Science in Journalism Journalism

## The College also offers the following special pre-professional preparation: <br> Preprofessional preparation-four-year <br> curricula providing preparation for: <br> Arts professional curricula <br> Preparation for Dentistry <br> Preparation for Law <br> Preparation for Medicine

Preprofessional preparation for:
Engineering
Mortuary Science
Occupational Therapy
Optometry
Osteopathy
Pharmacy
Veterinary Medicine
The college also offers an arts-education curriculum and other programs leading to dual degrees, including certification to teach in the public schools. Combined baccalaure-ate-master's degree programs are offered in chemistry. For more information, see page 62.

## General Education Program

Students are required to take eight courses distributed as follows: two courses each from the natural sciences, the social and behavioral sciences, and the humanities and arts, and one course from cultural diversity in the United States. One of the courses taken from either the social and behavioral sciences or the humanities and arts must be taken from International Perspectives. Courses marked with an (*) asterisk have been approved for International Perspectives. One course remains as an elective.

## Natural Sciences

ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109 \& 110, 117 \& 118, 125,127 \& 128, 135,137 \& 138; GEOG 125; GEOL 100, 104, 105, 205, 215, 322; HNRS 250; PHYS 101, 201, 202, 211, 212.

Social and Behavioral Sciences
A\&S 250; CAST 201*; ECON 100, 200, 202, 203; ENVH 210*; ENVS 101, 301; GEOG 121*, 122*, 225, 230*, $325^{*}, 331^{*}, 343^{*}, 344^{*}, 346^{*}, 349^{*}$, 426, 435*, GERO 405; HIST 151*, $152^{*}, 180^{*}, 205,206,310^{*}, 311^{*}$, $370^{*}, 377^{*}, 382^{*}, 411^{*}, 429,470^{*}$; HNRS 201, 240; POLS 110, 171*, 172*, 301, 335, 351*, 361*, 372*, 402, 403; PSYC 201; SOC 101, 202, 231*, 361; TECH 302.

## Arts and Humanities

ACS 200, 230, 300; ART 101; ARTH 145, 146; A\&S 250; ENG 150, 200, 203,

261, 262, 264, 265, 266, 267, 269*; ETHN 220*; Foreign Languages at 201*, 202*, 212* level; HNRS 260; MUCH 101, 125*, 221, 233*, 234*, 235*; PHIL 101, 102, 103, 204, 211, 212, 230, 325; POPC 160, 165, 220; CLCV 241, 242; THEA 141, 202, 261, 347, 348.

## Cultural Diversity in the United States

ACS 250; EDFI 408; ENG 200 (Black American Literature), 424; ETHN 101, 120, 130, 210, 260, 301, 302, 361, 410; GEOG 337; GERO 301; HDFS 107, 408; HIST 319; MUCH 237, 431; POPC 170, SOC 316; THEA 215; WS 200.

## General Requirements for a Degree

In addition to specific requirements listed on the following pages, a candidate for any degree in the College of Arts and Sciences must meet the following requirements:

1. Meet the degree requirements listed below, preferably in the freshman and sophomore years.
2. Satisfy the requirements for a major and minor area of specialization (if appli-cable-courses taken for a major may not also be counted for a minor). Major courses may not be taken $\mathrm{S} / \mathrm{U}$.
3. Meet the University's general education program requirements (above). These include courses in natural sciences; social and behavioral sciences; humanities and arts; international perspectives; and cultural diversity in the United States. Students wishing to apply general education program courses to college degree requirements should consult the Arts and Sciences Handbook for a list of appropriate courses which could be used to fulfill both sets of requirements. See also the college foreign language statement in this catalog under specific degree being sought.
4. Students anticipating graduation must complete a junior audit four semesters ( 60 hours) prior to graduating to ensure . that all requirements will be met for the degree. Junior audit checksheets are available in the college office and must be submitted with the department/school adviser's signature. Failure to file a junior audit may severely jeopardize graduating on time. The student assumes the responsibility for failure to be informed about requirements for the degree. See also application for graduation deadlines, page 5.

## Academic Advising

Although the advisers counsel students and check each student's record, upon request, the responsibility for meeting graduation requirements lies with the student and not
with the adviser, the department or the dean. Thorough familiarity with the Undergraduate Catatog is essential.

## Special Opportunities

Membership in Phi Beta Kappa, the nation's first Greek letter society and most prestigious honor society, is restricted to those students enrolled in Aris and Sciences degree programs. To be elected, members must meet stringent criteria. The BGSU chapter of Phi Beta Kappa was installed in 1983.

The College of Arts and Sciences offers opporiunities for year-long study in Tours, France; Salzburg, Austria; and Madrid, Spain. Students participating in these programs enroll in courses offered by departments/schools in arts and sciences during their academic year abroad, but participation is not limited to arts and sciences students. Fashion merchandising majors have the opportunity to spend their senior year at the nationally recognized Fashion Institute of Technology in New York City.

Arte and sciences students who are undecided about a major are assigned to one of the college office advisers and thereby have assistance in the selection of a major.

Opportunities for involvement in cocurricular activity abound in the College of Arts and Sciences. Its academic units sponsor the theatre and forensics programs as well as numerous discipline-based honor societies and interest groups. The French House, located on campus, offers a small, informal, residential and learning setting for women who are interested in French culture and language, whatever their major field of study. Often, enrollment in the College of Arts and Sciences is not a prerequisite for participation in these activities.

The college also sponsors an internship program through which students can gain practical, "hands-on" experience in workplace settings related to their field of study. Several departments and schools in the college also offer internship programs. Arts and sciences students interested in internship experiences may also work under the auspices of the University's Cooperative Education Program.

## Bachelor of Arts Degree

Each student must complete the degree requirements listed below, preferably in the frestman and sophomore years, and must satisfy the requirements for a major and a minor area of specialization. Every student, however, must take English in the first year. If known, the major or minor should be started in the first year, but selection of the major may be deferred as late as the beginning of the sophomore year. Certain majors and programs require course sequences. These sequences should be started in the treshman year.

Major courses may not be taken S/U.

## Degree Requirements Group I: English composition

Completion of ENG 112 or demonstration by examination of proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours).

## Group II: Foreign languages

Demonstration of proficiency in a language and language area by one of the options listed below:

1. Graduating from a high school where all instruction was conducted in a language other than English; or
2. Passing a proficiency examination in the language on the 202 course level; or
3. Having completed four years of one language in high school; or
4. Having completed one of the departmental options listed below (14 hours minimum in the same language area, or fewer by advanced placement).

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

## German, Russian and East Asian Lan-

guages (Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from: GERM 117, 118, 201, 202, 217, 218, 231, 331, and/or GERM 260, 315, 316; or
Completion of CHIN 101, 102, 201 and 202; or
Completion of JAPN 101, 102, 201 and 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from: RUSN 201, 202, 215, 216, 317, 319, 331 and/or 312, 313.

## Romance languages (French, Greek

Italian, Latin, Spanish)

## Option I:

FREN 101, 102, 201 and 202; or
GRK 101, 102, 201, 202; or
ITAL 101, 102, 201 and 202; or
LAT 101, 102, 201 and 202; or
SPAN 101, 102, 201 and 202
Option II: (one of the following)
FREN 101, 102, 201 and 212; or
GRK 101, 102 and two of GRK 201, CLCV 241, 242, 245; or
LAT 101, 102, and two of: LAT 201, CLCV 241, 242, 245; or
SPAN 101, 102, 201 and 212
A student may transfer at any point from option I to option II but not vice versa.
Course 202 is required for admission to 300 level courses.

Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.

Group III: Mathematics, computation and natural sciences
Completion of both $A$ and $B$ below.
A. Completion of at least one course in addition to the two required for the general education program. Courses are from astronomy, biological sciences, chemistry, geology, physics or physical geography (including GEOG 125, 126, $127,213,404$ ). Of the three courses, at least two courses must be approved for laboratory credit from a list printed in the College of Arts and Sciences Handbook.*
B. Completion of one of the following: 1. Three and one-half years of high school mathematics or equivalent proficiency as demonstrated on a placement test;
2. MATH 115, 126, 128, 129 or $130 ;{ }^{\text {; }}$ 3. MATH 111 or $120^{n t}$ and one of the following: PHIL 103, CS 100 or CS 101; 4. Three years of high school mathemaiics and CS 100 or CS 101. High school mathematics means college preparatory mathematics, which normally includes algebra I and II, geometry, and in the case of three and one-half years, trigonometry. Remedial, technical and business mathematics are not applicable.
*Or a B.S. laboratory sequence in one of the sciences meets this requirement. Alist of approved courses is printed in the Coilege of Arts and Sciences Handbook.
"See Department of Mathematics and Statistics for placement test.

## Group IV: Social sciences:

 economics, ethnic studies, geography, history, political science, psychology, sociologyCompletion of four courses in addition to the two required for the general education program. Courses are selected from at leasi three areas with at least three courses in one area (excluding GEOG $125,126,127,213$, 404). A student majoring in one of the social sciences may include two major courses in this group. A list of approved courses is printed in the College of Arts and Sciences Handbook. Note that some ethnic studies courses are in Group IV and some are in Group V.

## Group V: Arts and humanities

Completion of at least three courses in addition to the two required in the general education program, ior a total of five courses. Foreign language courses numbered 201, 201, 201, 212 apply to Group II, not Group V. The five courses should include:
one course in literature (American, English or foreign),
one course in the fine arts (art, art history, music, theatre, television and film), and
three additional courses from at least two of the following areas: ART 101, art history; American, English or foreign literature;

American culture studies; ethnic studies; music composition and history, philosophy (except PHIL 103 which applies to Group HI), popular culture, theatre and women's studies. It is recommended that philosophy be one of these areas.
A list of courses approved for Group $V$ requirements is printed in the College of Arts and Sciences Handbook. A student majoring in the arts and humanities may count one major course in this group.

## Bachelor of Arts: Majors and Minors

By the beginning of the second year most students select a major and minor. The number of hours required for a major or minor varies with departmental requirements but at least 32 hours are required in the major and 20 hours in the minor except as indicated below. In arranging courses in the minor field, a student should consult the department concerned.

Outlines listed for each major represent the usual sequences, but may be modified upon departmental approval to meet individual needs.

If educational objectives cannot be met by one of the departmental majors or minors, students may create an individualized planned program in consultation with a culty adviser or advisers. A student who Is earned at least 30 hours of credit and who needs at least 30 hours to complete the program may petition the academic appeals board of the college for an individualized planned program by presenting a statement of rationale as well as a detailed list of courses to be taken. Upon approval, the student is obligated to complete the program as planned unless changes are approved by the office of the dean. The degree requirements remain the same.

## American Culture Studies

211 Moseley Hall, 372-8886
Major ( 36 hours) (minor also required) An interdisciplinary program dedicated to the holistic study of American culture, society and institutions, American culture studies offers individualized programs which focus on the American experience. American culture studies courses develop the skills and methods appropriate to cultural studies and serve to integrate the substance of other disciplines into coherent patterns reflecting the complexity of American life and our national heritage. The director of American culture studies and the undergraduate adviser help students design programs using yurses in the humanities and social ciences suited to their needs and interests within the general requirements of the program and the college.

The program requires a minimum of 36
hours including the following:
ACS 200 and 400 (6)
ACS 230, 240, 250, or 300 (3)
HIST 205 and 206 (6)
Emphasis area (21) -
Emphasis areas include American Thought and Expression, American Society and Institutions, Comparative Cultures, or Culture and Community. Each of these emphasis areas is designed to allow the student to work across departmental lines to develop a program that is both interdisciplinary in approach and focused in purpose. Within each emphasis area students have the opportunity to design a program (in consultation with the undergraduate adviser) uniquely suited to individual needs and interests. Of the 21 hours in the emphasis area, at least two departments must be represented and no more than 9 hours in a single discipline may be counted toward fulfillment of this requirement; 15 of the 21 hours must be upper division.

Minor (21 hours)
HIST 205 and 206 (6)
ACS 200 and 400 (6)
Courses outside the major selected in consultation with the American culture studies adviser (9)

## Other programs

An American culture studies option, leading to teacher certification in social studies, history and either political science or geography, is available in the comprehensive social studies 'major offered by the College of Education and Human Development.

## Art

1000 Fine Arts Center, 372-2786
Major (42 hours) (minor also required)
First year (12 hours)
ART 102, 103 and 112 (9)
ARTH 145 (3)
Second year (12 hours)
ART 205 and 261 (6)
ARTH 146 (3)
ART/ARTD/ARTH elective (3)
Third and fourth years (18 hours)
Two from: ART 263, 246 or 256,320 or 321,365 or 366 (6)
Three from: ART 277, 325, 371, 373, 390, ARTD 211 (9)
ARTH 4XX (3)
Minor (21 hours)
First year (12 hours)
ART 102, 103 and 112 (9)
ARTH 145 (3)
Second year ( 6 hours)
ARTH 146 (3)
Art elective (3) .
Third and fourth years ( 3 hours)
Art elective (3)

## Other programs

Bachelor of Fine Arts programs in art are
offered by the School of Art in the College of Arts and Sciences. In addition, a Bachelor of Science program in visual arts education is available through the College of Education and Human Development. A Bachelor of Science in art therapy is offered through the College of Health and Human Services.

## Art History

1000 Fine Arts Center, 372-2786
Major (42 hours) (minor also required)
ART 102 (3)
ARTH 145, 146 (6)
Studio elective (3)
ARTH 441 or 442 (3)
ARTH 445 or 446 or 447 (3)
ARTH 456 or 457 (3)
ARTH 458 or 459 (3)
At least two courses from each of the following Groups:
ARTH 448, 449, 453 (6)
ARTH 451, 454, 455 (6)
Two additional ARTH electives (6)
Minor (21 hours)
ART 102 (3)
ARTH 145 and 146 (6)
Art history electives (i2)

## Asian Studies

27 Williams Hall, 372-8362
Major ( 36 hours) (minor also required)
The Asian studies program offers an
interdisciplinary curriculum of studies on Asia. The Asian studies major will complete a minimum of 36 credit hours from the list of the core courses ( 9 hours) and the elective courses (27 hours).
The core courses:
HIST 180, 382, 384, 486;
POLS 366.
The elective courses:
A\&S 489;
ARTH 458, 459;
BA 390;
CHIN 300, 480, 491;
CS 100, 101;
ECON 202, 203, 351, 451, 452, 454;
GEOG 121, 122, 230, 325, 344, 422;
HIST 151, 152, 337, 381, 386, 437, 483, 495;
JAPN 301, 302, 480, 491;
MUCH 100, 125, 234, 235;
PHIL 321, 322;
POLS 171, 172, 301, 372, 374, 460, 462;
SOC 101, 231, 312, 331, 369, 370.
Additional courses may be approved by
the adviser. Students must fulfill the foreign
language requirement by completing.
Chinese or Japanese at the 202 level or demonstrate competency in one Asian language, such as by completing intensive Asian language and culture courses through the student exchange programs in Asia. The students who wish to enter non-teaching careers are encouraged to develop a second
major or minor in history, political science, economics, geography, etc. Dual degrees can be pursued in the area of comparative education, ethnomusicology, international business, and other areas.

Minor (20 hours)
(20 hours selected from the core and elective courses in consultation with the Asian studies adviser. No Asian language required)

## Student Exchange and Internship

 Programs:The Asian studies program sends qualified undergraduate students to Asia as exchange students and student interns every year under the agreements between the University and the host institutions in Asia. Students earn credits transferable to the University.

1. Narzan University in Nagoya, Japan, admits one to two students every year with a tuition scholarship, and room and board. Classes taught in English.
2. Sallama University in Urawa, Japan, admits one to two students a year with a tuition scholarship. Classes taught in Japanese.
3. Yonsei University in Seoul, Korea, admits one to two students every year with a tuition scholarship. Classes taught in English.
4. Shandong University in Jinan, China, admits one to two students every year with a full scholarship. Classes taught in Chinese and English.
5. Xi'an Foreign Language University in Xi'an, China, admits students to a summer program and one-year academic program. Classes taught in English.
6. Tokai Rubber Industries Inc. in Komaki, Japan, admits two student interns every year for six months each with a stipend, housing and other benefits. Japanese required.

## Financial aid

Students who study about Asia may qualify for one of the three scholarships awarded each April for academic excellence: Kiyo Kitahara Scholarship for Asian Studies, Hiroko Nakamoto Scholarship for Japanese Studies, and Seiko MaCann Scholarship for US-Japan Friendship and Mutual Understanding.

## Business, General <br> Studies in

205 Administration Building, 372-2015
Major ( 36 hours) (minor required) MATH 126 (5) or MATH 131 (5) or MATH 134 and 135 (6) (prerequisite to STAT 211 and 212, but mathematics hours not included in major)
ECON 202 and 203
MIS 200 (3)*
STAT 211 and 212
ACCT 221 and 222.

## LEGS 301

MKT 300
MGMT 300 and 360
FIN 300
"The total number of hours in the College of Business Administration may not exceed 25 percent or 30 hours of the 122 needed for graduation. This limitation includes any ECON courses at the 300 or 400 level. Any hours taken in excess of this limitation may not be counted toward a degree in the College of Arts and Sciences. No minor may include any additional business hours.

## Canadian Studies

253 Business Administration Building, 3722457

Minor only (21 hours)
This minor is designed to provide students with an interdisciplinary program of study focusing on Canada. It is intended to be used in conjunction with virtually any major which would be complemented by an intensive, yet broad, examination of Canadian society and culture.

The program consists of 21 credit hours planned in consultation with the director of Canadian studies. At least three departments are to be represented. The study of French is encouraged as part of the program. CAST 201, "Introduction to Canadian Studies," is required of all students in the program. This course takes a comparative approach contrasting Canada to the United States on topics which include: history, geography, political systems, economy, literature, art, and popular culture. The remaining 18 credit hours are to be selected from among the following courses:

CAST 305-(3)
ENG 269 - (3)
ENVS 412-(3)
FCS 480-(3)
FIN 410 - (3)
FREN 458-(3)
FREN 488 - (3)
GEOG 342 - (3)
HIST 319-(3)
HIST 414 - (3)

## Classical Civilization

203 Shatzel Hall, 372-2667
Major ( 30 hours) (minor also required)
CLCV 380, 381, 485, 486 required
6 electives chosen from the following courses (although not required, LAT and GRK courses highly recommended):
ARTH 445, 446, 447448 (3)
HIST 441 or 442 (3)
PHIL 211 (3)
any other CLCV course
any GRK course, unless used to fulfill foreign language requirement

LAT 101-202, unless used to fulfill foreign language requirement
any LAT course beyond 202
Minor (21 hours)
Any of the above courses
Classical civilization is an interdisciplinary track designed to acquaint studenis with classical antiquity and the cultural foundations of the Western world without the intensive language training of the Latin major or minor. This major or minor is designed to help prepare students for careers in areas as diverse as archaeology, business, government service, law, the ministry, museum curatorship, public relations, writing and others.

## Computer Science

221 Hayes Hall, 372-2337
Major ( 30 hours) (minor also required)
CS 205, 215, 217, 324, 325, 327, 335 (21)

Three CS electives at the 400 level, excluding CS 490 (9)
An approved societal impact course (see department for list) (3)
MATH 134-135 (6) or MATH 131 (5) or. MATH 126 (5)
MATH 222 or 322 (3)
MATH 247 or 313 (3) or STAT 211-212 ( $\boldsymbol{\varepsilon}^{2}$
Students with computer science transfer
credit see departmental adviser for additional guidelines.

Students with a minor or joint major in MATH need not complete the listed MATH courses.

> Minor (18 hours)
> CS 205 and 215 (6)
> CS electives (12)

Transfer courses included in the minor are limited to three hours per course. The following courses may not be applied to the 18-hour minor requirement: CS 100, 101, $180,181,200,280,373,374,390,490$. CS courses included in a major (such as MIS). may not be counted in the 18 -hour minor requirement.

## Other programs

A Bachelor of Science in computer science also is offered by the College of Arts and Sciences. In addition, programs in computer science are available through the College of Education and Human Development.

## Economics

3002 Business Administration Building, 3722646

Major (33 hours) (minor also required)
First year (3 hours)
MATH 120 (3) or MATH 128 (5) or higher. Students considering graduate degrees in economics should take MATH 126 or 131.

Second year (9 hours)
STAT 200 (3) or higher, or PSYC 270 (4), or SOC 369 (3). (Not included in the 33 hours necessary for an economics major.) STAT 200 is recommended. Equivalent statistics may be accepted with the approval of the adviser.
ECON 202 and 203 (6)
Third year (9 hours)
ECON 301 or 302, 303, 473 (9)
Fourth year (18 hours)
ECON electives (18)*
Minor (21 hours)
Second year (6 hours)
ECON 202 and 203 (6)
Third year (6 hours)
ECON electives (6)
Fourth year ( 9 hours)
ECON electives (9)
All economics majors must satisfy a written and oral communications requirement in economics. Certification by an economics faculty member will be required. Details are available in the economics department office.
*ECON 304 cannot be counted toward the requirements for the economics major or minor without permission from the adviser. ECON 200 does not count in the major or minor.

## Other programs

Programs in economics also are available rrough the College of Business Administration and the College of Education and Human Development.

## English

201 Univerșity Hall, 372-2576
Major (35 hours beyond ENG 112) (minor also required)
First year
ENG 111, 112 (Úniversity requirement; prerequisite for all major/minor courses)
Second year (10 hours)
ENG 201 or ENG 205 and 206, prerequisite for all third-year courses (4)
ENG 261 or 306 (3)
ENG 290 (3)
Third year (12 hours)
Two chosen from ENG 264, 265, 266, 267, prerequisite for all fourth-year courses (6)
ENG 301 (3)
One chosen from ENG 320, 323, 325, $330,333,335$ (3)
Fourth year ( 13 hours)
One major author(s) course chosen from ENG 400, 401, 408, 435, or, if topic is appropriate, 423, 470, 480 (3)
ENG 310 (3)
Any 300 or 400 level ENG literature. course (except 342, 343, 442) (3)
ENG 498 or 499 (3)
English majors are required to include

Arts and Sciences 250, Great Ideas, as one of the courses for Group V, Arts and Humanities.

## Special studies option

English majors with specific career goals, such as commercial or technical writing, legal studies or linguistics, may, with the approval of the English adviser, substitute two relevant ENG courses for two required courses (not 498 or 499).

Minor (22 hours beyond ENG 112)
Second year ( 7 hours)
ENG 201 or ENG 205 and 206 (4)
ENG 290 (3)
Third year (9 hours)
Two chosen from ENG 264, 265, 266, 267 (6)
ENG 301 (3)
Fourth year ( 6 hours)
One chosen from ENG 320, 323, 325, 330, 333, 335 (3)
Any 300 or 400 level ENG literature course (except 342, 343, 442) (3)
Though not required for the minor, ENG 261 or 306 is recommended.

## Other programs

The College of Arts and Sciences also offers the Bachelor of Fine Arts degree with a major in creative writing and the Bachelor of Arts and Bachelor of Science degrees in scientific and technical communication. Programs in English are also available through the Coilege of Education and Human Development.

## Environmental Policy and Analysis

153 College Park Office Building, 372-8207
Major ( 78 hours) (no minor required)
The program emphasizes the
multidisciplinary nature of the field of environmental studies and the role of the social sciences which address environmental issues from a social, political and philosophical point of view. The curriculum includes basic instruction in the ecosystem approach and an individual planned area of emphasis which is designed to prepare each student to enter the career field of his or her choice.

Required courses are:
ENVS 101 or 201, 301, 401, 402 (11)
CS 100 or 101 (3)
ECON 200 or 202 (3)
ENG 207 or 388
IPC 205 or 306 or 403
LEGS 431
Statistics: MATH 115 or 247 ; or PSYC
270; or SOC 369; or STAT 200 or 211 and 212
PHIL 332 (3)

## POLS 336 (3)

SOC 101 or PSYC 201 (3-4)
Four courses (at least two of which have labs*): BIOL 204*, 205*, 400 (Conser-
vation Biology); CHEM 109 and 110*, 117 and 118*; GEOG 125, 213*; GEOL 104*; PHYS 101*, PHYS 360 (may not be taken to also fulfill requirement below)
Four courses from: BIOL 301, 354; CHEM 306; ECON 332, 335; EDFI 416; ENVH 210H, 306; ENVR'421; GEOG $321,325,331,333,337,412,426$, 457; GEOL 302, 304, 322; HIST 306, 319, 338 or ACS 338; PHYS 360; POLS $331,335,345$; PSYC 440 (environmental issues only); RTD 304; SOC 312, 414, 418.
Fifteen hours must also be taken in an area of emphasis such as environmental planining, management and administration, legislation and policy development or environmental analysis (economics and statistics).

Students should file an approved course list no later than the end of the junior year. An internship is highly recommended.

## Minor (27-29 hours) <br> First and second years

One course from BIOL and one from. GEOG or GEOL ( $6-8$ ) and
ENVS 101 or 201 (3)

## Third and fourth years

Select two from: ENVS 301, 400, 401, 402,403 , or 412 (6-7)
Select two from: POLS 331, 335, 346; LEGS 431 (6)
Select one from: PHIL 332; SOC 312; GEOG 321, 331 (3)
Select one from: ACS 338; HIST 338 (3)

## Other programs

The College of Arts and Sciences offers a major in environmental science leading to a Bachelor of Science. An environmental health program is also available in the College of Health and Human Services: Students should contact the Center for Environmental Programs, 372-8207, for help in selecting the program that most closely meets their career objectives.

## Ethnic Studies

## 228 Shatzel Hall, 372-2796

Major (32 hours) (minor also required) A student, in consultation with the adviser, may choose to focus on a specialized area of ethnic studies.

## Basic Ethnic Studies:

ETHN 101 and one of ETHN 110, 120, 130,140 or 160.
Required ETHN 301, 305, and one of the following ETHN 302, 351 or 361.
Four courses in three areas: African American, 220, 320, 321, 420. Latino, 210, 211, 310, 311, 410. Native American, 260, 360, 361. Five hours in 400 senior project, 489 field study, international activity or arranged with adviser.

African American Emphasis:
ETHN 101, 120.
Three of the following, ETHN 220, 320, 321,420 , or HIST 307.
Required ETHN 301, 305, and one of the following ETHN 302, 351, or 361.
One of the following: ETHN 210, 211, $260,310,360,361,410$.
Five hours in 400 senior project 489 field study, international activity or arranged with adviser.
A.atino American Emphasis:

ETHN 101, 110.
Three of the following, ETHN 210, 211, $310,311,410$.
Required ETHN 301, 305, and one of the following ETHN 302, 351, or 361.
One of the following, ETHN 220, 260, $320,321,360,361,420$. F
ive hours in 400 senior project, 489 field situdy, intemational activity or arranged with adviser.

Native American Emphasis:
ETHN 101, 160.
Three of the following, ETHN 260, 360, 361, HIST 319.
Required ETHN 304, 305, and one of the following ETHN 302, 351, or 361.
One of the following, ETHN 210, 211, $220,311,320,321,410,420$.
Five hours in 400 senior project, 489 field study, international activity or arranged with adviser.

Women of Color Emphasis:
ETHN 101, 150.
Three of the following: ETHN 302, 351, 361. Required: ETHN 301, 305.

Two of the following: ETHN 210, 211, 220, 311, 320, 321, 351, 410, 420.
Five hours in ETHN 400 senior project, 489 field study, international activity or arranged with adviser.

Minor (21 hours)
Must include two introductory courses with remainder of courses relating to ethnicity, in consultation with the adviser.

## Family and Consumer Sciences

206 Johnston Hall, 372-2026
Three programs are available through the Department of Family and Consumer Sciences. These include planned professional programs in fashion merchandising, and interior design; major program in apparel design and history. Programs must be planned with the adviser no later than the second year. After the first year, students may participate in a supervised field experience during the summer or academic year.

These programs are currently under review with revision possible by September 1997. Please check with the College of

Education and Human Development, Office of Program Advisement, 365 Education Building, for details of the revised program.

## Apparel Design and History

206 Johnston Hall, 372-2026
A major program designed for the student who wishes to specialize in apparel design and/or history for a career in various aspects of the fashion industry, a museum or in preparation for graduate studies.

Major (49 hours) (minor also required)
First year ( 6 hours)
AMID 101 and 103 (6)
Second year (12 hours)
AMID 202 and 204 (6)
F\&N 207 (3)
HDFS 107 or 408 (3)
Third year ( 15 hours)
AMID 401 and 340 (6)
AMID 412 and 451 (6)
One of: AMID 313, 303, 418 (3)
Fourth year ( 15 hours)
AMID 389 or 489 (3)
Four of: AMID 403, 404, 414, 456, 458, 480 (12)

Minor (21 hours)
AMID 101, 202, 401, 458 (12)
Three from apparel design (AMID 103, $340,412,414$ ) or three from apparel history (AMID 403, 451, 456) (9)

## Fashion Merchandising

206 Johnston Hall, 372-2026
This is a major designed to prepare students for careers in business and industry. These may include executive management positions; retail or wholesale merchandising; educational and/or sales representative for fabric, apparel and accessory firms. Fashion merchandising students may choose to study at the Fashion Institute of Technology in their senior year. No minor is required.

Major (76 hours) (no minor required)
First year (18 hours)
ART 101 and ARTH elective (6)
AMID 101 and 103 (6)
SOC 101 (3)
CS 100 (3)
Second year (16 hours)
ECON 202 (3)
PSYC 201 (4)
AMID 202 and 204 (6)
BA 203 or STAT 200 (3)
Third year (18 hours)
AMID 303 and 313 (6)
MKT 300 (3)*
ACCT 325 (3)
MGMT 305 (3)
One from: F\&N 207, HDFS 107, 408, (3)
FCS 389 (optional)

Fourth year (24 hours)
AMID 401, 402 and 403 ( 9 )
MKT 410 and 430 (6)
Two from: AMID 340, 404, 412, 414, 451, 456, 458 (6)
AMID 452 (3)
*MKT 300 prerequisite is an economics course.

## Interior Design <br> 206 Johnston Hall, 372-2026

The interior design program prepares students in the planning and executing of residential and nonresidential interiors. Coursework is designed to evaluate problems and devise solutions.

Major (77 hours) (no minor required)
First year (21 hours)
ART 102 (3)
AMID 103, 116 and 117 (9)
CS 100 (3)
ARCH 105 (3)
SOC 101 (3)
Second year (25 hours)
ART 112 (3)
ARTH 146 (3)
AMID 219, and 303 (6)
ECON 202 (3)
CONS 235 (3)
PSYC 201 (4)
ARCH 236 (3)
Third year (14 hours)
AMID 319, 329, 333 and 345 (11)
One from: F\&N 207 or 408
Fourth year (17 hours)
ARTH 440 (3)
AMID 417, 418, 419 and 423 (11)
MGMT 305 (3)
Also see Schoot of Art for a specialization in graphic design and College of Technology for a specialization in product design.

## Other programs

Programs in family and consumer sciences also are available through the College of Education and Human Development and the College of Health and Human Services.

## Film Studies

301 South Hall, 372-7175
Film studies is an interdisciplinary program designed to provide a general education in film history, aesthetics and production, as well as specialized study in areas of individual student interest.

The major program consists of a minimum of 39 credit hours for a film major, 24 credit hours for a minor.

Major ( 39 hours) (no minor required) After completion of 24 hours of coursework in the basic core, the student selects an additional 15 hours of coursework in the critical track. The critical track develops
knowledge of world cinema and skills of film
nalysis necessary for film critics and achers. Each student plans a program of study in consultation with the director of film studies.

Core courses ( 24 hours)
THEA 261 (3)
VCT 282 (3)
Two from: POPC 250, ENG 200, TCOM 270 (6)
Two from: POPC 350, 355, PHIL 335, TCOM 466, A\&S 300 (when filmrelated) (6)
Two from: CAST 305, GERM 415, RUSN 415, ROML 200, ITAL 261, FREN 444, A\&S 300 (when on an international film studies topic) (6)

Film studies tracks ( 15 hours)
Select five courses (at least three at the 300
level or higher) from the critical track, in
addition to courses taken for the core.
Critical track
ENG 200, 251, 385, 485
PHIL 335
POPC 250, 350, 355
ROML 200
ITAL 261
FREN 444
A\&S 300 (when on a film studies topic)
CAST 305
GERM 415
RUSN 415
TCOM 255, 270, 451, 469 (when on a film studies topic)
THEA 449 (when on a film studies topic)
Minor (24 hours)
THEA 261 and VCT 282 (6)
VCT 382 (3)
One from: POPC 250, ENG 200, TCOM 270 (3)
Two from: POPC 350, 355, PHIL 335, TCOM 466, A\&S 300 (when on a film studies topic), THEA 449 (when on a film studies topic) (6)
Two from: CAST 305, GERM 415, RUSN 415, ROML 200, ITAL 261, FREN 444, A\&S 300 (when on an international film studies topic) (6)

## Folkiore and Folklife

Popular Culture Building, 372-2981
Minor only (20 hours)
POPC 220 (3)
Oral folklore such as POPC 320 or 424* (3)

Material or customary folk culture such as POPC 321 or $424^{*}$
Regional or distinctive folk group such as POPC 325
Distinct genre of folkiore/folkiife such as POPC $424^{*}$
Collecting project such as POPC 485 (or other senior seminar as approved by adviser)
Electives in folklore
*No single course given as POPC 424 may be counted in more than one category within the minor. Courses other than those specified above may be chosen in consultation with the program adviser.

## French

203 Shatzel Hall, 372-2667
Major (30 hours at 300 and 400 level) (minor also required)

FREN 351, 352, 361, 362, 371 and 372 (18)

Electives at 400 -level including one course with Francophone content. (Independent study courses will not fulfill the literature requirement.) (12)

Minor (19 hours at 300 and 400 level)
FREN 351, 361, 362, 371 or 372 (12)
Electives, including one 400 -level course (not independent study course) (7)

## Geography

305 Hanna Hall, 372-2925
Major (33 hours) (minor also required)
GEOG 125, 126, 127 or 213 (3)
GEOG 225 or 230 (3)
GEOG 321 (3)
Electives (in consultation with adviser) (24)

A student may specialize in atmospheric studies (climatology, weather analysis), geodata communications (GIS - Geographic Information Systems, computer mapping, aerial photo interpretation, remote sensing), and applied human geography (population, regional development, urban/economic analysis, resource conservation, tourism).

## Minor (21 hours)

Courses recommended are the same as those required for the major, plus 12 hours. A journalism or telecommunications major can minor in broadcast meteorology. The latter consists of GEOG 125, 213, 303, 400, 404, 122 or 342 , and 455 or 457 or 490.

## Other programs

Programs in geography also are offered by the College of Education and Human Development.

## Geology

190 Overman Hall, 372-2886
Major ( 35 hours) (minor also required)
35 hours including GEOL 104, 105, 302 and 494 (or 493)

Minor (20 hours)

## Other programs

The College of Arts and Sciences also offers Bachelor of Science programs in geology.

The College of Education and Human Development offers programs in earth science.

## German

103 Shatzel Hall, 372-2268
Major (27 hours on 300 and 400 level) (minor also required)

GERM 317, 318 and 417 (9)
GERM 311 and 313 (6)
One course from 315, 316 and 416 (Contemporary Austrian Life) (3)
GERM 480 (Senior Seminar) (3)
Electives in GERM excluding 315 and 316 with one course on 400 level (6)
GERM 260, 300 and 360 do not count toward the major.

Minor ( 18 hours on 300 and 400 level)
GERM 317 and 318 (6)
GERM 311 or 313 (3)
One course from 315, 316 and 416 (Contemporary Austrian Life) (3)
Electives in GERM excluding 315 and 316 (6)

## Other programs

Programs in German also are available through the College of Education and Human Development.

## History

128 Williams Hall, 372-2030
Major (33 hours) (minor also required) Nine hours chosen from the following: HIST 151, 152, 180, 205, 206
Twenty-four hours of $300-400$ level courses including HIST 480, and at least three hours at the 400 level in each of the three categories:

## European History

HIST 327, 357, 360, 363, 367, 370, 377, $415,444,446,448,454,455,458$, 459, 464, 469, 470, 471

## U.S. History

HIST 301, 302, 303, 306, 307, 308, 319, 323, 325, 326, 337, 338, 419, 421, 422, 425, 426, 427, 428, 429, 430, 432, 433, 436, 437
Other
HIST 304, 305, 309, 310, 311, 315, 340 , 381, 382, 386, 401, 411, 413, 414, 441, 442, 462, 483, 486
(HIST 391, 395, 400, 495 may be used to fulfill the requirements of the major and minor with approval of the department adviser.)

Minor (21 hours)
Nine hours chosen from the following: HIST 151, 152, 180, 205, 206
Twelve hours at the 300 or 400 level chosen from at least two of the three categories indicated above with at least three hours at the 400 level.

## Thterntational studies

205 Administration Building, 372-2015
Nablor (57 hours) (no minor required) Intemational studies is an interdisciplinary program for students preparing for careers requining knowledge of world affairs and experience with different cultures. Graduates have found employment in trade, travel and government or completed additional graduate or professional training in international affairs. Study abroad and/or an intemship are strongly recommended.

Program requirements are:

1. Completion of HIST 151 or 152; POLS 171 or 172; GEOG 121 or 122; ECON 202; GEOG 230 or SOC 231 ; GEOG 325 or SOC 312; SOC 369; CS 100;
2. Completion of at least two courses taught in one foreign language at the 300 level. in certain languages, an approved substitute below the 300 level may be approved by the program advisery commitiee and the college.
3. A minimum of 27 hours of coursework on international affairs and world cultures selectec in consultation with the program adviser.

## Everpersomal

Gombunmaication
303 South Hall, 372-2823
Alajer (36 hours) (minor also required)
IPC 102 and 201 (6)
CS 100 (3)
TCOM 103 (3)
ENG 207 (3)
THEA 202 (3)
IPC eiactives (18)
Tintr (24 hours)
IPC 102 and 201 (6)
THEA 202 or TCOM 103 (3)
IPC electives (15)

## Other programs

Programs leading to the Bachelor of Arts in Communication degree also are offered through the College of Arts and Sciences.

## 

203 Snatzel Hall, 372-2667
Hiner only ( 15 hours beyond ITAL 202)
ITAL 361, 371 and 372

## * (\%)

3:9 West Hall, 372-2076
Minar only ( 22 hours)
JOUR $100,200,400,450$
Two additional skills courses (such as reporting, sditing, photography or feature writing)

Two journalism concept courses (such as press management, magazine journalism or government and the press)

## Latin

203 Shatzel Hall, 372-2667
Major (21 hours beyond LAT 202) (minor also required)

No more than 6 hours from any CLCV course.

Minor (12 hours beyond LAT 202)
No more than 3 hours from any CLCV course.

The Latin major offers preparation for prospective teachers of Latin in private schools (for those wishing to teach Latin in the public schools, a major in Latin is offered through the College of Education and Human Development) or for further study in areas such as classical studies, ancient history, classical archaeology, comparative literature, law, medicine, the Middle Ages or the Renaissance.

## Linguistics

305-A University Hall, 372-2576
Planned minor only (20 hours)
An interdepartmental and interdisciplinary program designed for the student who is interested in linguistics primarily for its relevance to the major field. The program requires 20 hours of coursework appropriately selected from courses recommended by the linguistics adviser. No work can be counted both for the major and the minor.

## Required courses

LING 310 and 490 (5-6)
One of the following (remainder may be used as electives) (3-4):
GERM 482
ENG 380
SPAN 455
Electives (10-12)

## Mathematics

450 Mathematical Sciences Building, 3722636

## Majors or Minors

Students may complete a Bachelor of Arts degree with a major, second major or minor in mathematics by completing the degree requirements for the BA degree and the requirements for a major or minor in mathematics listed under the Bachelor of Science degree. This policy also applies to majors in applied mathematics, actuarial science and statistics as well as the minor in statistics.

## Other programs

A mathematics major which leads to certification as a public-school teacher is available through the College of Education and Human Developmenit.

## Music

Moore Musical Aris Center, 372-2181
Students wishing to pursue a major or minor in music should contact the associate dean of the College of Musical Arts. An audition is required.

Major I (38 hours) (minor also required)
MUCH 141, 142, 151, 152, 251, 252, 261, 262, 361 (19)
MUSP applied study (4)
MUSP ensemble (4)
Music electives* (11)
MUS 099 six semesters (0)
Major II (38 hours) (minor also required)
MUCH 101, 110, 125, 221 (10)
MUSP, applied study (16)**
MUSP ensembles (8)
MUSP 305 (2)
MUSIC electives* (2)
Graduation recitat ${ }^{* * *}$
Minor or planned program in related area by advisement (20-24)

Suggested fields: business, computer science, filin studies, interpersona! and public communication, journalism, mass media, popular culture. telecommunications, recording technology, scientific and technical communication, theatre.

Minor ( 25 hours)
MUCH 141, 142, 151, 152, 251, 261, 262 (15)

MUSP applied study (3)*
MUSP ensemble (3)
Music electives (4)*
MUS 099 four semesters ( 0 )
*MUCH, MUED and MUSP excluding MUCH 216, 416 MUED 240, 249, 256, 257, 331, $332,340,349,359,402,450,451,458$, MUSP 367, 368, 453, 454, 458, 459 and 466
**BA degree music majors and minors are required to register for MUS 099 Recital Attendance during semesters in which they are engaged in applied study.
***Students must be registered for applied study during the semester of the graduate recital.

## Other programs

Degree programs in music are also offered through the College of Musical Arts.

## Philosophy

305 Shatzel Hall, 372-2117
The philosophy depariment intends to serve
the interests of a wide variety of students seeking the skills and understanding raditionally known as a philosophical perspective.

Major (33 hours) (minor also required) The major requires work in the various areas of philosophic study: logic, history of philosophy, normative philosophy, and metaphysics and epistemology. Requirements are:

Logic and Methodology: PHIL 203 and 303
History of Philosophy: two from PHIL 202, 211, 212, and either 411 or 412.
Normative Philosophy: one of PHIL 225, $312,318,319,320,325,332,342$, $344,417,418,425,442$ or 445.
Metaphysics and Epistemology: one of PHIL 325, 311, 317, 321, 330, 406, 414, 431, 432, 433.
Three other PHIL courses. At least four courses overall must be at the 400 level.

The philosophy department believes that the major, as described above, provides a solid grounding in philosophy, useful for students with widely varied interests. However, the department also recognizes that some students may be in special circumstances which warrant deviation from the above requirements. The requirements can be tailored to meet the needs of individual students in such cases. Early consultation with the undergraduate adviser is essential.

## Minor (20 hours)

Students fashion philosophy minors to complement major programs across the college as well as to develop broad philosophical perspectives of general interest. The philosophy minor is designed to serve philosophic interests of students throughout the college. The minor consists of 20 hours, including two history of philosophy courses, and three other 300-400 level philosophy courses, one of which must be at the 400 level.

## Political Science

124 Williams Hall, 372-2921

Major (33 hours) (minor also required) POLS 110 and 290 and 3 additional hours at the 100 level (POLS 290 should be taken no later than the end of the junior year.) $A$ minimum of 24 hours of political science at the 300-400 level distributed among at least three areas of political science with a concentration (at least 9 hours) in one is also required. The following areas in political science are available:
American Government
POLS 110, 302, 324, 325, 331, 336, 341, $345,346,347,374,430,431,440$, 443, 459
Comparative Government
POLS 171, 335, 351, 354, 355, 361, 366, $368,434,452,454,458,460,462$

International Relations
POLS 172, 335, 372, 374, 434, 452, 458, $460,462,473,475,476,478$
Political Theory
POLS 301, 304, 402, 403, 404, 405, 452
Public Administration
POLS 302, 303, 331, 346, 420, 421, 423, 430, 431, 459
Public Law
POLS 347, 416, 417, 418, 419, 420, 424, 425

POLS 303 is recommended for any of the $300-400$ level courses in public administration. The beginning student is encouraged to take the following courses before taking advanced courses in a particular area: POLS 110 for American government, POLS 171 for comparative politics and POLS 172 for international relations. While all 100-200level coursework completed satisfactorily will count toward the total number of hours necessary for the baccalaureate degree, no more than 9 hours at the 100 -200-level or 9 hours of POLS 496 (formerly 395) will count toward the 33-hour major.

All students must consult with an adviser early in their pursuit of a major. Students opting for honors in political science must also take POLS 495, Honors Seminar in Contemporary Political Science, and write a senior thesis under the direction of a faculty adviser.

## Minor (21 hours)

POLS at 100-200 level (6)
POLS at 300-400 level (15)
No more than 9 hours of POLS 496 (formerly 395) will count toward the 21 hour minor.

## Other programs

A program in political science also is offered through the College of Education and Human Development.

## Popular Culture

Popular Culture Building, 372-2981
Major (no minor required)
The Department of Popular Culture studies the forms of creative expression we use in everyday life. Courses focus on the impact various aspects of popular culture (such as television, movies, rock music, popular books and magazines, sports, holidays, festivals and folklore) have on our culture and how they reflect the values of our society. While studies of contemporary culture are an important part of the program, historical material is emphasized as well.

The popular culture undergraduate adviser assists students in designing programs adapted to their individual interests and career goals.

Major (42 hours)
Required courses:
POPC 160 or 165; POPC 170; POPC

260; one of POPC 220, 320, 321 or 325; one of POPC 250, 270, 280 or 290; two of POPC 350, 355, 380, 424 or 460 ; POPC 370 or 426 ; POPC 480 ; and 15 additional hours.

Minor (21 hours)
Required courses:
POPC 160 or 165 , POPC 170 ; POPC 260 , one of POPC 220 or 250 or 270 or 280 or 290 , two of POPC 350 or 355 or 370 or 380 or 426 , and one additional course offered by the Department of Popular Culture.

## Psychology

207 Psychology Building, 372-2301
Major (30 hours in psychology and a minor or 24 hours in cognate fields)
A psychology major may minor in any department with an established minor. A student who elects a cognate minor should select, after consuitation with an adviser, courses from at least three of the following fields: BIOL, CHEM, CS, ECON, MATH, PHIL, PHYS, SOC. Two courses that are used to fulfill group requirements may also be applied to this minor.

## First year

PSYC 201 and 270 (8)
Second year
PSYC 290 (4)
PSYC electives
Third year
One 300-level laboratory course .
PSYC electives
Fourth year
One 300-level laboratory course
PSYC electives
Minor (20 hours in PSYC)

## Other programs

The Bachelor of Arts program in psychology is primarily designed for the student interested in psychology as the focus of a liberal education. There is also a Bachelor of Science program in psychology offered by the College of Arts and Sciences that is designed for the student who is preparing for graduate study. Other programs in psychology are available through the College of Education and Human Development:

## Russian

103 Shatzel Hall, 372-2268
Major (minor also required)
25 hours beyond RUSN 202, or equivalent, and including RUSN 312, 313, $317,318,320,417$ and 331 or 419

## Minor

12 hours beyond RUSN 202, or equivalent, and including RUSN 317, 318 and 320

Summer or semester study abroad is strongly recommended for majors.

## Other programs

Programs in Russian also are offered by the College of Education and Human Development.

## Sclenific and Technical Gommmintakion <br> 218A University Hall, 372-2576

Technical communication clearly and accurately conveys scientific and technical information. Technical communicators interpret specialized information for their peaders' practical use. A technical communicator may be expected to create brochures, research reports, manuals, instructions, news stories, scripts and speeches. Although lechnical communicators are not expected to be scientists or engineers, they are expected to have a good background in at least one iechnical, scientific or business area. Technical communication is a rapidly growing profession needed in all industries, and technical communicators are in national demand.

## Curricuium

BGSU's Bachelor of Arts and Bachelor of Sclence degree programs develop technical communication skills by offering courses in technical writing, technical editing, computer science, visual communications and project management. In both degree programs a technical, scientific or business cognate area is determined by students' career interests and planned with and approved by the undergraduate adviser for scientific and technical communication and a cognate area adviser. Also included in both degree programs is an internship which gives the student practical work experience: Both programs combine in one comprehensive course of studies all of the requirements for both a major and a minor.

## Naticulation into Scientific and Technical

 Communication MajorBefore being fully accepted as a scientific and lechnical communication major, the student must have completed 30 hours of coursework and achieved an overall grade point average of 2.7; waivers of the grade paint average requirement may be granted on the basis of the student's unique educational or work experience.

Bacheler of Arts Program (57-63 hours) Communication core-required courses

ENG 207, 388, 389 and 488 (12) ENG 489 (3-9)
One of the following: ENG 484, JOUR 301 or any 300-or 400 -level English itherature course (3)

Computer science/technology requiremant (9)
(one of three of the four subgroups below)
CS 100 , MIS 200
CS 101, CS 260, MIS 360
CS 205, CS 360, TECH 102, CONS 235 , MFG 112
SOC 369, PSYC 270, STAT 200, MATH 115, MATH 247

Graphics and design requirements (choose two) (6)

DESN 104, 204, ART 102, ARTD 211, VCT 203, 208

Project management requirements (choose two) (6)
These courses may have prerequisites, some of which may be taken as part of the Group IV requirements.

PSYC 352, 452, 454, MGMT 300, 305,
361, IPC 203, 207, 303, 304, SOC $318,320,415$

Cognate area-suggested concentrations
(18)

Biology
Psychology
Physics
Mathematics
Chemistry
Computer Science
Geography
Forsign Languages
Sociology
Law-Related Studies
Industrial Technology
Environmental Studies
Business-Related Studies
Journalism-Related Studies
Note: scientific and technical communication majors are required to take Great Ideas (A\&S 250) as part of their Group $V$ requirements.

## Minor-recommended for students with

 science, technology or business majors (21 hours)ENG 207, 388, 389, 488
ENG 484 or JOUR 301
Any two courses chosen from computer science/technology, graphics and design, and project management groups above.

Minor--recommended for students with humanities majors ( 21 hours)

ENG 388, 389, 488
ENG 484 or JOUR 301
Any three courses chosen from computer science/technology, graphics and design, and project management groups above.

## Bachelor of Science Program

The bachelor of science program is similar to the bachelor of arts program except that a total of 45 hours of coursework is required in math and science, which may be distributed among college math and science requirements, the computer science courses in the computer science/technology group and the cognate area.

## Additional Learning Opportunities

BGSU has an acive student chapter of the Society for Technical Communication (STC), the profession's international association, providing opportunities for contact with professional communicators and with students in BGSU's highly successful graduate program in technical communication. In addition, students have the opportunity to write and edit for Interchange, STC's international student newsletter which is published by our chapter.

## Sociology

223 Williams Hall, 372-2294
Major ( 32 hours) (minor also required)
SOC 101, 368, and 369.
SOC 301 or 302
SOC electives are generally chosen to serve student career goals. A sociology major is excellent preparation for many professions. Majors and minors with specific career aspirations may wish to concentrate course selections in one of the following areas:

## Criminology/Corrections

This concentration studies the nature of criminal law, the causes and consequences of criminal behavior, and the ways in which society deals with criminal offenders. Criminology is excellent preparation for carears in both the adult and juvenile justice systems, including police departments, court systems, and the probation and corrections networks within each. Electives include, but are not limited to:

SOC 316, 319, 340, 341, 352, 441, 442, 443, 444, 461

## Family and Social Services

This concentration prepares students for careers in agencies responsible for the planning, delivery and administration of services and resources for the well-being of individuals and lamilies. Coursework provides a strong background for management decisions which must reflect an understanding of family dynamics-produced from social and individual variables including gender, age, race, and class-and the interactions of those dynamics with social institutions generally and human service programs in particular. Electives include, but are not limited to:

SOC $313,316,317,319,341,361,404$, $417,460,461$, and 463

## Population Studies

This concentration examines the composition of human populations, communities and organizations as they adapt to their environmentts. Basic understandings of contemporary energy and ecological issues are emphasized. The curriculum provides a breadth of training for careers in business planning, labor-force analysis, and economic development. Population analysts are employed in all levels of government and
private business. Electives include, but are not limited to:

SOC 311, 312, 313, 316, 361, 404, 414, 418, 419.

## Other programs

Students should consult the undergraduate adviser in the Department of Sociology for the planning of other concentrations (e.g., prelaw, social-science education) and for planned individual programs.

## Research Internships

Any concentration may involve cooperative education placements or internships which offer an opportunity for students to work in settings where they can apply their knowledge and learn more about careers in their area of study, as well as cognate courses in other departments.

## Minor (20 hours)

A student minoring in sociology is strongly encouraged to complete SOC 301 or 302, 369 and 368.

## Other programs

A combination psychology/sociology major is offered in the College of Education and Human Development.

## Spanish

03 Shatzel Hall, 372-2667
Major (33 hours) (minor also required) A student, in consultation with the undergraduate coordinator may choose to focus on a specialized area of Spanish.

## Basic Spanish:

SPAN $351,352,367,368,371,377$ and 378 (21)
Electives at the 400 -level (12)
Latin American Culture Studies Emphasis:
An interdisciplinary planned curriculum of studies on Latin America.

SPAN 270, 352, 377, 378, 401, HIST 310, POLS 355 (21)
12 additional hours:
One from the following: HIST 309, 311, 411, 413
One from the following: GEOG 349, ETHN 310
Two from the following: SPAN 368, 431, 481, 482, 488, 489.

Students choosing the Latin American culture studies emphasis must fulfill the Spanish language requirement by completing Spanish at the 351 level or demonstrate competency in the Spanish language, e.g., by completing intensive Spanish language and culture courses through the summer abroad program in Mexico.

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Minor (21 hours)
    SPAN 270, 351, 352 (9)
    SPAN 367 or 371(3)
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SPAN 368 or 377 or 378 (3)
Electives with one course at 400 level (6)

## Statistics

450 Mathematical Sciences Building, 3722636

Major (34 hours) (minor also required)
MATH 131, 232, 233 and 332 (16)
MATH 441 and 442 (6)
MATH 434 or 465 (3)
Three electives chosen from the following
list with at least two from statistics (9):
STAT 402, 406, 408, 412, 414, 416
MATH 432, 445, 447, 451, 461
CS 440, 442
Minor (19 hours)
MATH 131, 232, 233 (13)
MATH 441 and 442 (6)
Recommended electives from MATH 332, 445, 447, STAT 402, 406, 408, 412, 416

## Other programs

Students may complete a Bachelor of Science degree with a major or minor in statistics by completing the requirements above and the degree requirements for the BS degree.

## Telecommunications

322 West Hall, 372-2138 or 372-2224
Major ( $35-37$ hours) (minor also required)
TCOM 103, 255, 260, 262, 263, 360, 366, 451, 460, 489 (28)
Focus area: 3 courses ( 9 ) upper level.
Minor (21 hours)
TCOM 103 and 255 with grade point average of 2.5 (6)
Two 3-credit hour courses from TCOM courses at 200-300 level (6)
Three 3-credit hour courses from TCOM courses at 400 level ( 9 )

## Other programs

Programs leading to the Bachelor of Arts in Communication also are offered by the College of Arts and Sciences.

## Theatre

322 South Hall, 372-2222
Major (42 hours) (minor also required)
THEA 201, 202, 241, 243, 244, 341, 347, 348 and 498. In addition, two hours of 146 (139 at Firelands) or two hours of 346 (339 at Firelands).
THEA electives ( $300-400$ level) (12)
Minor (24 hours)
THEA 141, 202, 241, 243, 341
Electives at 300-400 level (9)

## Other programs

A separate degree in theatre is listed in the catalog under Bachelor of Arts in Communication.

## Women's Studies <br> 246 Shatzel, 372-7133

Women's studies is a multidisciplinary program which offers students the opportunity to explore the diverse experiences, perspectives and significant contributions of women-past, present and cross-culturally. Women's studies courses and those crosslisted with women's studies make the study of women and gender central to their purpose. Women's studies courses also emphasize the interconnections among issues of gender, class, race and ethnicity.

Readings and classroom discussions introduce women's studies students to the new scholarship on women which reveals the ways in which women's lives have been frequently erased from traditional scholarship. Women's studies faculty encourage critical analyses of women in society, culture and history; they promote active learning and social responsibility.

The women's studies major consists of a multidisciplinary program of study leading to the Bachelor of Arts degree. Both the major and minor in women's studies provide flexibility in the pursuit of a liberal arts education along with useful preparation for a variety of careers.

Major ( 39 hours) (minor also required) WS 200; ETHN 302; WS 302, WS 400, WS 401 (15)

Eight additional courses (24 hours) from the approved courses listed below. Coursework counting toward the major must be completed in at least four departments. Four of the eight courses ( 12 hours) must be completed in one of the arts and sciences departments offering courses on women and/or gender. The area of concentration is planned in consultation with the program adviser to reflect the individual student's interests and career goals.

ACS $300^{*}, 400^{*}, 490^{*}$
ARTH 460
BA 305/HDFS 305
ECON 323, 440, 476
EDFI 460
ENG 269, 300*, 423, 470*
ETHN $300^{*}, 306,351,361,470^{*}, 480^{*}$
HED 301
HIST 326, 327, 480*, 495*
HDFS 105, 107, 302, 408, 426, 427
IPC $406^{*}$
PHIL 245
POPC 231, 424, 460*, 480*
PSYC 306, 307, 490*, 495*, 496*
SOC 300*, 313, 316, 361, 461, 470*, 480
SMD 425

TCOM $270^{*}$
THEA $449^{*}$
MS 300,470
"Indicates variable topic courses which may be included in the program when the topic is appropriate to women's studies.

Minct ( 21 hours)
WS 200, ETHN 302, WS 302, and either WS 400 or WS 401 (12)
9 houts of courses chosen from the above approved course list.

## 

Bachetor of Science

## 赞equer

Each student must complete the degree requirements listed below, preferably in the fresimman and sophomore years, and must satisfy the requirements for a major and minor area of specialization as outlined. Every student, however, must take English in the first year. If known, the major or minor should be started in the first year, but selection of the major may be deferred as late as the beginning of the sophomore year. Cerain majors and programs require course sequences. These sequences should be started in the freshman year. Major courses may not be taken S/U.

A Bachelor of Science degree is only available in biological sciences, chemistry, computer science, environmental science, geology, matherratics, physics, psychology or stedistics. The student also completes a minor area of specialization as outlined below.

## Tesure fequirements

Greup : En millich Composition
Sudents are required to complete ENG 112 or gemonstrate by examination that they heve proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours.)

## - modep 部: Forelem lamenages

Each student is required to demonstrate proticiency in a lanyuage and language area by one of the options listed below: 1. Graduating from a high school where all instuction was conducted in a language other then English; or
2. Passing a proficiency examination in language on the 202 course level; or
3. Having completed four years of one language in high school; or
4. Heving completed one of the departmental options listed below (14 hours minimum in same language area, or fewer by duvanced placement).

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

## German, Russian, East Asian Languages

 (Chinese, Japanese)Completion of GERM 101 and 102 plus a minimum of six additional hours from: GERM 117, 118, 201, 217, 218, 231, 331, and/or GERM 315, 316, 260; or
Completion of CHIN 101, 102, 201 and 202; or
Completion of JAPN 101, 102, 201 and 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from: RUSN 201, 202, 215, 216, 317, 319, 331 and/or 312, 313.

Romance languages (French, Greek, İalian, Latin, Spanish)
Option f:
FREN 101, 102, 201 and 202; or
GRK 101, 102, 201 and 202; or
ITAL 101, 102, 201 and 202; or
L.AT 101, 102, 201 and 202; or

SPAN 101, 102, 201 and 202.
Option ll: One of the following:
FREN 101, 102, 201 and 212;
GRK 101, 102 and two of GRK 201, CLCV 241, 242, 245
LAT 101, 102 and two of: LAT 201 and/or CLCV 241, 242, 245;
SPAN 101, 102, 201 and 212.
A student may transfer at any point from option I to option II but not vice versa.
Course 202 is required for admission to 300 level courses.

Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.

Group If: Mathematics and computation and natural sciences: biological sciences, chemistry, computer science, geology, mathematics and statistics, physics, psychology
A student is required to complete a minimum of 45 hours of credit, including:

1. A major in biological sciences, chemistry, computer science, environmental science, geology, mathematics, physics, psychology or statistics;
2. A minimum proficiency in mathematics equivalent to MATH 131;*
3. A laboratory sequence in one of the sciences. (A list of approved courses is printed in the College of Arts and Sciences Handbook.)
Certain science courses numbered 100 do not apply toward a student's degree requirements if credit has been granted for the introductory course in the same science.
See departmental listings in the course
descriptions for specific applications.
*See MATH course descriptions for placement in MATH 128/130/131/134 \& 135, or Department of Mathematics and Statistics for placement test.

## Group IV: Social sclences: economics, thatic stutiles; geography, history, polithean schence psychology, sociology

Each student is required to complete wo courses in one or more of these areas (excluding GEOG $\{25,126,127,213,404$ ) in addition to the general education program. A psychology major may include two psychoiogy courses in this group. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.

## Group Vr Arts and bumanioies

Each situdent is required to complete one course in literature (American, English or foreign), one course in the fine arts (art, art history, music, theatre, television and film), and two additional courses from the general education progrem in addition to foreign language courses numbered 201, 202,212 which apply to Group II, not Group V. It is recommended that philosophy be one of these areas. A list of courses approved for general education Group $V$ requirements is printed in the College of Arts and Sciences Handbook.

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## Bachelor of science: Majors and Minors

By the beginning of the second year most students select a major and minor. The number of hours required for a major or minor varies with departmental requirements but is at least 32 hours in the major and 20 hours in the minor except as indicated below.
Major courses may not be laken S/U. In arranging courses in the minor field, a student should consult the department concerned.

These outlines represent the usual sequence, but may be modified upon departmental approval to meet individual needs. If educational objectives cannot be met by one of the departmental majors or minors, the student may create an individualized planned program in consultation with a facuity adviser or advisers. A student who has earned at least 30 hours of credit and who needs at least 30 hours to compiete the program may petition the Academic Appeals Board of the College for an individualized planned program by presenting a statement of rationale as well as a detalled list of courses to be taken. Upon approval, the student is obligated to complete the program as planned unless changes are approved by the office of the dean. The degree requirements remain the same.

## Astronomy

104 Overman Hall, 372-2421
Minor only (10-21 hours)
Five courses chosen from: ASTR 201, 212, 305, 307, 303, 321 and 403
Plus six additional hours in PHYS.
This program is intended for students with
an avocational interest in astronomy.
Students planning a career in astronomy hould major in physics and choose astronomy courses as electives.

## Other programs

A program in astronomy also is offered by the College of Education and Human Development.

## Biological Sciences

217 Life Sciences Building, 372-2332

Major (32 hours) (minor also required)
First and second years
BIOL 204 and 205, 350 (13)
CHEM 125, 127 and 128 (10)
BIOL courses as required for the student's program
Third and fourth years
One course in organic chemistry (CHEM 306 or CHEM 341 and 342) (4-10) (At least one course in biochemistry is strongly recommended.)
MATH through 131 or 134 and 135
PHYS 201 (5)
A minimum of 10 hours at the 400 -level and 9 additional hours electives in BIOL.
At least one course in each of the following groups:

Group 1: Biology of Organisms
BIOL 313, 331, 332, 343, 404, 405, 406, $413,414,424,426,427,434,435$, 472, 473, 474, 476, 477
Group 2: Ecology, Evolution \& Behavior
BIOL 325, 354, 412, 420, 422, 425, 449, 451
Group 3: Cell, Molecular \& Regulatory Biology
BIOL 407, 408, 411, 417, 421, 431, 438, $439,442,443,446,447$

Minor (20 hours)
First and second years
BIOL 204 and 205 (10)
CHEM 125, 127 and 128 or equivalent (10)

Third and fourth years
Electives in BIOL (10)

## Microbiology

519 Life Sciences Building, 372-8568
Major only ( 32 hours)
BIOL 204, 205 and 313 (14)
CHEM 125, 127, 128 and 201 (13); or CHENI 135, 137 and 138 (10)
CHEM 341 and 342 (10); or CHEM 306 (4)

CHEM 308 and 309 (4) or CHEM 445 and 447 (6)
MATH equivalent to 131
PHYS 201 and 202, or 211 and 212 (10) CS 100, 101 or MIS 200 recommended
A minimum of 18 hours, at least 12 of which should be selected from the following list of core courses, including
at least one course with a laboratory component: BIOL 421, 426, 442, 443, $444,447,400$ (up to 3 hours in a microbiology topic, with prior approval of microbiology adviser).
Additional hours may be selected from the following: BIOL 405, 407, 424, 439, 446.
The following courses may also be taken as electives with prior approval of the microbiology adviser: BIOL 400, 401, $402,470,489,490$, all in the area of microbiology; BIOL 479; MEDT 404 (or 416), 434, 435, 421, 422, 431 and 432 (or 403).

## Other programs

Programs in biology are offered also through the College of Education and Human Development. A program in applied health science is available through the College of Health and Human Services.

## Chemistry

141 Overman Hall, 372-2031
Students who take two courses in any one of the following groups may not receive graduation credit for both:

CHEM 100, 109, 125, 135;
CHEM 117, 127, 137;
CHEM 117, 306, 341;
CHEM 117, 308, 445;
CHEM 118, 128, 138;
CHEM 118, 309, 446;
CHEM 321, 454;
CHEM 352, 405.
Major (32 hours) (minor also required) A chemistry major may follow several programs of study depending upon career aspirations. All chemistry majors must take the following:

CHEM 125, 127, 128 and 201 (13) or CHEM 135, 137, 138 (10)
CHEM 341, 342 (10)
CHEM 321 or CHEM 454, 407 (3-5)
CHEM 352 or CHEM 405 (3-4)
PHYS 202 or PHYS 212 (preferred) should be taken by the end of the second year.
MATH 232 should be completed by the end of the second year, except in the least rigorous major. CHEM 313, 395, 413 and 483 may not be included in the 32 hours.
The following program will meet American Chemical Society (ACS) professional training standards and is the recommended program for students who plan professional careers in science.

## First year

CHEM 125, 127, 128 (10) or CHEM 135, 137, 138 (10); MATH 131

## Second year

CHEM 201 (3) (For those having taken CHEM 128.)

PHYS 211, 212 (10)
MATH 232 (5)
CHEM 341, 342 (10)
Third year
CHEM 405, 406, 407 and 408 (12)
CHEM 413 is highly recommended
PHYS 401 or MATH 233 and 332

## Fourth year

CHEM 454 (3)
CHEM 463 (4) or CHEM 445, 446 (4)
Additional 400 -level CHEM courses to a minimum of five credit hours of lecture and two credit hours of laboratory.

A student who wishes a more limited major but one that is still adequate for advanced study or professional work in chemistry follows the same schedule during the first three years as given above, except PHYS 401 or MATH 233 and 332 are not required.

## Fourth year

CHEM 454 (3)
Electives from 400-level CHEM (none required)

This program also gives excellent preparation for premedical students and other preprofessionals who anticipate possible research careers.

The least rigorous major is useful for certain preprofessional (predental or premedical) programs or for preparation for limited positions in industry or government:

## First year

CHEM 125, 127, 128 (10) or CHEM 135, 137, 138 (10)
MATH 131 (5)

## Second year

CHEM 201 (3) (For those having taken CHEM 128)
CHEM 341, 342 (10)
PHYS 201, 202 (10) or PHYS 211, 212 (10)

Third and fourth years
CHEM 352 (3) or CHEM 405 (4)
CHEM 321 (3) or CHEM 454 (3) and 407 (2)

300-and 400-level CHEM courses to a minimum of 32 hours; at least one CHEM course must be 400-level (not CHEM 413 or CHEM 483). CHEM $313,395,413$ or 483 may not be counted in the 32 -hour minimum.

Minor (20 hours)
First year
CHEM 125, 127, 128 (10) or CHEM 135, 137, 138 (10)
Second year
CHEM 201 (3) (For those having taken CHEM 128)
CHEM electives
Third and fourth years
CHEM electives
CHEM 313, 395, 413 and 483 cannot count toward the 20 hours required.

## Biochemistry specialization

Chemistry majors preparing for graduate study or research in the health-related academic area requiring biochemistry should take: CHEM 445, 446, and 447; BIOL 204, 205, 313, 350, and 411 or 439 . CHEM 413 is recommernded.

To complete either a standard chemistry mejor or the more rigorous ACS major, the student should consuit the above guidelines for additional courses that are required to complete the major program of choice.

The student is urged to seek advice from deparmental advisers at the chemistry office before planning an academic program, and at regular intervals thereafter. Detailed supplements to this publication are available in the chemistry office that describe courses, program (including yraduate) and protessional requirements.

## Other programs

Programs in chernistry also are offered by the College of Education and Human Development.

## Companter Science

221 Hayes Hall, 372-2337
Malo: ( 30 hours) (minor also required)
C8 205, 215, 217, 324, 325, 327, 335 (21)

Thee CS electives at the 400 level, axcluding CS 490 (9)
An approved societal impact course (see deparment for list) (3)
MATH 134-135 (6) or MATH 131 (5)
MATH 222 or 322 (3)
MATH 247 or 313 (3) or STAT 211 - 212 (6)

Sudents with computer science transfer credit see departmental adviser for additional guidelines.

Sudents with a minor or joint major in MATH need not complete the listed MATH courses.

## Business systems specialization

A student interested in the application of computer science to business systems may take ECON 202 and 203 as part of the Group N requirement and may choose electives such as ACCT 221 and 222, FIN 300, MATH 226, MCMT 300 or 305 , and MKT 300 . See the Deparmert of Computer Science for detalls.

Hinor (18 hours)
68205 and 215 (6)
CS electives (12)
Transfor courses included in the minor are limited to three hours per course. The following courses may not be applied to the 18 -hour minor requirement: CS 100,101 , $180,154,200,280,373,374,390,490$. CS courses included in a major (such as MIS) may not be counted in the 18 -hour minor requirement.

## Other programs

A Bachelor of Arts in computer science also is offered by the College of Arts and Sciences. In addition, programs in computer science are available through the College of Education and Human Development.

## Environmental Science

153 College Park Office Building, 372-8207
Major (92 hours) (minor not required) This program emphasizes the multidisciplinary nature of environmental issues and the role of the natural sciences in addressing and solving environmental problems. Students receive a basic understanding of the sciences, particularly biology and chemistry. Additional courses in the social sciences and humanities are included to help the student obtain a holistic view and understanding of the overall context in which environmental issues are placed. Each student also takes courses in an individually planned area of emphasis designed to prepare for a career field. Close consultation with advisers in the Center for Environmental Programs is essential. Required courses are:

ENVS 101 or 201, 301 or 401, 402 (8-9)
BIOL 204 and 205 (10)
CHEM 125, 127 and 128 (10)
CS 100 or 101 (3)
ECON 200 or 202 (3)
ENG 207 or 388 (3)
GEOL 104 (4)
IPC 205 or 206 or 403 (3)
MATH 131 or 134 and 135 (5-6)
SOC 101 or PSYC 201 (3-4)
Statistics: MATH 115 or 247; or PSYC 270 ; or SOC 369; or STAT 200 or 211 and 212 (3-6)
Two courses from: PHYS 201 or 211, 202 or 212, 360; or CHEM 306 and one PHYS course (7-10)
Four courses from the following; no more than two courses in any one area: BIOL 301, 354; CHEM 306; ECON 332, 335; EDFI 416; ENVH 201H. 306; ENVR 421; GEOG 321, 325, 331, 333, 337, 412, 426, 457; GEOL 302, 304, 322; HIST 306, 319, 338 or ACS 338; LEGS 431; PHIL 332; PHYS 360 (may not also be used for requirement above); POLS 331, 335, 336, 345; PSYC 440 (environmental issues only); RTD 304; SOC 312, 414, 418. (12)

Fifteen hours must also be taken in an area of emphasis such as energy use, chernical analysis, geography/geology, coastal studies or computer modeling. The area of emphasis is planned by the student with faculty members and academic advisers to refiect the student's occupational goals. Students should file an approved course list for their area no later than the end of their junior year. An internship is highly recommended.

Minor (27-30 hours)

## First and second years

One course from BIOL and one from GEOG or GEOL ( $6-9$ ) and
ENVS 101 or 201 (3)

## Third and fourth years

Select two from: ENVS 301, 400, 401, 402, 403 or 412 (5-6)
Select two from: POLS 331, 335, 336, 345; LEGS 441 (6)
Select one from: PHIL 332; SOC 312; GEOG 321, 331 (3)
Select one from: ACS 338; HIST 338 (3)

## Other programs

The Collage of Arts and Sciences offers a major in environmental policy and analysis leading to a Bachelor of Arts. An environmental health program is also available in the College of Health and Human Services. Students should contact the Center for Environmental Programs, 372-8207, for help in selecting the program that most closely meets their career goals.

## Geology

190 Overman Hall, 372-2886
Major (34 hours) (minor also required)
A geology major may follow several programs of study depending upon career aspirations. All geology majors must take the following:

GEOL 104, 105, 302, 309, 316 and 494 (26) plus two from GEOL 415, 431, 432 (8)
MATH 134 and 135 (6) or MATH 131 (5)
CHEM 125 (5) (or 135) (5) and 127 and 128 (5) (or 137 and 138) (5)
PHYS 201 (5) (or 211) (5) and PHYS 202 (5) (or 212) (5)

BIOL 204 may be substituted for PHYS 202 or 212

## Geochemistry

A student concentrating in geochemistry
should take the following courses:
GEOL 104, 105, 302, 309, 316, 415 (or 432), 431 and 494 (34)

PHYS 201 and 202 (or 211 and 212) (10)
MATH 131 and 232 (10)
CHEM-see minor requirements in chemistry (20)
CS 101 ( 3 )
No minor is required.

## Geophysics

A student concentrating in geophysics should
take the following courses:
GEOL 104, 105, 302, 309, 316, 415 (or 431), 432 and 494 (34)

PHYS 211, 212, 307, 401 and 427 (18)MATH 131 and 232 (10)

CHEM 125, 127 and 128 (or 135, 137 and 138) (10)

CS 101 (3)
No minor is required.

## Paleobiology

student concentrating in paleobiology is quired to take the following courses:
GEOL 104, 105, 205 (or 215), 302, 309, 316, 415, 425 (29)
GEOL 490 (senior research problem approved by paleobiology adviser) (12)

GEOL 494 (or a substitute field course approved by the paleobiology adviser) (3-6)
CHEM 125 (or 135) (5)
MATH 134 and 135 (6) (or 131) (5)
PHYS 201 (5)
BIOL 204, 205, 350, 354, 451 (19)
No minor is required.
Minor (20 hours)

## Other programs

A program in geology leading to the Bachelor of Arts also is offered by the College of Arts and Sciences.

## Mathematics

450 Mathematical Sciences Building 3722636

Major ( 34 hours) (minor also required) MATH 131, 232, 233, 322, 332, 337, 403 (25)

MATH 434 or 465 (3)
At least two additional 300 or 400 level MATH electives*(6). These electives must be chosen so that two courses are completed from any one of the following groups**:
MATH 401, 403, 404, 432
MATH 402, 405
MATH 313, 421
MATH 434, 439, 461, 465, 466
MATH 441, 442, 445,447
MATH 451,452
MATH 426, 427
To graduate with a major in mathematics, a grade point average of 2.0 or better is required in those courses used to meet the requirements for the major. (The University policy for grades in repeated course is used in computing this grade point average.)

Applied Mathematics ( $31-37$ hours)
This option emphasizes the scientific computing and modeling aspects of applied mathematics. The minimum grade point average in major courses given above also applies. A minor or double major in computer science or physics is recommended.

## CS 101

PHYS 211-212
MATH 131, 232, 233, 322, 332, 337, 432 and 441 (28)
MATH 434 or 465 (3),
MATH 451 or CS 451 (0-3)
A second course from any one of the following groups $(0-3)^{* *}$ :
MATH 337, 437, 439
MATH/CS 451, 452
MATH 441, 442, 445, 447

Actuarial Science (37-40 hours)
This option is intended for students interested in a career as an insurance or pension actuary. It requires the following courses:

MATH 131, 232, 233, 322, 332, 432, 425, 426, 427, 441, 442 (37)
MATH 451 or CS 451 (0-3)
CS 101, STAT 416, ECON 202, 203, OR 380 or CS 440, ACCT 221, FIN 320
Suggested electives for this program are
ACCT 222, FIN 426, 428, OR 480 and STAT 402. A minor is not required.

## Suggested schedule for program courses:

## First year

Fall
MATH 131 and CS 101
Spring
MATH 232
Second year
Fall
MATH 233, 332
ECON 202
Spring
ECON 203
MATH 322
MATH 425 (even years)
Third year
Fall
MATH 441, 451
Spring
MATH 442, 432
ACCT 221
Fourth year
Fall
MATH 426
FIN 420
OR 380
Spring
MATH 427
STAT 416
Arrangements have been made to waive the stated prerequisites to OR 380 and FIN 420. The economics courses may be counted toward the social sciences requirement. It is essential that students consult with the program adviser on a regular basis so that they can meet the program requirements within the normal time frame.

Minor (22 hours)
MATH 131, 232, 233 and 332 (16 hours)
Two electives at the 300 - or 400 -level* ( 6 )

## Core program

The following is recommended for majors and minors in mathematics and statistics:
First year
MATH 131, 232 (10)
Second year
MATH 233, 332 and 322 and/or 337 (912)

## Other programs

A Bachelor of Arts in mathematics is offered in the College of Arts and Sciences and programs in mathematics education are offered through the College of Education and Human Development.
*except MATH 222, 226, 395, 414, 470, 489, 495
**some of these courses may not be offered every year

## Materials Science

104 Overman Hall, 372-2421

## Minor only

This curriculum is primarily intended as an option for students who major in biology, chemistry, geology, mathematics, physics, and technology. The basic prerequisites for the survey courses (MATS 401/402) include one year of physics and chemistry, or permission of the instructor. The program includes 20 semester hours of specialized coursework in materials:

MATS 401, 402, 470 (10)
MFG 329, 438 (6)
BIOL 446 (4)

## Physics

104 Overman Hall, 372-2421
Major (32 hours) (minor also required) PHYS 211, 212, 301 and 311 (14) PHYS 307, 317, 401 and 418 (11) PHYS 429 or 470 (1) PHYS 416, 417 (6)
It is recommended that a student majoring or minoring in physics take the following:

CHEM. 125, 127 and 128 (10)
MATH 332 (3)
For students expecting to continue on to graduate school, the following courses are recommended:

PHYS 303, 309, 402 and 419 (12)
Microcomputer systems specialization
A student may elect to specialize in microcomputer systems. The following courses should be included as part of the major: PHYS 303, 428 and 429 (9)
In addition, the following courses must be taken:

CS 101 (3)
CS 207, 208, 205 and 307 (12)
MATH 332 (3)
No minor is required.

## Applied physics specialization

A student may elect to specialize in applied physics, with emphasis on the areas of current interest in the modern optics and solid state fields. The following courses should be included as part of the major:

PHYS 303, 306, 309, 410 or 411, 428 and 429 (18)
In addition, the following courses must be taken:

CS 101 (3), 207 (3)
CHEM 125, 127 and 128 (10)
DESN 243 (3)
Minor (22 hours)
PHYS 211, 212, 301 and 311 (14)

## PHYS 317 (i)

Cher 300-and 400 - level courses in PHYS (7)

## Other programe

Programs in physics are also available though the College of Education and Human Dovalopment.

## Psyehology

132 Psychology Bulding, 372-2301
Hifijor (30 hours) (minor also required) 30 hours in PSYC and either 24 hours in cognate fields or a minor in a second department. The 24 hours in cognate fields should be selected, after consultation with an adviser, fiom ai least three of the following tields: BIOL, CHEM, CS, ECON, MATH, PHII, PHYS, SOC. Two courses that are used to fultll group requirements may also be applied to this minor.

Note: The psychology department requirements differ from the arts and sciences group requirements in the following aspects:

## Groqup Itif fsculonce and

(manthemeticst:
a minimum of 43 hours must be completed in two or more of the following felds: BIOL, CHEM, CS, GEOL, MATH, PHYS, PSYC. No more than 24 iours of PSYC may be applied to this group. Each student must demonstrate proficiency equivalent to completion of MATH 232. Additional preparation in MATH is advisable for the student planning to do advanced graduate work in psychology.
©row IV (socinal sciences):
we PSYC courses may be applied.
Group V (humanities):
courses in logic and the philosophy of science are recommended.
riss year
PSYC 201 and 270 (8)
sebond year
PSYC 290 and 370 (8)
PSYC eleclives
Thirc year
Two 300-level PSYC laboratory courses
PSYC electives
Fowth year
. PSVC electives
Mimor (20 hours in PSYC)

## Dher programe

The Eachelor of Science program in psychology is designed for the student who is preparing for graduate study. There is also a Bacheior of Arts program in psychology ofiored by the College of Arts and Sciences pilmarily designed for the student interested in psychology as the focus of a liberal oducation. Other programs in psychology are available through the College of Education and Himan Development.

## Science

205 Administration Building, 372-2015

## Minor only

This minor is offered for the student who receives the Bachelor of Science degree. In place of a conventional minor a student may bring the total in Group III (science and mathematics requirement) to 53 hours by following a program approved by the major adviser. No more than 33 hours in the major field may be applied to this requirement.

## Scientific and Technical Communication <br> 218A University Hall, 372-2576

Major (57-63 hours) (minor not required) The program for the Bachelor of Science in scientific and technical communication is the same as that for the Bachelor of Arts described on page 49 , including the Arts \& Sciences 250 requirement, except that appropriate courses from the science or technology cognate and from the computer science/technology group may count toward the 45 -hour Group III (Mathematics and Sciences) degree requirement for the bachelor of science degree. A plan for these courses is worked out in consultation with and approval of the program adviser. Admission to the major requires adviser approval.

Before being fully accepted as a scientific and technical communication major, the student must have completed 30 hours of coursework and achieved an overall grade point average of 2.7; waivers of the grade point requirements may be granted on the basis of the student's unique educational or work experience.

## Minor

See description under Bachelor of Arts Degree.

## Statistics

4.50 Mathematical Sciences Building 372-

2636
Major (34 hours) (minor also required)
MATH 131, 232, 233 and 332 (16)
MATH 441 and 442 (6)
Math 434 or 465 (3)
Three electives chosen from the following list with at least two from statistics (9):
STAT 402, 406, 408, 412, 414, 416
MATH 432, 445, 447, 451, 461
CS 440, 442
Minor (19 hours)
MATH 131, 232, 233 (13)
MATH 441 and 442 (6)
Recommended electives from MATH 332 , 445,447 , STAT 402, 406, 408, 412, 416

## Other programs

Siudents may complete a Bachelor of Arts degree with a major or minor in statistics by completing the requirements above and the degree requirements for the BA degree.

## 

## Bachelor of Liberal

## Studies Degree

205 Administration Building, 372-2015
The Bachelor of Liberal Studies degree program is one option available to the student whose interests extend beyond a single academic major or more traditional interdeparimental program. The degree's Hexibility may make it an appropriate option, for example, for nontraditional students who enroll only in evening courses.

1. A fully admitted student at the University may be evaluated for admission to the BLS program if she/he has:
a. Completed no less than 30 semester hours;
b. A minimum GPA of 2.25 ;
c. At least 45 semester hours of coursework remaining to be completed before graduation;
d. Subrnitted the application for admission into the BLS degree program within the first 14 days of the semester in which the last 45 hours of the degree program are begun;
e. Submitted a personal essay of three to five pages which articulates specific correspondences between the student's long-and short-term goals and objectives and the proposed curriculum;
f. Completed English 112;
g. Removed all high school deficiencies (if appropriate);
h. Completed the University's general education program (page 9);
i. Students enrolled in other colleges at BGSU must meet with an adviser at the time application is made.
2. A BLS degree program may include within the 122 hours requlied for graduation no more than 27 hours within any one department in the College of Arts and Sciences.
3. To be eligible to graduate in the BLS degree program, a student must have: a. Met all of the requirements set forth in section 1 above and have been admitted to the program;
b. Completed 100 hours of coursework within the college;
c. Met all of the University's requirements for a bachelor's degree;
d. Followed an approved program of study which is consistent with his/her original application to the program; e. Satisfactorily completed a minimum of 122 hours with the last 30 hours in residence at BGSU.

# Bachelor of Fine Arts egree 

Each student must complete the degree requirements listed below, preferably in the freshman and sophomore years, and must satisfy the requirements for a major in creative writing and a minor in an area of specialization. Major courses may not be taken $\mathrm{S} / \mathrm{U}$.

## Degree Requirements

## Group I: English composition

Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours.)

## Group II: Foreign languages

Each student is required to demonstrate a proficiency in a language by one of the options listed below:

1. Graduating from a high school where all instruction was conducted in a language other than English; or
2. Passing a proficiency examination in the language on the 202 course level; or
3. Having completed four years of one language in high school; or Having completed one of the departmental options listed below ( 14 hours minimum in same language area, or fewer by advanced placement).

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

## German, Russian, East Asian Languages

(Chinese, Japanesel
Completion of GERM 101 and 102 plus a minimum of six additional hours from: GERM 117, 118, 201, 202, 217, 218, 231 , 331 and/or GERM 315, 316, 260; or
Completion of CHIN 101, 102, 201 and 202; or
Completion of JAPN 101, 102, 201 and 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from. RUSN 201, 202, 215, 216, 313, 317, 319, 331 and/or RUSN 312.

Romance languages (French, Greek,
Italian, Latin, Spanish)
Option I
FREN 101, 102, 201 and 202; or GRK 101, 102, 201 and 202; or ITAL 101, 102, 201 and 202; or LAT 101. 102, 201 and 202; or SPAN 101, 102, 201 and 202.
tion II: one of the following:
FREN 101. 102, 201 and 212; or
GRK 101, 102 and two of CLCV 241, 242, 245; or

LAT 101, 102 and two of: LAT 201, CLCV 241, 242, 245; or
SPAN 101, 102, 201 and 212.
A student may transfer at any point from option I to option II, but not vice versa.
Course 202 is required for admission to $300-$ level courses.

Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.

## Group III: Mathematics and computation and natural sciences

 Each student must complete at least two courses elected from the general education program including at least one course approved for laboratory credit from a list of approved courses printed in the College of Arts and Sciences Handbook.
## Group IV: Social sciences: economics, ethnic studies, geography, history, political science, psychology, sociology

Each student must complete one course in addition to the general education program in one or more of these subjects; A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.

Group V: Humanities: art, art history, English, music composition and history, philosophy, popular culture, telecommunications, theatre Each student must complete three courses in addition to the general education requirements. Of the five total required, courses must be chosen from at least four of the above disciplines. Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V. One course taken in the student's major may be counted in this group. A list of courses approved for the Group $V$ requirement is printed in the Coilege of Arts and Sciences Handbook.

## Creative Writing

104 Hanna Hall, 372-8370
Enrollment in the creative writing major is dependent upon an ACT score of 22 or higher in English, or consent of the creative writing staff. A creative writing major must: 1) produce a senior thesis, 2) give a senior reading of his/her thesis work.

Major (37 hours) (minor required)
ENG 208, 209, 308a, 308b, 407a and 407b (18)
ENG 205, 206 (or ENG 201) (4)
ENG 261 or 262 (3)
ENG 320, 323, 330, 333 (12)
Minor (20 hours)
ENG 208, 209, 308, 407 (12)
ENG 205 or 206 (2)
ENG 320 or 323 (3)
ENG 330 or 333 (3)

## Bachelor Of Arts In Communication Degree

The requirements for the degree of Bachelor of Arts in Communication (BAC) include completion of the requirements for the baccalaureate listed on page 5 and;

1. Completion of the degree requirements in the six areas listed below.
2. Completion of a specialized program in theatre as defined below.
3. Major courses may not be taken S/U.

## Degree Requirements

## Group I: Communication

Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 10.) IPC 102, THEA 202 and IPC 201 are also required.

## Group II: Foreign languages

Each student is required to demonstrate a proficiency in a language by one of the options listed below:

1. Graduating from a high school where all instruction was conducted in a language other than English; or
2. Passing a proficiency examination in the language on the 202 course level; or
3. Having completed four years of one language in high school; or
4. Having completed one of the departmental options listed below ( 14 hours minimum in the same language area, or fewer by advanced placement).

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

German, Russian, East Asian languages
(Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from GERM 117,.118, 201, 202, 217, 218, 231, 331 or GERM 260, 315, 316 or
Completion of CHIN 101, 102, 201, 202; or
Completion of JAPN 101. 102, 201, 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 201, 202, 215, 216, 317, 319, 331 and/or 312, 313.

Romance languages (French, Greek, Italian, Latin, Spanish)
Option I
FREN 101, 102, 201 and 202; or
GRK 101, 102, 201 and 202; or
ITAL 101, 102, 201 and 202; or
LAT 101, 102, 201 and 202; or
SPAN 101, 102, 201 and 202
Option II: one of the following: FREN 101. 102. 201 and 212; or GRK 101, 102, and two of GRK 201,

CLCV 241, 242, 245; or

LAT 10i, 102 and iwo of LAT 201, CLCV 241, 242, 245; or
SIPAN 101, 102, 201 and 212
A student may transfer at any point from option I to option Il but not vice versa. Course 202 is required for admission to $300-$ level coursos.

Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.

## Cultural experience

Those students who have completed two years of one foreign language in high school may select a planned program of at least four courses involving study of foreign or . ethnic cultures drawn from a list approved by the major department.

Group 期: Mathematics and science Each studeni must complete at least two courses elected from the general education program including at least one course approved for laboratory credit from a list of approved courses printed in the College of Arts and Sciences Handbook.

## Group HY: Social sciences:

 economics, ethnic studies, geography, nistory, political science. psychology, sociologyEach student must complete one course in addition to the general education program.
Two depariments must be represented. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook
 literature (American, English or foreign), filmi, music, philosophy pepular culture; theatre
Each student must complete one course in addition to the general education program. Two departmenis musi be represented. A list of courses approved for Group $V$ requirements is printed in the College of Arts and Sciences Handbook. Foreign language courses nunbered 201, 202, 212 apply to group II, not group $V$.

## 6rcup vis Eognate studies experience

Students must complete, as specified by the nature of their specialized program, six additional courses from at least two of the above groups.

## Swecilalizeai programs

Each student is expected to present a program of specialization in communication study from existing structured options (ihseatre, telecommunications, interpersonal communication), or a previously approved individual program to approximate the equivalent of a range from 42-54 hours.

## 踓erpersonal Communication

See School of Communication Studies.

## Telecommunications

See School of Communication Studies.

## Theatre

322 South Hall, 372-2222
All BAC students with a specialization in theatre must take the following theatre core courses: THEA 201, 347, 348, 460, 498, 146( 139), or 346 (339) ( 2 hours), 110/310/449/ 490 ( 2 hours): total core 18 hours. Students will also follow a specialized concentration in either:
Periormance Studies: THEA 241 or 340 , 341 or 449,243 or 244,302, POPC 220, ENG 385, and TCOM 261 (18 hours).
Acting/Directing: THEA 241,243 or 244 , $341,344,345$, or 342 or 490 (Stage Management) or 395 (Voice \& Movement) total 18 hours.
Design/Technical Theatre: THEA 243, 244, 266, 341, ART 103, THEA 343 or 349,466 Scene Design) total 18 hours.
In addition, a support field of at least 12 hours outside of the department is required.

## Other programs

Programs leading to the Bachelor of Ar's degree also are offered by the College of Arts and Sciences.

## University Theatre

The University Theatre serves as a laboratory for University students interested in theatre. The University Theatre presents approximately twelve productions during the academic year. Plays and musicals that are presented represent a wide range of dramatic literature in a variety of production styles. The productions are presented in the Eva Marie Saint Theatre and the Joe E. Brown Theatre, both in University Hall. Open auditions are held for all productions and the entire University community is invited to participate. Opportunities are available for students to work in all aspects of theatre production from management and promotion to acting, directing, designing and crew work.

The theatre department offers talent scholarships in acting, forensics and technical theatre to qualified undergraduates. The scholarships are awarded on a competitive basis with students submitting applications, letters of recommendation and doing a live audition or interview. Students interested in obtaining a talent scholarship audition form should contact the theatre office in 322 South Hall.

The theatre program also sponsors the Huron Playhouse each summer. Students must audition to be considered for membership in the company. Each year the Playhouse presents five plays and musicals during the eight-week season. The Playhouse provides students with a full range of summer stock experience.

The theatre program is accredited by the National Association of Schools of Theatre.

## Preprofessional Training

The College of Arts and Sciences provides four kinds of preprofessional training:

## Arts-Professional Curricula

These are offered in cooperation with the professional schools and colleges of other institutions of higher learning. The sfudent spends three years at Bowling Green before entering a professional school. Upon satisfaciory completion of the first year in the professional school, a bachelor's degree is granted from Bowling Green.

## Preprofessional Preparation

From two to three years of preprofessional study may be completed at Bowling Green. The student then transfers to a professional school or college to complete a professional program.

## Combined Curricula

The student may obtain both an arts and sciences degree and an education degree at Bowling Green by following this program.

## Combined Baccalaureate-Master's

 ProgramBy following this program, the student may finish the coursework for a bachelor's degree in less than four complete years and is prepared for early enrollment in a graduate program.

A student who expects to receive a degree by completing one of these curricula must meet all of the requirements for the degree inclucing major, minor and group requirements.

## Arts-professional Curricula

It is strongly recommended that the student who expects to enter a professional school first complete a four-year course in the College of Arts and Sciences. A student may desire, however, to secure the Bachelor of Arts or Bachelor of Science, as well as a professional degree, but may be unable to give the time necessary for the completion of both programs. Therefore, combination arisprofessional curricula are offered.

Combination curricula are offered in cooperation with the protessional schools and colleges of other institutions. These enable the student to shorten the time required for securing the two degrees by substituting the first year of work in a professional college for the fourth year of the course in arts and sciences. These courses vary in length from five to seven years-the first three years being taken in the College of Arts and Sciences and the remainder in an approved protessional school. Upon the satisfactory completion of the work of the first year in the professional college, the student is granted the degree of Bachelor of Arts or Bachelor of Science by Bowling Green.

Permission to graduate from one of these combination curricula must be obtained from the dean before the end of the junior year. A
student in these curricula must:

1. Earn a minimum of 92 hours either in residence or by advanced placement; at least 60 hours must have been taken at Bowling Green in the student's last two academic years prior to entering the professional school;
2. Earn a.grade point average of at least 2.5 in all courses undertaken in residence;
3. Meet the requirements of the degree sought;
4. Meet the major and minor requirements of the curriculum selected.

## Other programs

A combined arts-professional curriculum is also offered through the College of Education and Human Development.

## Preparation for Dentistry

503 Life Sciences Building, 372-8361
Admission to dental school is selective and based upon scholarly achievement and aptitude as indicated by scores on the Dental Aptitude Test, which is generally taken in the spring semester of the student's third year of college. The predental student should select an academic program that provides for an alternate career should acceptance into dental school be denied. The Bachelor of Science degree program can be planned to meet all course requirements for dental school and still provide time for sufficient lectives in other areas so that the student may attend graduate school or pursue new career alternatives. There are no preferred majors for entrance into dental school, although students generally choose biology or chemistry.

Predental students are encouraged to meet frequently with an adviser to ensure progress in meeting the designated prerequisites, to prepare for the Dental Aptitude Test and to make application to dental school.

Recommended course sequence:
BIOL 204, 205, 350, 352, 431 and 432
CHEM 125, 127, 128 or CHEM 135, 137, 138; CHEM 201 for those having taken CHEM 127.
CHEM.341, 342, 308, 309 (plus 445, 446, 447 if CHEM major)
PHYS 201, 202 or 211 and 212
MATH 130 or 128 or 129 (by placement) and 131 and 232 depending on major
A student should take the required
courses to complete a major and a minor, as well as the degree requirements for the particular degree program selected, and electives to total 122 hours. A science minor may be desirable.

## Preparation for Law

206 Williams Hall, 372-2030
accredited law schools in Ohio, like most accredited schools throughout the country, require a college degree for admission. A college degree is also a prerequisite to
taking the Ohio Bar Examination and the bar examinations for most other states.

Beyond the minimum requirements for admission, law schools emphasize the value of a broad, general program of arts and sciences for the prospective law student. Above all, they stress the importance of acquiring certain intellectual skills and abilities rather than a particular body of information. Foremost among these skills are facility in writing and speaking, logical reasoning and the use of abstract concepts. Because the student can develop these skills in a variety of courses, there is no basis on which to prescribe a rigid and detailed "prelaw curriculum" or any particular major.

Law schools, however, uniformly emphasize the special value of courses in which considerable writing is required. In addition, courses in American government help acquaint the student with the basic legislative, administrative and judicial processes of our society. Business and economics courses often provide an understanding of business and financial concepts and terms with which the lawyer may deal. Other disciplines, such as history, philosophy, psychology and sociology, offer concepts, information and perspectives that are important in dealing with modern legal issues. Finally, prelaw students may wish to take a course taught by case method in order to discover if their aptitudes lie in this direction.

## Preparation for Medicine

503 Life Sciences Building, 372-8361 or 141 Overman Hall, 372-2031

Admission to medical school is selective and is dependent upon scholarship and aptitude as indicated by the scores attained on the Medical College Admission Test (normally taken during the spring semester of the student's third year) and by other criteria. The student should include in the premedical program a course of study to prepare for admission to medical school and for admission to an appropriate graduate school or for an industrial, government or teaching position in case the first choice cannot be realized. To meet the requirements for admission to most medical schools, the Bachelor of Science curriculum can be modified to include the required courses and still provide the student with enough depth in at least one area for graduate work or for career opportunities if medical school is not attended. There is no preferred major for entrance into medical school. Generally, either chemistry or biology is chosen by the premedical student, but other majors are possible.

The premedical student is urged to confer frequently with the adviser, particularly with respect tọ planning prerequisite courses for the Medical School Admission Test and for meeting the admission requirements of the medical school of the student's choice.

## Recommended course sequence

BIOL 204 and 205 (10)
CHEM 125, 127, 128, or CHEM 135, 137, 138; CHEM 201 for those having taken CHEM 127
CHEM 341 and 342 (10)
MATH 130 or 128 or 129 (by placement) and 131 (232 optional depending upon major) (7-13)
PHYS 201, 202 or 211 and 212 (10)
ENG 112 (3)
In addition, a student should plan to take the required courses to complete a major and a minor, as well as complete group requirements for the degree sought. Total: 122 hours. Note: the science minor may be advantageous.

## Preprofessional Preparation Preparation for Engineering <br> 104 Overman Hall, 372-2421

The two-year curriculum outlined below closely parallels the introductory coursework of engineering schools and is designed for the student who expects to transfer to a college of engineering at the end of two years. Since the requirements in engineering colleges and in different fields of engineering vary considerably, the student should consult with the preengineering program adviser early in the freshman year in order to plan a schedulle to meet the requirements of the institution and branch of engineering in which he or she expects to receive a degree.

Engineering is presently a high-opportunity career area, and a preengineering program at Bowling Green offers several advantages, especially for those students who are uncertain about an engineering specialty. However, students should be advised that all engineering specialties require a high aptitude for mathematics and quantitative reasoning. In order to complete the curriculum below in two years, a student must be qualified to enroll in MATH 131 during the first semester of the freshman year; this normally requires four years of high school mathematics and good mathematics aptitude.

## Recommended course sequence

MATH 131, 232, 233 and 332 (16)
CHEM 125, 127 and 128 or 135, 137 and 138 (10)
PHYS 211, 212, 301 and 313 (14)
CS 101 (3)
CS 205 (3)
DESN 104 (3)
ENG 112 (3)
Electives

## Preparation for Mortuary Science

503 Life Sciences Building, 372-8361
The Board of Embalmers and Funeral Directors of Ohio requires a minimum of 60 semester hours in courses to be eligible to register with the board prior to entering a college of mortuary science. At least 30
hours must be in the following subject areas, with a minimum hourly distribution of English ( 8 hours), science ( 6 hours), social science ( 8 hours), fine or applied arts ( 6 hours). In addition, al least 3 hours of psychology and 3 hours of speech communication (offered in the department of interpersonal communication) are required. Students wishing to practice in another state should contact its licensing authority. Information about colleges accredited by the Commission of Schools of the American Board of Funeral Gervice Education can be obtained by writing to the agency at 201 Columbia St., P.O. Box 2098, Fairmont, WV 26554.

The Cincinnati College of Mortuary Science offers the Bachelor in Mortuary Science degree. Students planning to transfer into this program after two years at Bowing Green must take at least 10 hours of English composition and literature; 12 hours of social science, including required psychology and sociology; 12 hours of natural science/math, with biological sciences and chemistry recommended; 12 hours of humanities and the arts, including beginning drawing/art, sculpting and theatre arts recommended, and IPC 102 required, as part of the 60 -hour ruinimum requirement to enter. For more information, write to the American Board of Funeral Service Education, 14 Crestwood Drive, Cumberland, ME 04021.

## Preparation for Occupational Therapy

205 Administration Building, 372-2015
Occupational therapy-an auxiliary medical service in which normal activities are used as remedial treatment in the rehabilitation of palients-is being used increasingly in hospitais, schools, rehabilitation centers and related institutions. Such therapy is prescribed by physicians and applied by trained therapists as part of the freatment of an aduit or a child in the areas of orthopedics, psychiatry, tuberculosis, general medicine and surgery.

In preparing for a career in occupational therapy, the student should complete two years of preprofessional courses at BGSU, two years of academic instruction in an approved professional school and 10 months of clinical training. Ohio institutions offering bachelor's degrees in occupational therapy include Cleveland State and Ohio State unversities. Professional occupational therapy programs differ greatly in preprofessional course requirements. While advising of a general nature is available through the College of Arts and Sciences, the student should contact the institution in which admission will be sought to ensure that specific preprofessional and admission criteria are met.

## Preparation for Optometry

503 Life Sciences Building, 372-8361 or 141 Overman Hall, 372-2031

Requirements vary for admission to the schools and colleges of optometry. Typically, they include courses in English, mathematics, physics, chemistry and biological sciences. Requirements of specific schools should be examined before planning the coursework for the sophomore year. A list of accredited schools and colleges of optometry in the United States can be obtained from the American Optometric Association, 243 N . Lindbergh Blvd., St. Louis, MO 63141.

The following two-year pattern coordinates with the program of the College of Optometry of Ohio State University. Many students find that three or four years of preoptometry are necessary before gaining admission.

Recommended course sequence: (62 hours)

CHEM 125, 127, 128, 341 and 342 (20)
PHYS 201 and 202 (10)
BIOL 204 and 205 (10)
BIOL 313 (4)
ENG 112 (3)
MATH 130 or 128 or 129 (by
placement) and 131 ( 8 )
PSYC 201 (4)
Electives
The amount of foreign language to be taken depends upon the requirements of the professional school and the student's high school preparation. Students who do not need foreign language courses should substitute those courses which meet the requirements of the professional school they plan to enter.

## Preparation for Osteopathy

141 Overman Hall, 372-2031
The requirements and recommendations for entrance to schools of osteopathy are essentially the same as those for medical school.

## Preparation for Pharmacy

$14 \dagger$ Overman Hall, 372-2031
All accredited colleges of pharmacy require five years of study to qualify for the pharmacy degree. One or two years of the fiveyear requirement may be satisfied at this University. The state boards of pharmacy usually require a period of practical experience in pharmacy. Students should request information concerning requirements for a certificate to practice pharmacy from the board of pharmacy in the state in which they wish to practice. In Ohio this information may be obtained from the secretary, State Board of Pharmacy, Wyandotte Building, 21 West Broad St., Columbus, OH 43215.

Since colleges of pharmacy vary in their requirements, prepharmacy students should ascertain the requirements of the school they plan to enter before selecting the courses for
the second year. The program outlined below prepares the student for transfer to the College of Pharmacy at Ohio State Universit after one year.

A list of accredited colleges of pharmacy may be obtained from the American Association of Colleges of Pharmacy, 4630 Montgomery Ave., Suite 201, Bethesda, MD 20014.

## Recommended course sequence

( 33 hours)
BIOL 204 and 205 (10)
ENG 112 (3)
MATH 130 or 128 or 129 (by placement) and 131 (8)
Electives chosen from social sciences, literature and philosophy
CHEM 125, 127 and 128 (10)
Some pharmacy schools require additional calculus.

## Preparation for Veterinary Medicina

112 Hayes Hall, 372-2031 or
503 Life Sciences Building, 372-8361
Colleges of veterinary medicine require two years of preveterinary medical work for admission; however, most students find that three or four years of preveterinary study are necessary. The two-year preveterinary medical program which follows meets the requirements of the College of Veterinary Medicine at Ohio State University. Students should obtain information as early as possible about the requirements of the school where they plan to apply. A list of accredited colleges of veterinary medicins in the United States can be obtained from the American Veterinary Medical Association, 900 N. Meacham Rd., Schaumberg, il 60172.

## Recommended course sequence

(62 hours)
BIOL 204 and 205 (10)
BIOL 313 (4)
BIOL 350 (3)
ENG 112 (3)
CHEM 125, 127 and 128 or CHEM 135, 137 and 138 (10)
CHEM 341 and 342 (10)
CHEM 308 or 445 (3)
MATH 130 (3) or MATH 128 (5) (by placement)
PHYS 201 and 202 (10)
Electives selected to meet requirements of the college of veterinary medicine to be entered.

## Combined Curricula

## Arts-Education Curriculum

205 Administration Building, 372-2015
The student who desires to take an arts and sciences degree to qualify for certification to teach in the public schools may take work in education after graduation or qualify for the combined degree program outlined here. On the basis of the accumulative grade point
average, a student may register in both the College of Education and Human Developpent and the College of Arts and Sciences br the combined degree as soon as eligible. The student in the dual-degree program leading to the Bachelor of Arts or Bachelor of Science degree from the College of Arts and
Sciences and the Bachelor of Science in
Education degree from the College of Education and Human Development must:

1. Secure permission of the deans of both colleges before the end of the junior year;
2. Complete the requirements of both colleges for the degrees sought;
3. Earn at least 142 hours including education courses.
By careful selection of electives, the program in both colleges can be completed in eight semesters plus one summer. The superior student may increase the number of subjects to be carried each semester and complete the program in less time.

## Other dual-degree programs

205 Administration Building, 372-2015
The student who wishes to earn a dualdegree involving the College of Arts and Sciences and another undergraduate college within the University may do so by adhering to the following requirements:

1. Secure permission to pursue a dual degree program from the offices of both deans before the end of the junior year: Meet the group requirements of both colleges;
2. Earn a minimum of 142 semester hours for graduation (20 hours beyond the singledegree requirement).

## Intracollege Curricula and Dual <br> Degrees

A candidate for a degree from the College of Arts and Sciences who desires a second degree within the College of Arts and Sciences may take work after graduation to complete second degree requirements or qualify for the dual-degree program prior to graduation. Students desiring a dual degree must:

1. Secure permission of the dean of the College of Arts and Sciences;
2. Complete the requirements for a major and minor in each degree independently. The courses counted toward a major and minor (or concentration) for the first degree cannot apply toward the major or minor of the second degree; and
3. Complete at least 32 hours minimum of credit beyond the hours required for a single degree major.

## Certification to Teach in the Public Schools

365 Education Building, 372-7372
student holding a bachelor's degree in arts id sciences who wishes to become certified to teach in the public schools of Ohio should contact the Program Advisement and

Teacher Certification Office, 365 Education Building. Both specified coursework and satisfactory completion of the stateprescribed examinations are required.

## Combined Baccalaureate-Master's Program in Chemistry

110 Hayes Hall, 372-2031 or
205 Administration Building, 372-2015
The combined baccalaureate-master's program in chemistry offers the well-qualified student the opportunity to complete the Bachelor of Science degree in three years and the Master of Science degree at the end of the fourth. By completing the two degrees in four years, the student may become better prepared to earn the Ph.D. degree because of the more concentrated background. In addition, a preprofessional student may elect either to complete the three-year bachelor of science program and go directly to professional school or to continue on to earn the master of science degree to prepare for a research-oriented career.

The program is structured on a schedule of four years, including summers. Courses should be carefully chosen so that major and group requirements will be completed on time.

## First year

A first-year student will take two semesters each of chemistry and calculus, will complete the English requirement and take social science and/or humanities courses. In the summer session the student will take either eight hours of German (or Russian) or three hours of quantitative analysis, or both.

## Second year

A second-year student completes two semesters of physics and two semesters of organic chemistry and finishes the requirements in social sciences and humanities. If these have been completed, other courses may be substituted.

## Third year

This year includes two semesters of physical chemistry and electives chosen from biochemistry or advanced organic chemistry. A course in instrumentation or inorganic chemistry completes the undergraduate chemistry major. Some students may choose independent research or other electives such as differential equations. During the third summer, a student begins research and completes the Bachelor of Science requirements.

## Fourth year

Upon admission to the Graduate College, courses in thermodynamics, kinetics, quantum mechanics, reaction mechanisms, inorganic chemistry and atomic and molecular structure are taken. During the fourth year, the student may become eligible for a stipend as well as tuition waivers for assisting in one or more undergraduate laboratories.

In the final summer, the student would normally be expected to complete a formal thesis as part of the master of science program (plan I). Under certain circumstances, however, a student may, by early consultation with an academic adviser, elect the nonthesis option (plan II) and still. complete the program within the four-year period.

This program also offers students the option of studying off campus for a semester in a governmental or industrial laboratory, which would likely be done during the summer between the third and fourth years.

## School of Art

1000 Fine Arts Center
372-2786
Changes which supersede the printed catalog can be found in the online eatalog at http://www.bgsu.edu/catalog/

## 

## 既achetor of Fine Arts

## Togiree

The School of Art is accredited by the Nattonal Association of Schools of Art and Design and offers several degree options in the visual arts. Central among them is the Bachelor of Fine Arts degree. The requirements for the B.F.A. degree, in addition to the general requirements listed on page 5 , include the completion of:

- Degree requirements;

2. An art core;
3. A major in either two-dimensional studies or three-dimensional studies including: a. 15-hour specialization in either ceramics, computer art, drawing, fiber/ fibric, glass, jewelry/metalsmithing, painting, photography, printmaking or soulptura.
b. 9 -hour art minor, 12 hours of support courses in art, and senior studio seminar (3); OP
a major in graphic design studies including:
a. pre-major portolio review
b. 27 -hour specialization
c. 21 hours of support courses
4. Major courses may not be taken $\mathrm{S} / \mathrm{U}$.

## Degree Requirements

Group in Engifish composition
Completion of ENG 112, or demonstration by examination of proficiency in written expression equivalent to that attained by a student who completes ENG 112. (A penally is imposed If ENG 112 is not completed within the first 60 hours. See page 8.)

## Group ${ }^{\text {Hit moreign languages }}$

Each student is required to demonstrate a proficiency in a language by one of the options listed below:

1. Completing a two-year study of one language in high school: or
2. Passing a proficiency examination in the languege on the 102 course level; or
3. Having graduated from a high school where all instruction was conducted in a language other than English; or
4. Having completed one of the departmental options listed below (8 hours minimum in same language area, or fewer by advance placement)

Chinese, German, Japanese, Russian Completion of CHIN 101 and 102; or GERM 101 and 102; or JAPN 101 or 102; or RUSN 101 and 102.

French, Greek, Italian, Latin, Spanish Completion of FREN 101 and 102; or GRK 101 and 102; or ITAL 101 and 102; or LAT 101 and 102; or SPAN 101 and 102.

The student who must take two courses of foreign language and who follows a program in aerospace studies or in milltary science needs to take more than the usual time to complete this degree.

## Group Ill: Science, mathematics; computer science

Each student must complete two courses from the general education program including, one course approved for laboratory credit, listed in the College of Arts and Sciences advising handbook.

## Group IViv Social science

Each student must complete one course in addition to the general education program. Approved ethnic studies courses are listed in the College of Arts and Sciences advising handbook.

## Group V: Arts and humanities

Each student is required to complete one course in literature (American, English or foreign), and two additional courses from the general education program

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.
B.F.A. students are encouraged to elect a course in aesthetics, art criticism or film criticism. Students may count two required art history courses from the major in this area. Approved courses are listed in the College of Arts and Sciences advising handbook

## Art Majors

1000 Fine Arts Center, 372-2786
The School of Art offers studio majors in the areas of two-dimensional studies, threedimensional studies and graphic design studies. The majors in two-dimensional studies and three-dimensional studies require completion of the art core, a 15 -hour specialization, a 9 -hour art minor and 12 hours of support courses and senior studio seminar. The major in graphic design studies requires completion of the art core, a pro. major portfolio review, a 27 -hour specialization and 21 hours of support courses. A student should consult each semester with their respective B.F.A. adviser in the School of Art concerning progress and course sequence. Courses taken as part of the art core may not be considered part of a specialization, minor or support core.

## Two-Dimensionall Stedies

Art Core (48 hours)
Foundations: ART 102, 103, 112 (9)
Art History: ARTH 145, 146, wo 400level ARTH electives (12)
Studio: ART 205, 261 ; four from ART 277, 325, 371, 373, 390, APTD 211; three from ART 263, 365 or 366, 240 or 256,320 or 321 (27)

Specializations ( 15 hours)
Computer Art: ART 391, 392, 490, 491, elective
Drawing: ART 206, 305, 305, 405, 405
Painting: ART 371, 372, 372, 471, 471 or ART 373, 374, 374, 473, 473
Photography: ART 325, 326, 425, 425, 426
Printmaking: APT 277, 377, 377, 477, 477

Minor (9 hours, three courses from one area) ${ }^{\text {" }}$

Support Courses (12)*
Senior Studio Seminar (3)
*Courses comprising the minor and support core can be selected from any area of the School of Art in consultation with the respective major advise:

## Three-Dimensional Studies

Art Core (48 hours)
Foundations: ART 102, 103, 112 (9)
Art History: ARTH 145, 146, two 400level ARTH electives (12)
Studio: ART 205, 261; four from ART 277, 325, 371, 373, 390, ARTD 211; three from ART 263, 365 or 366, 246 or 256,320 or 321 (27)

Specializations ( 15 hours)
Ceramics: ART 263, 363, 463, 463, elective
Fiber/fabric: ART 365, 366, 465, 465, 466
Glass: ART 246, 256, 356, 346 or 376 or 456, 467
Jewelry/Metalsmithing: ART 321, 322, 322, 421, 421
Sculpture: ART 361, 361, 461, 461, 461
Minor ( 9 hours, three courses from one area)*

Support Courses (12)*
Senior Studio Seminar (3)
*Courses comprising the minor and support core can be selected from any area of the School of Art in consultation with the respective major adviser.

## Graphic Design Studies

Art Core (39 hours)
Foundations: ART 102, 103, 112 (9)
Art History: ARTH 145, 146, two 400level ARTH electives (12)
Studio: ART 205, 261, 325; two from ART 277, 371, 373, 390; one from ART 263,365 or 366,246 or 256,320 or 321 (18)

Specialization (27 hours)
(Pre-Major) ARTD 211, 212 (6)
(Pre-Major) Portfolio Review*
ARTD 311, 312, 319, 411, 412, 413, 414 (21)
*Students may become pre-graphic design candidates at any time during their academic program. Following Art Foundations (ART 102, 103, 11.2), pre-majors will take ARTD 211 and ARTD 212. At the conclusion of the ARTD 212 course, all pre-graphic design candidates will take part in the Design Portfolio Review process (scheduled each semester) in order to be officially admitted into the graphic design specialization. Accepted students may then continue with the necessary course requirements to complete the B.F.A. degree in graphic design. All transfer students will be designated as pre-graphic design candidates and must complete the Design Portfolio Review to be accepted into the graphic design specialization. Non-graphic design majors completing a minor with emphasis in graphic design must follow the same procedure as B.F.A. graphic design majors. Upon cceptance into the program, they will be quired to take ARTD 311 and selected advance courses from the curriculum to complete the minor. Students must declare their status as minors during the portfolio review process.

Support Courses (21 hours)
Selected from an approved list of courses in consultation with the graphic design adviser.

## B.F.A. teacher preparation

The teacher preparation program is available as a combined arts and sciences/education curriculum which leads to the Bachelor of Fine Arts degree with certification to teach in the public schools. It offers in-depth experiences in the studio component of the art education content specialization. Students in the B.F.A. program may qualify for teacher certification through successful completion of the teacher education certification requirements. This combined program will generally require an additional semester to complete. Though it is possible to complete the education requirements in a fifth year of study, it is recommended that B.F.A. students desiring Ohio teacher certification attend to these requirements earlier in their programs.

A student who follows this curriculum registers in both the College of Arts and Sciences and the College of Education and Human Development.

A student should consult each semester with the B.F.A. teacher preparatory adviser in the School of Art concerning progress and course sequence. Courses taken as part of the art core may not be considered part of a specialization, minor or support core. In addition to completion of the art core (48 hours), a two-dimensional or three-dimensional studies specialization (15 hours) and the senior studio seminar ( 3 hours), the following courses are required for teacher certification:

SOC 101*, PSYC 201*, EDFI 302*, POPC elective, PHIL 204**
*Group IV social science requirement
**Group V humanities requirement
Minor (9)
ARTE 252, 352, 452
Support courses (17)
ARTE 407 (3) and ARTE 492/497 (14)
Education core (17-20)
ARTE 382 (3) or EDSE 311 (2).
IPC 102 (3)
EDCI/EDFI 202 (3)
EDFI 402 (3)
EDFI 408 (3)
Math Elective (3-5)

## Related degree programs

The School of Art sponsors Bachelor of Arts programs in art history and art through the College of Arts and Sciences. The school also offers a Bachelor of Science degree in visual arts education in conjunction with the College of Education and Human Development, and a Bachelor of Science degree in art therapy through the College of Health and Human Services.

## Special topics offerings

Periodically the School of Art offers experimental courses in a variety of areas to enhance the established curricula of the various degree programs. These workshops (ART 395, ART 495), taught by both school faculty and invited artists and scholars, have included: computer art, papermaking, illustration, textile printing, photo/print techniques and mural painting. Individual study (ART 470) is also available for students who have completed available course offerings in an area, and have exhibited a marked degree of proficiency and independence in regular coursework.

## Summer and academic year programs in Florence, Italy

The partnership between Bowling Green State University and Studio Art Centers International (SACI) offers a bicultural educational experience for students seeking excellence in studio art instruction and liberal arts subjects in Italy. The program draws upon the rich past of Florence, its resources in museums, architecture, specialists in art fields and wide cultural offerings, while presenting contemporary developments in Italian art and culture through classroom and studio instruction and through field trips. For further information, students are encouraged to contact the program coordinator for SACI in the School of Art.

# School of Commmunication Studies 

Ghanges which supersede the printed catalog can be found in the online catalog at hates//wow.bgsu.edu/catalog/

302 West Hall, $372-6349$
Deparment of Interpersonal Commurication, 303 South Hall, $372-2823$
Department of Jouinallsm, 319 West Hall, 372 -2076
Depatment of Telecommunications, 322 West Hall, 372-2138

## The Fireld of Mass

## Commanication

The study of mass communication encompasses ell of the modern mass communication media-newspapers, consumer magazines, business and industrial publications, technical periodicals, books, trade and professional publications, radio, television, photography, motion pictures, cable television, teletext, videctext, corporate video and satellite transmissions. As a diversified profession, mass communication requires highly trained news reporters and editors for dally newspepers, weekies, the wire services, radio and television; specialists in photojoumalism; public relations practitioners; editors for a wide range of magazines; producers, directors and editors for television and film; writers in special fields such as sctence, business, economics, education, medicine and politics; radio announcers and production experts; broadcast salespersons; autlence researchers; and competent durninisirators to manage the editorial, advertising and business functions of puolications, broadcast stations and other mass communication services.
The student who plans a career in mass communication must have a broad education based on the social sciences, humanities ant natural sciences; understand the social, political and economic roles of the mass medla in a democratic society; be able to read intelligently the scholarly mass communication literature; have superb wring and thinking skills, and be proficient in the professional techniques demanded by employers.

## Majors

Students can major in one of the programs in the Departments of Interpersonal Communication, Journalism or Telecommunications. Major courses may not be taken S/U. Those choosing to major in one of the journalism programs may not also major in a telecommunications program, unless they are willing to extend their education beyond the 122 hours normally required for graduation.

Students planning careers as news writers, reporters, feature writers, sports writers, magazine and newspaper editors, television and radio news directors, photojournalists and public relations specialists usually major in the Department of Journalism.

Students planning careers as television and film producers, directors and editors; broadcast salespersons; radio announcers and production experts; programming researchers; scriptwriters; and on-air personalities usually major in the Department of Telecommunications.

A minor in broadcast meteorology is available to journalism and telecommunications majors. Students take 21 hours consisting of:

GEOG $125,213,303,400,404$ (15)
GEOG 122 or 342 (3)
GEOG 455 or 457 or 490 (3)
For more information contact the geography department, 305 Hanna Hall, 372 2925.

## Campus Media

The BG News, the five-times weekly campus newspaper (214 West Hall, 372-2601), provides opportunities to gain experience in reporting, editing, advertising and management. In addition, students have the opportunity to work on The Key, BGSU's yearbook (28 West Hall, 372-8086). Other publications include a student magazine, Miscellany, and The Obsidian and The Gavel, newspapers aimed at special interests. All these publications are under the supervision of a board of student publications.

Located on the south side of campus, the Tucker Telecommunications Center contains public television station WBGU-TV, and closed-circuit instructional television production and distribution facilities.

The center's staff of 30 full-time professional broadcasters is assisted by graduate assistants, doctoral fellows and more than 50 undergraduate employees.

WBGU-TV, a regional public television station serving northwest Ohio, broadcasts instructional television programs to elementary and secondary classrooms during the day and cultural and public affairs programe to the general public throughout the evening. It is affiliated with the Public Broadcasting Service (the national public television network) and with the Ohio ETV Network. The station's local program production schedule provides student opportunities foi professional production experience in television.

The Closed-Circuit Instructional Telavi. sion Office provides the campus community with telecourses and a variety of other educational television and film materials used by academic departments. A campuswide dual television cable system carries commercial station programs and educa. tional programming to all residence halls. The system also provides opportunity for intra-University communications.

The center's television staff contracts with state and other agencies for production projects, some of which attain nationwide distribution.

Students interested in gaining professional radio experience while studying at Bowling Green have two stations at their disposal. WBGU, the University FM radio station (120 West Hall, 372-2826), broadcasis on 88.1 megahert with 1350 watts. Programming consists of rock, jazz, classical and ethnic music, plus news, sports and public affairs programs. This non-commercial radio station is operated by student volunteers who work with a faculty adviser.

Carrier-current WFAL (120 West Hall, $372-2195$ ) is a student-operated commercial AM radio station broadcasting to residence halls on campus. The station provides communication to and among students while offering commercial programming designed to meet students' interests. The station is heard in the residence halls on 680 AM.

Both WBGU and WFAL are organized and operated according to professional radio station practices and provide students with a wide range of experiences including on-air announcing, news and sports, broadcast sales and promotion, writing and production, audience research and station management.

Students interested in electronic journalism may participate in the Bowling Green Radio News Organization, which supplies news, sports, features and documentaries for the campus radio stations, WFAL-AM and WBGU-FM. They may also participate in the feature and documentary productions of WBGU-TV. Students interested in television news are encouraged to work for BG24 News (372-2997). Broadcast daily from the studios in West Hall, this campus-community television station offers students experience in producing, writing and on-air newscasting. Participation in student publications and in campus-related radio and television stations is not limited to mass communication students.

## Training and facilities

The School of Communication Studies occupies West Hall. Each area of West Hall has been specifically designed to aid in the education of a particular segment of mass communication professionals. For example, the lower floor of the building consists of aboratories and classrooms dedicated to the teaching of film. It contains still photography developing labs, printing labs and color labs and the student yearbook. It also contains super 8 mm motion picture labs. The first floor houses two radio stations, a complete television studio, video editing facilities and a property storage area. The second floor contains modern writing laboratories, three - computer laboratories, a broadcast studio, a student-operated newspaper, an audio-visual classroom, numerous newspaper and magazine layout and paste-up areas and a lounge. The mass communication faculty is housed on the third floor, and that floor also contains several classrooms and a reading room with reference books and periodicals. Modern typesetting, broadcasting, photography, film, audio and video equipment is provided in the various laboratories.

Laboratory fees are charged in many of the skills courses utilizing equipment. A field practice (internship) provides majors with professional training and experience on the staff of a daily or weekly newspaper, magazine, radio or television station, cable television system, college news bureau or public relations department of a business or governmental agency.

## Student organizations

The school has chapters of six national organizations dedicated to professional interest in mass communication fields: Society of Professional Journalists, a society of journalists open to students wishing a professional association; Women In Communications, Inc., an organization dedicated to the professional advancement of women working in the media; Public Relations Student Society of America, an organization affiliated with the national Public Relations Society of America; the International Association of Business Communicators, an association for those employed in communication roles in the business world; the International Television Association, an organization of non-broadcast video practitioners, and a student affiliate of Radio/ Television News Directors Association.

The Department of Journalism also has a chapter of Kappa Tau Alpha, the national ${ }^{1}$. journalism honorary society.

## School requirements

All majors are required to seek program counseling at least once per semester with an academic adviser in the school. The school requires each student to have a junior audit of his/her program before making application for graduation.

Any change in a student's program requirements or course prerequisites must have approval of the director of the School of Communication Studies.

## Department of Journalism

The Department of Journalism is accredited by the Accrediting Council on Education in Journalism and Mass Communication. The department is a member of the Association of Schools of Journalism and Mass Communication, and maintains contacts with numerous professional organizations through individual faculty memberships. Also, the Department of Journalism serves as secretariat of the Great Lakes Interscholastic Press Association (GLIPA), the high school press association serving portions of Ohio, Michigan and Indiana.

## Bachelor of Arts in Communication Degree requirements

## Group I: Communication

Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 8.) IPC 102, THEA 202 and IPC 201 are also required.

## Group II: Foreign languages

Each student is required to demonstrate a proficiency in a language by one of the options listed below:

1. Graduating from a high school where all instruction was conducted in a language other than English; or
2. Passing a proficiency examination in the language on the 202 course level; or
3. Having completed four years of one language in high school; or
4. Having completed one of the departmental options listed below ( 14 hours minimum in the same language area, or fewer by advanced placement).

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

## German, Russian, East Asian languages

(Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from GERM 117, 118, 201, 217, 218, 231, 331 and/or GERM 260, 315, 316; or
Completion of CHIN 101, 102, 201, 202; or Completion of JAPN 101, 102, 201, 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 201, 202, 215, 216, 317, 319, 331 and/or 312, 313.

Romance Languages (French, Greek,
Italian, Latin, Spanish)
Option 1
FREN 101, 102, 201 and 202; or
GRK 101, 102, 201, 202; or
ITAL 101, 102, 201 and 202; or
LAT 101, 102, 201 and 202; or
SPAN 101, 102, 201 and 202
Option II: one of the following:
FREN 101, 102, 201 and 212; or
GRK 101, 102 and two of GRK 201, CLCV 241, 242, 245; or
LAT 101, 102 and two of LAT 201, CLCV 241, 242, 245; or
SPAN 101, 102, 201 and 212.
A student may transfer at any point from option I to option II, but not vice versa. Course 202 is required for admission to 300 level courses.

Credit towards a degree is not granted for foreign language courses which duplicate more than two units of high school study.

## Cultural Experience

Those students who have completed two years of one foreign language in high school may select a planned program of at least four courses involving study of foreign or ethnic cultures drawn from a list approved by the major department.

## Group 12 Mathematics and science

Each student must complete two courses selected from the general education program including at least one course approved for faboratory credit from a list of approved courses printed in the College of Arts and Sciences Handbook.

## Group IV: Social sciences:

 ecenomics, ethnic studies, geagraphy, hisfory, political science, psyeholegy, sociologyEach student must complete one course in addition to the general education program. Two departments must be represented.

Group Vif Arts and humanities: art, Ilterature American, English or foroign), film, music, philosophy, popular culture, theatre
Each student must complete one course in addition to the general education program. Two departments must be represented. A list of courses approved for Group $V$ requirements is printed in the College of Arts and Sciences Handbook. Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

## Group Vi: Cognate studies <br> experlence

Students must complete, as specified by the nature of their specialized program, six additional courses from at least two of the above groups.

## Ine*erpersonal <br> Communication

303 South Hall, 372-2823

## Malor (42 hours)

IPC BAC students must complete a minimum of eight, three-hour courses ( 24 credit hours), selected in consultation with their adviser. Credit for internships and independent studies may not be used to satisfy this requirement.

Additionally, each student must complete a Career Focus ( 24 credit hours). The specific courses used to fulfill the career locus must define an occupational area. Some examples might include human resource development, community affairs liaison, customer service representative, communication consultant, information specialist, industrial and labor relations, corporate sales, fund raising, lobbyist, recreation and leisure time activities, and management communication. Any number of sequences of courses can be used to define a career focus, but the choices must logically
and clearly support the designated focus. (Internships may not count for the major hours.) Students are expected to work closely with advisers in selection of courses.

## Matriculation into Interpersona! Communication BAC major

Students must earn a 2.75 grade point average, minimum, in Group I requirements to gain admission to the IPC BAC program. Students who have not met this requirement may become IPC BA majors. Students must also complete IPC 102 before they can take any other IPC courses (except IPC 306, 395, 403 and 406). Students must also complete IPC 201 before they can take any 300-400 level courses, except those noted above. These requirements apply to majors and non-majors on the main campus, with the exception of communications majors in the Colleges of Education and Human Development and Firelands unless they seek admission to the IPC program on the main campus.

## Telecommunications

322 West Hall, 372-2138
A candidate for the degree of bachelor of arts in communication with an emphasis in telecommunications must meet the following requirements:

1. Complete the degree requirements for the Bachelor of Arts in Communication explained below.
2. Complete at least 30 hours in telecommunications courses, 20 of which are core requirements.
3. Earn a grade of C or better in all TCOM courses.
4. Complete a support field of at least nine hours in one department other than telecommunications. A student wishing to pursue an interdisciplinary support field must make an argument in writing to his or her adviser. The support field must be declared in writing by the end of the student's junior year.

## Matriculation into

## Telecommunications Sequences

Before being classified as a telecommunications major, a student must:

1. Complete at least 30 hours of coursework consisting of degree requirements and TCOM 103, TCOM 255 and TCOM 260.
2. Earn an overall grade point average in the above-mentioned coursework of at least 2.5
3. Pass TCOM 103, TCOM 255 and TCOM 260 with a $C$ or better.
To remain a telecommunications major, a student must receive a grade of C or better in all TCOM coursework. (Students are required to take all TCOM courses for a grade.)

Students transferring into the Department of Telecommunications must have a 2.5 grade point average in both telecommunica-
tions and also in their overall coursework. No more than 12 semester hours of coursework in telecommunications will be accepted for transfer from junior colleges. No more than 15 semester hours of coursework in telecommunications will be accepted for transfer from any four-year institution.

## Major (36 hours)

Part I. All majors are required to take ten core courses ( 28 hours):

TCOM 103, 255, 260, 262, 263, 360, 366, 451, 460 and 489

Part il. All majors are required to take three additional electives from TCOM courses numbered 261 to 490. These electives are in addition to courses already applied toward satisfying Part I course requirements. The three courses should have an area of focus (such as production, programming, management) that is approved by a faculty adviser.

## Bachelor of Science in Journalism

A candidate for the degree of bachelor of science in journalism must meet the following requirenents in addition to those listed on page 5.

1. Be proficient in keyboarding skills.
2. Complete approximately 58 semester hours of degree requirements, including completion of the General Education Program and 3 to 8 hours of English composition; demonstration of proficiency in a foreign language; 3 hours of cultural diversity; 6 hours of natural science including a laboratory course; 18 hours of social science courses including history, political science and economics; 15 hours of humanities and arts courses including A\&S 250 (Great Ideas), English literature and philosophy; 6 hours of computation and mathematics including computer science and a course in either college mathematics, statistics or accounting; and a 3 -hour course in speaking and listening. Courses fulfilling the degree requirements are listed in the Department of Journalism Requirements Sheet provided to all incoming freshman and transfer sfudents and available from the departmental office in 319 West Hall.

## Foreign Language Requirement

Each student is required to demonstrate a proficiency in a language by one of the options listed below:
a. Graduating from a high school where all instruction was conducted in a language other than English; or
b. Passing a proficiency examination in the . language on the 202-course level; or
c. Having completed four years of one language in high school; or
d. Having completed one of the departmental
options listed below (14 hours minimum in the same language area, or fewer by advanced placement.)

Note: Foreign language courses numbered 201, 202, 212 apply to Group II, not Group V.

German, Russian, East Asian languages
(Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from GERM 117, 118, 201, 202, 217, 218, 231, 331 and/ or GERM 260, 315, 316; or
Completion of CHIN 101, 102, 201, 202; or Completion of JAPN 101, 102, 201, 202; or Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 201, 202, 215, 216, 317, 319, 331 and/or 312, 313

Romance languages (French, Greek, Italian, Latin, Spanish)

## Option I

FREN 101, 102, 201, 202; or
GRK 101, 102, 201, 202; or
ITAL 101, 102, 201, 202; or
LAT 101, 102, 201, 202; or
SPAN 101, 102, 201, 202
Option II: one of the following:
FREN 101, 102, 201 and 212; or
GRK 101, 102 and two of GRK 201, CLCV
$241,242,245$; or
AT 101, 102 and two of LAT 201, CLCV 41, 242, 245; or
SPAN 101, 102, 201 and 212.
A student may transfer at any point from option I to option II but not vice versa. Course 202 is required for admission to 300 level courses.

Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.
3. Complete 32 or 33 semester hours of journalism/mass communication courses, 14 or 15 of which are core journalism courses, with the remainder from specific sequence courses and electives. No more than 33 semester hours of journalism/ mass communication courses may be counted towards a Bachelor of Science in Journalism degree. (Note: Courses taken in departments and programs other than journalism, such as telecommunications or visual communication technology, may count as part of the 33 semester hours allowed. However, students should not enroll in mass communication courses in programs and departments outside of the Department of Journalism without permission from their adviser or the chair of the Department of Journalism.)
4. Earn a grade of $C$ or better in all journalism courses and maintain a 2.5 grade point average in journalism courses (and a 2.5 in JOUR 103 and JOUR 200). All journalism courses must be taken for a grade. A student is allowed to repeat a
journalism course only once.
5. Complete a minor of at least 20 semester hours in a field other than journalism/ mass communication or complete an interdepartmental minor of 20 hours that clusters courses in two or more fields other than journalism/mass communication. Twelve of the 20 hours required for a minor must be in 300 - or 400 -level courses. Minors are declared in consultation with the student's adviser: All courses taken for minor credit must be taken for a grade.
6. Earn an overall grade point average of 2.25 in order to graduate.

Note: Resources may limit class enrollment in upper-division journalism courses, beginning with JOUR 200. Total hours earned, declared sequence, and grade point average determine which journalism students are given preference. Students not majoring in journalism may find it difficult to gain admittance into some upper-division journalism courses, including JOUR 200. Non-majors may wish to consider enrolling in JOUR 201, Journalism Techniques for Nonmajors, although that will limit their ability to be admitted into other journalism skills courses.

Major courses may not be taken S/U.

## Specialization: four sequences

In addition to other requirements, each journalism major chooses one of four areas of specialization called sequences. The broadcast journalism sequence aims at competence in the electronic media of radio and television. The print journalism sequence is generally associated with training for reporting, writing, and editing positions on weekly and daily newspapers, wire services, magazines and other publications. Public relations includes inter-group communications and relating the interests of business, industry, government and public and private institutions to each other and to society. The visual journalism sequence includes preparing photos and other forms of visual journalism for a variety of media, including print, Internet and other media.

## Core courses in journalism required of all majors

( 14 hours minimum)
JOUR 100, 200, 250 and 450 (12)
JOUR 400 (2-3); 2 hours required, one of which must be with a campus medium such as the BG News, Miscellany magazine, the Key yearbook, etc. Students in the broadcast sequence may take two off-campus internships.

## Broadcast journalism

( 9 hours)
JOUR 315, 330; and 430

## Print journalism

(9 hours)
JOUR 320, 325, 420

## Public relations

( 9 hours of journalism courses and 9 hours of business courses)

JOUR 340, 345, 440
MKT 300 and 410
MGMT 305
Note: Two of the above three business
courses may be applied to certain minors, in consultation with the student's adviser.

## Visual journalism

(9 hours)
JOUR 310, 315, 410

## Required of all majors

## (9 hours)

One skills course from another sequence (3)

One issues course chosen from JOUR $455,465,475,485$ and 495
One elective chosen in consultation with adviser

## Matriculation into journalism sequences

Before being admitted into JOUR 200, a student MUST:

1. Complete at least 30 hours of coursework consisting of degree requirements
including ENG 112 and JOUR 100.
2. Earn an overall grade point average of 2.7 in the above mentioned coursework. The coursework and GPA must be completed at the time admittance is sought into JOUR 200.
3. Earn a minimum grade of C in JOUR 100.
4. Officially matriculate into the chosen sequence by declaring a major near the completion of JOUR 200 . Students must have an overall GPA of 2.5 before their major will be approved by the department. To remain journalism majors, students must maintain a 2.5 grade point average in all journalism courses and a C or better in every required journalism course. An overall GPA of 2.25 must be I maintained for graduation.
5. If transferring into the BGSU journalism program, have a 2.5 grade point average in both journalism and overall coursework. if JOUR 200 transfer credit is approved. The normal requirements for entry into JOUR 200 apply if a student does not receive transfer credit for JOUR 200. No more than 12 semester hours of coursework in journalism will be accepted for transfer from junior colleges. No more than 15 semester hours of coursework in journalism will be accepted for transfer from any four-year institution.

NOTE: Students seeking entry into JOUR 200 who are not pre-journalism majors must meet all of the above-listed requirements. Pre-journalism majors have priority admittance into this class.

## Hentommaltsit eleckives

After completing approximately 58 hours of required general education courses, 29-30 hours of required journalism/mass communication courses and 20 -hour required minor, most students will have approximately 15 semester hours remaining to complete the 122 semester hours required for graduation. Students must use these hours as general electives, taking courses outside the field of journalism/mass communication. Students are encouraged to select these general electives carefully with the advice of their joumalism adviser. General electives should be chosen with the goal of enhancing the siudent's overall education.

# College of Business Administration 

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/

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## Statement of Mission

The College of Business Administration is a center of learning that nurtures the continuous personal and professional development of all who participate in its academic programs and scholarly endeavors. We are entrusted with a fundamental responsibility by the University and the people of the State of Ohio to educate individuals for professional roles in business and society. In fulfilling our mission, we foster intellectual curiosity, innovative leadership, critical thinking, ethical behavior, and an understanding of the cultural implications of managing in a pluralistic society and in an international environment.

## Program Philosophy

The goal of the undergraduate business administration degree program is to develop broadly educated business professionals. This goal is accomplished through a fouryear academic experience involving curricular and co-curricular elements. The program consists of three major components: professional education in business administration, education in the liberal arts and development of a broadly defined set of personal skills. Each component is a necessary part of the educational experience for students, and none can be neglected if the program is to succeed.

The professional component of the program stresses knowledge and skill development necessary for students to function effectively in entry level jobs and to enjoy productive professional careers. It
develops understandings of the "common body of knowledge" as defined by the AACSB--the International Association for Management Education. Consistent with this definition, this background includes study and understanding of the business functional and tool areas, the economic and legal environment, organizational theory and behavior, and integrative strategy and policy analysis. It also incorporates the worldwide dimension of business administration.

Professional knowledge and skills are developed through a common business core curriculum and areas of specialization designed to meet students' specific professional needs. The core develops a broad understanding of the entire business enterprise and represents the more important element of business majors' professional education component. The specialization supplements the core by allowing students to develop a deeper understanding of a more precisely defined field.

The liberal arts component emphasizes facts, concepts and ideas which are necessary to be a broadly educated person in our society. More importantly, it provides.a set of frameworks with which to analyze, comprehend and enjoy these facts, concepts and ideas in a long term perspective. Consistent with University general education requirements, it contains background and study of the humanities and the arts, the natural sciences, social and behavioral sciences, and cultural diversity in the United States. Beyond that it develops a sense of ethical considerations and a framework for analyzing social issues.

Personal skills developed through the program are designed to enhance productivity for a long term career, and to permit the individual to engage in lifelong learning. By enabling students to engage in self-initiated independent learning, these skills provide the foundation for a productive career and a satisfying life. These skills include analytical and critical thinking, decision making, intellectual independence, leadership, planning and organization, and problem solving. Of paramount importance in order to manifest these skills is the ability to communicate ideas effectively. Consequently, the program pays particular attention to the development of students' written and oral communication skills.

## Standards of Performance and Accreditation

To meet the challenges of the business world the academic programs of the College of Business Administration require high standards of performance. Programs are designed to provide an intellectual challenge to a student who wishes to assume the responsibility for tomorrow's business leadership.

The College of Business Administration is a fully accredited member of the AACSB--the International Association for Management Education. Degrees granted by such accredited colleges are widely recognized by major businesses and graduate schools.

Students of outstanding achievement in business and management may be recognized by Beta Gamma Sigma, the national scholastic honor society. The purposes of Beta Garmma Sigma are to encourage and reward scholarship and accomplishment, to promote the advancement of education in the ait and science of business, and to foster integrity in the conduct of business operations.

Credit by transfer from a two-year, fully accredited institution is not accepted for most business courses which require junior or senior standing at Bowling Green. However, should transfer students believe they have sufficient background in the subject matter of a course, they may seek credit by examination or credit through the College Level Examination Program (see policy on credit by oxamination). These validation options are given at the discretion of the appropriate department and may result in transfer credit for the course being accepted.

Credit by transfer from a four-year, fully accredited institution is accepted for most courses.

## Organization of the Colliege

The College of Business Administration consists of eight departments of instruction in business administration. The eight depart-ments-accounting and management information systems, applied statistics and operations research, business education, economics, finance, legal studies, management, and markeling-offer 15 undergraduate areas of specialization and a comprehensive graduate program covering the major phases of husiness activity.

The following degrees and areas of specialization are offered in the College of Business Administration:

Bachelor of Science in Business Administration

Accounting
Business pre-law
Economics
Finance
General business
Health care administration
Hospitality management
Human resource management
Industrial and labor relations
International business
Management information systems
Marketing
Production and operations management
Public and institutional administration
Purchasing and materials management
Bachelor of Science in Economics
Economics

## Study Abroad

The College of Business Administration offers an opportunity to enroll in a five-week summer session at a business school in Nantes, France. Courses are taught in English and carry up to nine hours credit. Special courses in the French language are optional. The program is contingent upon enrollments. Contact International Programs (372-0309) and the International Business Program Director (372-8080) for additional information.

## Academic Advising

The college office advising staff, which includes the director of undergraduate studies in business, assistant director and academic adviser, are available to all College of Business Administration students, including students who are undecided or specializing in general business. The advisers discuss career and educational goals, program requirements, and suitable courses. College office advisers meet with high school students and students from other colleges and universities who are interested in transferring to the College of Business Administration. College office advisers are available for appointments throughout the calendar year (even when classes are not in session). Walk-in, group and evening advising are offered during the fall and spring semesters. Contact the college office for more information or to make an appointment (371 Business Administration or call 419 -372-2747).

College of Business Administration students who have declared an area of specialization other than general business are also assigned a faculty adviser in the student's specialization. Students meet with their faculty advisers to discuss course selections, program requirements, specialization requirements, careers, internships,
job opportunities and student organizations. In addition to assigned College of Business Administration sludents, faculty advisers meet with other current and prospective students regarding the College of Business Administration programs and courses.

Students are responsible for meeting all graduation requirements and arranging advising appointments with faculty and college office advisers. To facilitate student planning, degree audits indicating all unfulfilied graduation requirements are available to all students.

## Bachelor of Science in Business Administration

The curriculum leading to the Bachelor of Science in Business Administration (BSBA) degree consists of two phases. The firsit phase, completed principally in the freshman and sophomore years, consists of liberal arts, general education and pre-professional courses. These courses provide the foundation for the second phase, the professional core and specialization courses completed in the junior and senior years.

## Admission to the BSEA Program

Students who wish to pursue the BSBA degree enter the college as pre-business students and retain that classification until they are admitted to the BSBA prograrn by the College of Business Administration. The BSBA degree will be granted only to those students who fulfill all degree requirements, which includes achieving BSBA admission. BSBA admission requires that credit be earned for the eight pre-professional core courses (ACCT 221-222, BA 203, ECON 202-203, MIS 200, and STAT 211-212) with a minimum grade point average of 2.25 in these eight courses.

Pre-business students are expected to achieve BSBA admission before enrolling in 300 -level business courses and are not permitted to take 400 -level business courses. Those who do not achieve BSBA admission by the end of the sophomore year (completion of 60 semester hours applicable to the degree) are placed on conditional standing for a maximum of one semester, to complete the requirements for BSBA admission.

Pre-business students on conditional standing may take 300 -level business courses, subject to normal prerequisites, but still cannot take 400 -level business courses. Students who do not achieve BSBA admission after the conditional semester may not register for 300 - or 400 -level business courses until they achieve BSBA admission. In cases of exireme hardship, extension of the conditional semester will be considered through the College of Business Administration appeal process.

## Completion of the BSBA Program

fter gaining admission to the BSBA
ogram, a candidate for the degree of Bachelor of Science in Business Administration must complete the general requirements for graduation listed under Academic Policies and the following:

1. meet the articulation requirements of the University;
2. meet the University, College, general education and electives requirements listed below
3. meet the professional core requirements and specific requirements for an area of specialization;
4. complete at least one-half of the area of specialization courses and BA 405 at Bowling Green State University;
5. take all courses satisfying the mathematics requirement, pre-professional core, professional core, and area of specialization for a grade.

## University Requirements

## English

Each student is required to complete ENG 112. ENG 110 and/or 111 also may be required depending on a student's placement, but only six hours from ENG 110/111/ 112 count toward graduation. If a student is quired to complete only three hours of Cnglish based on placement (ENG 112), three additional hours of non-business electives are required. Additional hours will be required for graduation if ENG 112 is not completed within the first 60 hours.

## College Requirements

## Mathematics

Each student is required to complete five credit hours in calculus with a grade of $C$ of better. Unless stated otherwise in the area of specialization, a student may select either MATH 126 or MATH 131, or both MATH 134 and 135. Refer to specific areas of specialization for any differences in this mathematics requirement. MATH 095 or 120 also may be required depending on a student's placement. Credit for MATH 095 does not count toward graduation in any University program, including the BSBA program. MATH 120 does not count toward graduation in the BSBA program.

## Communications

Each studert is required to complete a threehour communications course, IPC 102.

## General Education Requirements

## Natural Sciences

Each student is required to complete two courses from the natural sciences. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

## Social and Behavioral Sciences

Each student is required to complete two courses from the social and behavioral sciences. At least one course from either the social and behavioral sciences or the humanities and arts must be an international perspectives course, noted with an asterisk (*) on the checksheet of requirements. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

The General Requirements component (see BSBA checksheet) of the BSBA degree must include at least 47 hours of nonbusiness courses. The use of certain ECON courses in the social and behavioral sciences will increase General Requirements up to 53 hours. In addition, BSBA students who use ECON 200 (a business course) as one of the two social and behavioral science electives must have three additional hours of non-business credit in non-business electives, free electives or their area of specialization (this could increase graduation requirements to 125 hours).

## Humanities and Arts

Each student is required to complete two courses from the humanities and arts. At least one course from either the social and behavioral sciences or the humanities and arts must be an international perspectives course, noted with an asterisk(*) on the checksheet of requirements. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

## Cultural Diversity in the United States

Each student is required to complete one course from the area of cultural diversity in the United States. A list of approved courses satisfying this requirement is available in the College of Business Administration office.

## General Education Elective

Each student is required to complete one additional general education elective. A student may select this elective from any of the general education categories including natural sciences, social and behavioral sciences, humanities and arts, and cultural diversity in the Unites States. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

## Non-business Electives

Each student is required to complete seven to 14 additional hours (depending on ENG placement) in non-business fields. An academic adviser can assist each student in selecting courses which broaden or deepen the student's general education. Courses chosen must not be in Business Administration. See appropriate College of Business Administration (CBA) checksheet for a list of courses that do not count toward the BSBA degree.

## Pre-professional Core

Each student is required to complete the following 24 hours of pre-professional courses: ACCT 221 and 222; ECON 202 and 203; STAT 211 and 212; MIS 200; and BA 203. Students should complete these courses during the sophomore year. A grade point average of at least 2.25 in these eight pre-professional core courses is required to be admitted to the BSBA program. See Admission to the BSBA Program section for additional requirements.

## Professional Requirements

## Professional Core

Each student is required to complete a common core of professional courses. These courses are BA 390 and 405; ECON 302, 303, 304, or 311; FIN 300; LEGS 301; MGMT 300 and 360 ; MKT 300; and OR 380.

Since BA 405 is the capstone course for all students in the BSBA program, the following courses must be successfully completed before enrolling in BA 405: MGMT 300 and 360 ; FIN 300; MKT 300; and OR 380. BSBA admission is an additional prerequisite for BA 405. BA 405 must be taken at BGSU. No transfer credit is accepted by the College of Business Administration for BA 405.

## Areas of Specialization

Each student must complete the requirements for one area of specialization. Requirements for these areas of specialization are listed on the following pages and are available in the college office.

## Free Electives

The remainder of the academic program (0-9 hours) consists of electives to meet the student's specific educational objectives. These electives should be selected in consultation with the student's adviser. Generally a student may take courses in any
deparment of the University in meeting this requirement. See appropriate College of Business Administration (CBA) checksheet for a list of courees that do not count toward tha BSBA degree.

## The Cumficula

The pages which follow describe the specific reguirements in various areas of specialization. Whenever possible, 100 -level courses should be taken during the freshman year; 200 level courses during the sophomore year; 300 -level courses during the junior year; and 400 -level courses during the senior year. Following these levels is particularly important for core courses.

A typical program for a student in the BSBA degree program would appear as follows:

Strs year ( 32 hours)
ENG 111 and/or 112 (3-6)
MATH 126 (5)
or
MATH 131 (5)
or
MATH 134 and 135 (6)
General education courses and/or electives ( $20-24$ )

Secona yaar (30 hours)
MIS 200 (3)
STAT 211 and 212 (6)
ACCT 221 and 222 (6)
ECON 202 and 203 (6)
BA 203 (3)
Qeneral cducation courses and/or electives (6)

Third and fourth years ( 60 hours)
BA 390 (3)
ECON 302, 303, 304, or 311 (3)
FIN 300 (3)
LEGS 301 (3)
MGMT 300 and 360 (6)
MKT 300 (3)
OR 380 (3)
BA 405 (3) (following successful complethon of FIN 300, MKT 300, MGMT 300 and 360, and OR 380, and BSBA admission)
Area of speciaization (15-24)
General education courses and/or electives (9-18)

Athough this represents the program for a typical siudent, the areas of specialization heve more precise requirements. Refer to the areas of specialization in the following pages for the specific requirements in each are.

## Accounting

332 Business Administration Building, 372-2767

The BSBA program in accounting is accredited by the AACSB--the International Association for Management Education. The mission of the Department of Accounting and Management Information Systems at Bowling Green State University is to promote the growth of knowledge and nurture the personal and professional development of those interested in the disciplines of accounting and management information systems. We strive for a learning environment that stimulates intellectual curiosity, enhances critical thinking skills, encourages ethical behavior and develops leadership ability. The department is committed to offering programs and a setting that attract students as they choose among competing undergraduate programs in the region and to producing graduates that are well-equipped to enter industry and public accounting.
Faculty are encouraged to place emphasis on teaching, applied research, instructional development, and service to the accounting and management information systems professions.

The curriculum in accounting is designed for the student who wishes to prepare for a career as a professional accountant with industry, government or nonprofit organizations or for public accounting practice as a CPA. Opportunities exist to work in such specialized areas as auditing, managerial reporting, cost accounting and consulting.

## Statement of Objectives-Accounting Specialization

Accountants aid society by providing information that promotes optimal allocation and use of limited resources. Accordingly, one objective of the program is to introduce students to the institutional framework of business and society which accounting serves. Students also are educated about financial and operating decision-making; the goals, conflicts in goals, and constraints on decision-makers; and the information needed to support decision-making. Further objectives are: (1) to aid the student in becoming a well-rounded individual by incorporating into the program courses in science and mathematics, social studies, and the humanities; and (2) to promote awareness of the need for continuing intellectual growth and adaptability to a dynamic environment. In general, the program is designed to enhance conceptual and analytical understanding, to provide exercises in communications skills, to foster a work ethic among students, and to develop judgment and a mature, professional, ethical attitude.

Few students can predict the future course of their careers. Accordingly, each is expected to become familiar with the theory, principles and practices of the major branches of the accounting field-auditing, financial accounting, managerial accounting, systems, and tax accounting. The program recognizes the need for adequate training to fulfill entry-level job requirements and to ald in obtaining professional certification. However, the program's primary emphasis is on education for the student's total career, including future leadership and policy-making roles. Given this total-career emphasis, students are expected to be motivated and well-qualified. They may expect upper-level instruction from full-time professors who are regularly involved with course development, practical accounting issues and problems, and current professional and academic research in accounuing.

CPA Examination and Licensing Requirements
Until December 31, 1999, to qualify as a candidate for the CPA examination in the State of Ohio, one must hold at least a bachelor's degree (not necessarily in accounting or business) and have a minimum of 24 semester hours of accounting. A candidate may count three semester hours of computer-related training with the 24 -semester-hour total. Beginning on January 1,2000 , a minimum 150 semester hours of university education will be require. as an additional qualification for the CPA examination. Hours taken beyond the bachelor's degree may be taken within the context of a master's program or as independent study. The specific content of the additional semester hours is not specified and, therefore, is up to each CPA examination candidate. Graduation from BGSU with an area of specialization in accounting with the BSBA degree will fulfill CPA candidacy requirements until December 3i, 1999. Students planning to take the CPA examination after January 1, 2000, should enroll for at least 28 semester hours of additional coursework beyond the 122 semester hours required for an undergraduate degree. BGSU offers both Master of Business Administration (MBA) and Master of Accountancy (MAcc) programs that permit an individual to fulfill the additional educational requirements within the context of a graduate degree program. Students may apply for admission to the Gracuate College during their senior year and, in some cases, may quallify to begin graduate coursework concurrently with completion of their BSBA program. Sludents interested in enrolling in the MAcc program should consult with their faculty adviser. Students interested in the MBA program should consult with the Graduate Studies in Business office.

To receive the CPA certificate and license practice in Ohio, a candidate also must pmplete two years in public accounting or our years in another accounting-related position. One half the work experience may be waived if the candidate has a master's degree. Education and experience requirements differ in other states; contact the appropriate state board of accountancy to determine its requirements.

For more information regarding the . application for the examination, contact CPA Examination Services, Ohio Coordinator, P.O. Box 5391, Grand Central Station, New York, NY 10163-5391 (telephone 1-800-CPAEXAM). First-time applications must be mailed to the processing center by March 1 for the May examination and September 1 for the November examination.

Two other certification examinations are sponsored by private agencies. Information on the Certified Management Accountant (CMA) examination is available from the Institute of Certified Management Accountants, 10 Paragon Drive, Montvale, NJ 07645. Information on the Certified Internal Auditor (C|A) examination is available from the Institute of Internal Auditors, P.O. Box 1119, Altamonte Springs, FL 32701.

## Matriculation into the Accounting Area of

 SpecializationStuidents who plan to obtain the Bachelor of Science in Business Administration degree With an area of specialization in accounting should enroll in the pre-accounting program within the College of Business Administration. To enroll in upper-level accounting classes (with an expectation of an accounting specialization), a student must:

1. attain an all-University accumulative grade point average of at least 2.6;
2. complete a minimum of 51 semester hours of University credit; and
3. complete ACCT 221 and ACCT 222 with a grade of $C$ or better in each.

The specific requirements for an area of specialization in accounting are as follows:

## Third and fourth years

ACCT 321, 322, 331, 332, 341, 360 and 451.

Students must attain a grade of $C$ or better in all of the courses specifically required for the area of specialization. They are not permitted to take ECON 304 as part of the professional core.

Students planning to take the CPA examination are advised to take LEGS 401 rather than LEGS 301 as part of the professional core.

## Business Pre-law

264 Business Administration Building, 372-2376

The program's intent is to provide the student with a broad foundation in business with a major concentration designed to enhance one's communication skills and critical thinking abilities. Emphasis on writing, research and a legal approach to problem solving provide the framework for the specialization.

This combination of experiences should enrich a student's understanding of the interaction of business, government and society. Such experience would be appropriate for law school candidates or any student seeking a firm foundation in business and economic concepts who does not desire a more narrow area of specialization.

Specific requirements for the area of specialization in business pre-law are as follows:

## Second year

ENG 207

## Third year

LEGS 305
Fourth year
LEGS 421 or 410,490 , and three additional hours in LEGS at the 400 level.

A\&S 250 or ENG 261 or ENG 262 must be taken as part of the specialization.

The following courses are suggested but not required: PHIL 103 as a humanities and arts elective, HIST 205 and/or HIST 206 as social and behavioral sciences electives, and HIST 357 and/or HIST 433 as non-business or free electives. Other suggestions for the non-business or free electives may be ,obtained from the business pre-law adviser.

## Economics

3002 Business Administration Building, 372-2646

Students choosing a specialization in economics gain critical reasoning skills in areas related to many aspects of business and society. Depending upon the students' course selection, they can gain analytical and technical capabilities relating to such areas as business behavior and management, finance, labor, employment, inflation, international trade and income distribution. The study of economics prepares students, for futures in virtually all areas of business and society.

After completing the business professional core, students selecting an economics specialization within the BSBA degree take 18 additional hours of economics courses. These courses must include both ECON 302 and 303 (one may be counted in the
professional core) and one quantitative economics course (i.e., ECON 400 or 401 or 402). Students are then free to choose any four other 300 - or 400 -level ECON courses to complete the specialization.

All students with an'economics specialization must satisfy a written and oral communication requirement in economics. Certification by an economics faculty member that the requirement has been met is required. Details are available in the economics department office.

## Areas of concentration

The 12 elective hours can be chosen to define an area of concentration for the economics specialization. Two examples are listed below. These are illustrative. Others can be designed with the advice and consent of the student's adviser.

## Business Economics

ECON 302 and 303 (one may be counted in the professional core)
ECON 400 or 401 or 402
ECON 404, 471 and two ECON electives
Labor economics and relations
ECON 302 and 303 (one may be counted in the professional core)
ECON 400 or 401 or 402
ECON 321, 323, 421 and 422

## Other programs

The College of Business Administration also offers the Bachelor of Science in Economics (see page 76). Programs in economics also are available through the College of Arts and Sciences and the College of Education and Human Development.

## Finance

201 Business Administration Building, 372-2520

This specialization is for the student interested in financial management as it relates to either financial or non-financial institutions. Areas of emphasis included within this curriculum are risk analysis and management, financial markets and institutions management, business financial analysis and management, and investment analysis and management. Career opportuni-- ties associated with this specialization include, but are not restricted to, commercial lending, retail bank management, credit management, cash management, capital budgeting and investment analysis, securities analysis, portfolio management, real estate, securities brokering, risk management, pension and employee benefits management, and insurance company operations/management.

The specific requirements for an area of specialization in finance are as follows:

## Third yeap

FIN $320,330,340$ and 350

## foumbyear

Any three of ACCT 321, ACCT 322, FIN 410 , FIN 425 , FIN 435, FIN 445 , FIN 447, FIN 455
All 400 -leval finance courses require a grade of $C$ or better in the prerequisite finence course.

## (temeral mimess

371 Business Administration Building, $372-2747$

This curiculum is for students who desire a broad business background with a minimum of specialzation or who desire a program tailorod to specific needs.

The requirements for an area of specialkation in general business are as follows:

The student must select at least 18 hours but no more then 24 hours from a list of approved 300-and 400 - level courses in ACCT, BA, BUSE, ECON, FIN, LEGS, MGMT, MIS, MKT, OF and/or STAT with no more than nine hours in any one area. A list of approved courses for the general business specialization is available in the College of Business Administration office.

Qeneral business may not be combined with any other area of specialization to form a dual area of specialization.

##  <br> Adminnistration

204 Business Administration Building, 372-2376

This is an area of undergraduate studies which will provide a variety of career oppurtunities in community hospitals, extended care fucilities, state and federal agencies, voluntary health agencies and in various services found in health care organizations.

The specific requirements for an area of specialization in healin care administration are as rollows:

## Thita yegr

DA 325
Fourth year
LEGS 425, BA 420, BA 429*
In addition to the area of specialization, the student must complete a management concentration (a minimum of nine semester hours) in selected areas of business management, such as staff planning and research, human resource management, accomtancy, and general supervision. These courses are taken in the junior and senior years; contact the program director for furtherinformation.)

The internship component of the program (BA 429) will provide students with practical experience and participation in the particular health care institutions and agencies in which they may be professionally interested.
*The student must complete a minimum of two courses in the management concentration before the internship (BA 429) may be taken.

## Hospitality Management <br> 230 Business Administration Building, 372-8713

Hospitality management is an area of specialization designed to prepare students for managerial positions in the hospitality industry. Since the hospitality sector is a multi-billion dollar industry, the program is designed to provide students with a sound education in the fundamentals of business administration. Graduates typically stant their careers as management trainees, assistant managers or supervisors in hotels, clubs, restaurants or food companies. They also may find positions with airline, hospital or university food service programs. Advancement opportunities extend far beyond these entry-level positions to include corporate staff positions in large hospitality oriented firms.

In addition to formal coursework, students are required to complete a minimum of 800 clock hours of practical work experience in the hospitality industry.

The specific requirements for an area of specialization in hospitality management are as follows:

## Third year

BA 310
Fourth year
BA 480, F\&N 331, MGMT 361 or 452, and MKT 405
Fither LEGS 450 or F\&N 437
Students are encouraged to take elective courses in one of five areas: foreign language, human resource management, marketing, travel and tourism, or food service management. Contact the program office for a list of suggested electives.

## Human Resource Management

3018 Business Administration Building, 372-2946

This curriculum prepares a student for a career in the field of human resource management, in the key staff positions of compensation, staffing-employment, training and organization development, or for a position in line management. The human resource management specialization courses
(four are required) develop advenced knowledge and skill in the areas of performance, evaluation, work design, human resource planning, staffing, compensation, training and development, employee involvement programs, pertormance improvement programs, and organization development and the management of change. Electives (two are required) are used to strengthen the student's background through courses in psychology, economics, law and/or applied field experience in organization development.

Students are encouraged to enroll in the human resource management program as freshmen. However, to be admitted officially to the specialization, students must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5 .

The specific requirements for an area of specialization in human resource management are as follows:

## Third year

MGMT 361
Fourth year
MGMT 454, MGMT 456, MGMT 465 and iwo electives
Electives are selected from: ECON 421 ECON 422, LEGS 419, LEGS 429, MGMT 330, MGMT 430. MGMT 441, MGMT 442, MGMT 445, PSYC 352 and PSYC 454
See your faculty adviser for more detaile information about requirements.

## Industrial and Labor Relations

306 Business Administration Euilding, 372-8060/372-2646

This is an interdisciplinary program designed to prepare a student for work in industrial relations departments in corporations, government agencies and other organizations. This program will provide the student with a series of courses in the three areas of personnel, labor relations and the legal aspects of industrial relations.

Specific requirements for an area of specialization in industrial and labor relations are:

## Third year

ECON 321
MGMT 361
Fourth year
LEGS 419
Three courses chosen from the lollowing, but no more than two courses in any one fíld: ECON 323, 421, 422; LEGS 429; MGMT 454, 455, 456, 463, 465

## International Business

09 Business Administration Building, 372-8080/372-2646

This curriculum is designed to provide students with an international perspective in preparation for a career with a multinational company, international organization, government, or other organization concerned with international activities.

The specific requirements for an area of specialization in international business are as follows:

## Third and fourth years <br> ECON 351, POLS 476 or POLS 372.

An area of concentration (9 hours) also must be chosen from one of the following areas: ACCT, ECON, FIN, LEGS, MGMT, MIS, MKT or a selection specifically approved by the international business adviser. These courses may be taken during the third or fourth year.

Careful planning of the electives can broaden the international business specialization. A second area of specialization, such as accounting or marketing, may easily be added. In this way a student has both job entry skills useful in seeking employment immediately after graduation and training in international business which will be useful in ater career stages.

A foreign language is strongly suggested but is not required.

## Management <br> Information Systems

332 Business Administration Building, 372-2767

The mission of the Department of Accounting and Managemènt Information Systems is to promote the growth of knowledge and nurture the personal and professional development of those interested in the disciplines of accounting and management information systems. We strive for a learning environment that stimulates intellectual curiosity, enhances critical thinking skills, encourages ethical behavior and develops leadership ability. The department is committed'to offering programs and a setting that attract students as they choose among competing undergraduate programs in the region and to producing graduates that are well-equipped to enter industry and public accounting. Faculty are encouraged to place emphasis on teaching, applied research, instructional development, and service to the accounting and management information systems professions.

The curriculum in management information systems is designed for the student who is interested in a position as a systems
analyst or a position requiring the application of computers to business problems. Emphasis is placed on the use of the computer in a business environment. Students are encouraged to use their free electives to strengthen their technical background and to strengthen their understanding of a business field such as accounting, economics, finance, management or marketing.

The specific requirements for an area of specialization in management information systems are listed below. A grade of C or better must be earned in each course required for the area of specialization.

## Second year

CS 200 and CS 205 or
CS 205 and CS 360
Third year
MIS 360 and MIS 370
Fourth year
MIS 421, MIS 471 and two MIS 300- or 400 -level electives (MIS 489 may not be used to fulfill specialization requirements.)

## Marketing

234 Business Administration Building, 372-2041

Marketing consists of a broad spectrum of business activities designed to plan, price, promote and distribute products and services to consumers, businesses and other organizational buyers. These activities include, but are not limited to, market assessment, marketing research, product development, distribution, retailing, pricing, selling and advertising.

Not surprisingly, career opportunities in marketing are both extensive and diverse, including positions in advertising management, brand or product management, marketing research, retail merchandise buying or store management, professional selling, sales management, wholesaling/ distribution management, as well as international marketing.

While all BSBA students take MKT 300 as part of the professional core, each student who selects marketing as an area of specialization is required to take: MKT 302, 310, 320, 450, 460. In addition, students specializing in marketing must select two more marketing courses from the following. list of electives*: MKT 400, 405, 412, 421, $430,440,442,445$ and 455. (*One of the two electives may be taken from an approved list of courses outside the Department of Marketing. The list is available in the department office.)

The marketing program emphasizes development of the following skills: oral and written communication, problem solving, and team building. All students must achieve a C
or better in MKT 300 in order to enroll in advanced marketing courses. BSBA students who have designated a marketing specialization must achieve a C or better in each course they take as part of the specialization. Each student is strongly encouraged to meet and maintain contact with his or her marketing faculty adviser throughout the program of study. The suggested program of study for a specialization in marketing is:

## Third year

MKT 300
Two courses from: MKT 302, 310, 320, 450
Fourth year
Two courses from MKT 302, 310, 320, 450
Two MKT electives
MKT 460 (normally taken in the last semester of the senior year, prerequisites: MKT 302, MKT 320, and MKT 450; (course prerequisites must be met for all courses.)

## Production and Operations Management

3018 Business Administration Building, 372-2946

Production and operations management is concerned with the theory and practice of making products economically in both manufacturing and service firms. In a typical organization, this function is responsible for designing, operating and controlling the productive system. Production and operations managers are responsible for making strategic and tactical decisions that determine quality levels, cost levels and the timely availability of goods and services.

Students are encouraged to enroll in the production and operations management program as freshmen. However, to be admitted officially to the specialization, the student must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5 .

The specific requirements for an area of specialization in production and operations management are as follows:

## Fourth year

MGMT 441, 442, 445, 449 and one of the following pairs of courses:
MGMT 330 and 430
or
MGMT 361 and 456
or
Two courses ( 6 hours), approved in advance by the faculty adviser, from any one of the following areas: ACCT, CS, MFG, MIS, OR or STAT:
Students should see their faculty adviser for more detailed information about requirements.

## Public mend mstitutional Administration

310 Business Administration Building, 372-8162/372-2646

This program has an interdisciplinary curriculum keyed to management and administration in public and nonprofit institutions. In addition to the general businses courses taken by all candidates for the BSEA degree, the student takes courses in advanced management as well as courses that provide an understanding of important public policy problems and the environment within which decision-making occurs in the public and nonproitt sectors. The program is interdisciplinary and allows development of a student's particular skills and interests through courses taken in optional study areas. For those students who are unclear about their career objectives, this program exposes students to a range of managerial options. The program also provides a suitable pre-professional program for students interested in professional degrees in law, business or public administration.

The specific requirements for the area of speciallzation in pubic and institutional administration are as follows:

## First ar second year

Students who have not had a strong course in government in high school are recommended to take a political sclence course such as POLS 110 as one of their social and behavioral science general education courses.
Third and fouth years
POLS 303

## MGMT 367

ECON 331 and/or ECON 332

- 300 or higher level course(s) selected from courses in the optional study areas or approved by an adviser from courses in business, economics or political science.
Optional study areas (3-6 hours)
Each student will select at least one course from the following options to complete the arsa of specialization. Additional courses can be taken as elective courses.

Administration
MGMT 330. MGMT 463
ECON 421
ACCT 423 (ACCT 321 and ACCT 322 prorequisites)
Polley Analysis
POLS 302, 431, 459
ECON 321
LEGS 425, 431
Criminal Justice
LEGS 440
SOC 341, 441, 442
Urban Studies
ECON 462
POLS 331,430

## Mass Media and Public Opinion

JOUR 103, 340, 433, 435
POLS 341, 443

## Purchasing and Materials Management <br> 3018 Business Administration Building, 372-2946

This curriculum is for students who are interested in the field of purchasing and materials management. The course of study includes an integrated approach to the movement of goods from the supplier to the final customer. The purchasing department in a typical organization is responsible for securing necessary materials, supplies, capital equipment and services at the best possible terms. The materials management function typically coordinates the major activities contributing to material costs and availability including purchasing, production control and physical distribution.

Students are encouraged to enroil in the purchasing and materials management program as freshmen. However, to be admitted officially to the specialization, the student must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5 .

The specific requirements for an area of specialization in purchasing and materials management are as follows:

## Third and fourth years

MGMT 330, 430, 439, 441, 442 and 445
See your faculty adviser for more detailed information about requirements.

## Bachelor of Science in Economics

3002 Business Administration Building, 372-2646

The study of economics involves an analytical look at how scarce resources are allocated to various areas of production. It emphasizes the importance of making choices between desirable alternatives. The study of economics provides tools to make these choices in such areas as employment, economic growth, price stability and trade. The B.S. major in economics is especially suited for students who wish to combine a major in economics with concentrated study in other disciplines. The B.S. in economics requires two more economics courses than the economics specialization in the B.S.B.A., but the B.S. permits students to choose their own cognate field of study ( 15 hours). The B.S. in economics is well suited for double
majors. For example, students can expand the number of hours in the cognate fieid to achieve a major in such areas as sociology, political science, history, mathematics or psychology. Students may also combine a major in economics with business fields such as accounting, finance, legal studies, marketing or management. This program provides students with a meaningful educational experience that is suitable for employment in a wide variety of occupations in business or government, and for continued study in graduate schools in economics, business, law and other fields.

A candidate for the bachelor of science in economics must complete the general requirements for graduation listed under Academic Policies and meet the general education requirements listed below.

## General Education Requirements

## Communication

Each student is required to complete ENG 112. ENG 110 and/or 111 also may be required depending on a student's placement, but only six hours from ENG $110 / 111 /$ 112 count toward graduation. If a student is required to complete only three hours of English based on placement (ENG 112), three additional hours of electives are required. Additional hours will be required for graduation if ENG 112 is not completed vithin the first 60 hours. In addition all economics majors must satisfy a written and oral communications requirement in economics. Certification by an economics faculty member that the requirement has been met will be required. Details are available in the economics department office.

## Rathematics, science ant quantitative measurements

 Each student is required to complete MATH 126 or MATH 131, or both MATH 134 and MATH 135, STAT 211 and 212. Students are strongly urged to take MATH 131, or MATH 134 and MATH 135, rather than MATH 126.
## Natural sciences

Each student is required to take two courses from the natural sciences. An approved list of courses satisfying these requirements is available in the Department of Economics office.

## Social and behavioral sciences

Each student is required to complete ECON 202 and 203 plus two courses from the social and behavioral sciences outside ECON. At least one course from either the social and behavioral sciences or the humanities and arts must be an international perspectives course, noted with an asterisk (*) on the checksheet of requirements. An approved lisi of courses satisfying these requirements is available in the Department of Economics office.

## Humanities and Arts

Each student is required to complete three yurses from the humanities and arts. At east one course from either the social and behavioral sciences or the humanities and arts must be an international perspectives course, noted with an asterisk (*) on the checksheet of requirements. An approved list of courses satisfying these requirements is available in the Department of Economics office.

## Cultural Diversity in the United States

Each student is required to complete one course from the area of cultural diversity in the United States. A list of approved courses satisfying this requirement is available in the Department of Economics Office.

## General Education Elective

Each student is required to complete one additional general education elective. A student may select this elective from any of the general education categories including natural sciences, social and behavioral sciences, humanities and arts, and cultural diversity in the United States. An approved list of courses satisfying these requirements is available in the Department of Economics office.

## Major and cognate concentration

Each student is required to complete ECON 302, 303, 473, three hours of quantitative economics (ECON 400, 401 or 402) and 18 additional hours of 300 and 400 level ECON or approved related courses. To complete the cognate concentration, 15 hours must be selected from the areas of business administration, arts and sciences or education, after consultation with and approval of the program adviser.

## Major (30 hours)

## First year

MATH 126 (5) or MATH 131 (5), or MATH
134 (3) and MATH 135 (3). Students are strongly urged to take MATH 131 or the MATH 134-135 sequence.

## Second year

ECON 202 (3) and ECON 203 (3) (ECON 202 and 203 are counted as social science courses and not as part of the major) and STAT 211 (3) and STAT 212 (3)
Third year
ECON 302 (3) ECON 303 (3), ECON 473 (3) and either ECON 400 or 401 or 402 (3)
Fourth year
ECON electives (18)
All other general education and University requirements are to be dispersed throughout the four years.

## Minors

The following minors are offered by College of Business Administration departments:

## Applied Statistics

344 Business Administration Building, 372-2363

## Minor (25 hours)

(not available to students who are majoring in statistics)

1. MATH 131 and 232 (10)

MATH 134 and 135 may be substituted for MATH 131.
2. One of the following sets of two courses (6):

- STAT 211 and 212; or
- MATH 441 and one from STAT 200, MATH 115, MATH 247, PSYC 270, or SOC 369; or
- MATH 441 and 442

3. STAT 402 and 408 (6)
4. One from STAT 406, 412, 414, 416, or MATH 447 (3)
If any of the courses in (1) or (2) above are required for the major and cannot be counted for the minor, no substitution is necessary provided that the number of remaining hours is at least 18. If the number of remaining hours is less than 18, substitutions must be approved by the Department of Applied Statistics and Operations Research.

## Economics

See under the College of Arts and Sciences. (not available to students who are majoring in economics or specializing in economics in the BSBA program)

## International Business

309 Business Administration Building 372-8080 or 372-2646

Minor (21-24 hours)
(not available to students pursuing a BSBA degree or who are majoring in General Studies in Business in the College of Arts and Sciences)

A minor program designed for students outside the College of Business Administration (such as those majoring in a foreign language, area studies or international studies) who want a foundation in business administration.

Students must take a core of business administration and economics courses and choose either an international business transactions and marketing track or an international finance track.

Track 1: International Business Transactions and Marketing

1. Required core ( $12-15$ hours)

ECON 200 (3), or ECON 202 and ECON 203 (6)

BA 390 (3)
ACCT 325 (3) or ACCT 221 (3)
MGMT 305 (3)
2. Additional required courses:

LEGS 406 (3)
MKT 300 (3)
MKT 455 (3)
Track 2: International Finance

1. Required core (12-15 hours) *

ECON 200 (3), or ECON 202 and ECON 203 (6)
BA 390 (3)
ACCT 325 (3) or ACCT 221 (3)
MGMT 305 (3)
2. Additional required courses (9 hours)

ECON 351 (3)
FIN 300 (3)
FIN 410 (3)

If any of the courses listed above are required for the major and cannot be counted for the minor, no substitution is necessary provided that the number of remaining hours is at least 18. If the number of remaining hours is less than 18, substitution must be approved by the director of the international business program

## Management Information Systems

332 Business Administration Building 372-2767

Minor (27 hours)
(not available to students who are majoring in general studies in business in the College of Arts and Sciences or to students specializing in management information systems in the BSBA program)

Required courses ( 21 hours)

1. CS 101 or CS 200 (3)

CS 205 (3)*
ACCT 221 and 222 (6)
MIS 360 and 370 and 471 (9)
2. Elective courses ( 6 hours)

Choose 6 hours from any 300- or 400level MIS courses (except MIS 479 and MIS 489)

If any of the courses in (1) or (2) above are required for the major and cannot be counted for the minor, no substitution is necessary provided that the number of remaining hours is at least 18 . If the number of remaining hours is less than 18 , substitutions must be approved by the Department of Accounting and Management Information Systems.
*One prior course in computer programming or satisfactory completion of an examination is required for CS 205 . Students without prior programming exposure should take CS 200 . Students who wish to qualify for CS 205 by examination should contact the computer science department.

## Mxathening

254 Business Administration Building, 372.2041

Minor (21 hours)
(not available to students who are pursuing a BSBA degree or who are majoring in general studies in business in the College of Arts and Sciences)

1. Required courses ( 15 hours)

ECON 200, or higher level ECON (3)
ACCT 325 or ACCT 221, or MGMT 305 (3)

MKT 300, 302 and 310 (9)
2. Elective courses ( 6 hours) from: MKT 320, 405, 412, 430, 440, 442, 445, 450, 455

If any of the courses in (1) or (2) above are required for the major and cannot be counted for the minor, no substitution is necessary provided that the number of remaining hours is at least 12 (or more, if required by the college in which the student is majoring). If the number of remaining hours is less than 12, substitutions must be approved by the Department of Marketing. Note: all course prerequisites must be met.

Operatians Rosearch/management Scimen
344 Business Administration Building, 372-2363

Minor (26 hours)

1. MATH 131 (5)
2. One of the following sets of two courses:
$-O R 380$ and either STAT 211 or MATH
115 or MATH 247; or
-CS 10 and CS 440
3. All of the following courses:

OR 480 (3).
OR 482 or CS 442 (3).
OR 485 Or MATH 445 (3).
OR 487 (3), and
OR 489 (3)
Hany of the above courses are required for the student's major and cannot be counted for the minor, no substitution is necessary provided that the number of remaining hours is at least 18 . Substitutions must be approved by the Department of Applied Statistics and Operations Research.

## Business AdministrationEducation

242 Business Administration Building, 372-2901

A candidate who has met all the requirements for the degree of bachelor of science in business administration also may qualify for the degree of bachelor of science in education and for an Ohio teaching certificate by completing a combined curriculum including the general and specific graduation requirements for each college.

The student who desires to pursue the combined program must:

1. Petition the board of appeals of the

College of Education and Human Development and the College of Business Administration to request registration in both colleges.
2. Complete a minimum of 20 credit hours beyond the 122 hours required for graduation with a bachelor's degree in one college.
3. Complete the major in comprehensive business education or the marketing education major.
4. Complete the appropriate professional education courses, meet the general education requirements of the College of Education and Human Development and participate in a semester of professional concentration which includes student teaching (BUSE 497).
A student interested in teaching business or marketing education should consult with the Department of Business Education in planning the program.

# College of Education and Human Development 

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/

## Office of the Dean

Les Sternberg, Ph.D., dean, 444 Education Building, 372-7403
Steven Russell, Ph.D., associate dean for academic affairs,
444 Education Building, 372-7401
Ellen Williams, Ph.D., associate dean for student affairs,
455 Education Building, 372-7407

## Office of Undergraduate and Graduate

 Student ServicesEllen Williams, Ph.D., associate dean for student affairs,
455 Education Building, 372-7407
Office of Program Advisement and Teacher Certification and Office of Field Experiences
Kimberly Grilliot, M.Ed., manager of program advisement and teacher certification office, 365 Education Building, 372-7372
Diane Smith, M.Ed, assistant director program advisement and teacher certification office, 365 Education Building, 372-7389
Sandra McKenzie, M.A., program counselor, 365 Education Building, 372-7372
Karen Matheny, B.S., assistant to the director of program advisement and teacher certification, 365 Education Building, 372-7372
Linda Sullivan, M.A., program counselor, 365 Education Building, 372-7372

Clinical and Computer Laboratories
Gregg Brownell, Ed.D., Director, 215 Education Building, 372-7392

## Schools and Departments

School of Health, Physical Education, and Recreation, Mary Ann Roberton, Ph.D., director, 117 Eppler Center, 372-2334
Department of Educational Administration and Supervision, Eugene Sanders, Ph.D., chair, 510 Education Building, 372-7377
Department of Educational Curriculum and Instruction, D. Rosalind Hammond, Ed.D., chair, 529 Education Building, 372-7314
Department of Educational Foundations and Inquiry, Jane Wolfle, Ph.D., chair, 550 Education Building, 372-7350

Department of Family and Consumer Sciences, Thomas Chibucos, Ph.D., chair, 217 Johnston Hall, 372-7823
Department of Higher Education and Student Affairs, Patricia King, Ph.D., chair, 330 Education Building, 372-7382
Department of Special Education, Richard Wilson, Ph.D., chair, 451 Education Building, 372-7358

## Aims and Purposes

The College of Education and Human Development has two primary purposes: to provide coursework that contributes to the general education program of the University and to provide programs that lead to careers in the fields of education, sport management, recreation, dance, health promotion, child and family community services, and restaurant and institutional food service management.

The college believes that quality career programs must include:

1. a program of general education designed to provide a broad and liberating educational experience for life-long learning.
2. advanced study in one or more areas of specialized interest.
3. a program of on-campus and field-based professional experiences.
The College of Education and Human
Development maintains close working relationships with other colleges in the University, with elementary, secondary and vocational schools in northern Ohio and with the State Department of Education for teacher certification.

The bachelor of science in education, the bachelor of science in child and family community services and the bachelor of science in technology are offered by the College of Education and Human Development. To qualify for one of these degrees, a candidate must complete the requirements under Academic Policies, complete the 32-33 hours of general education specified in the College section, complete all of the specified major and professional requirements and complete any other published graduation requirements of the College or the program area.

## Programs Offered

The following programs are available in the College of Education and Human Development. Unless otherwise noted, the areas indicated are majors only.

Aquatics (minor only)
Art
Athletic coaching (minor only)
Athletic training (minor also available)
Bookkeeping and basic business (minor only)
Business education
Child and family development
Child and family community services
Dance (minor also available)
Early childhood education
Elementary education
Elementary/special education (dual program)
Environmental education (minor only)
Exercise specialist
Family and Consumer Sciences (minor also available)
French
German
Health education (minor also available)
Health promotion (minor also available)
Human Movement Science
Industrial technology education (minor also available)
Latin
Marketing education
Music (minor also available)
Physical education (two programs available)
(two minors also available)
Recreation (two options available) (minor also available)
Restaurant and institutional food service management (currently unavailable)
Russian
Sales (minor only)
Secondary education
Biological sciences
Chemistry
Communications
Computer science
Earth science
Economics
English (minor also available)
General science (minor only)
Geography
History
Journalism

Nathematics (minor also available)
Physics
Pollical science
Psychology/Sociology
Science comprehensive
Social studies
Spanish
Special education
Devolopmental handicaps
Hearing handicaps
Multhandicaps
Severe behavior handicaps
Special education (minor only)
Specific learning disabilities
Spor management (major only; four options avallable)
Stenography and typing (minor only)
Encorsements/Validations Leading to
Certiftcation Oifered at the Undergraduate
Level it the College of Education and
Human Development
Adapted physical education
Driver education
Elemantary school physical education
Pre-kindergarten
School nurse
Typingkeyboarding

## Collme Admission

Students accepted by Bowling Green State University may enroll in the College of Education and Human Development when they have:
i. formally declared their desire to major wilhin the College;
2. registered with the college Office of Program Advisement their choice of major or as an undecided major;
3. conferred with an adviser assigned by the College of Education and Human Development; and
4. eamed at least a 2.0 grade point average it transerring from another BGSU college.

## Collage Retention

## Mcu-Gertitication Progyams

Students registered in majors not leading to teacher certification will be considered full members of the college when they have:

1. completed ENG 112;
2. completed IPC 102 with a $C$ or better; and
3. attained a 2.0 BGSU accumulative grade point average.

## Teacher Certificetion Programs

Students registered as majors in teacher certification programs will be considered full members of the college when they have:

1. complated ENG 112;
2. completed IPC 102 with a C or better;
3. completed EDCI/F1 202 or a program altenative accepted by the college with a Corbether:
4. attained a 2.5 BGSU accumulative grade point average.
A teacher education student who fails to meet the above criteria upon attaining junior status will not be permitted to enroll in the methods courses indicated on program area checklists.

## Program Matriculation/ Retention

Many programs in the college have established matriculation/retention criteria in addition to the college criteria specified above. These additional requirements and/or application procedures are indicated on each program area checksheet and at the end of this section

## Due process for academic decisions

The College of Education and Human Development has established specific requirements for admission, retention, student teaching eligibility, graduation and certification eligibility; some program areas have also established additional full admission requirements. There are also established University policies regarding academic dismissal, deadline dates, etc.

Students who do not meet specified requirements or who have not met established deadlines may file an academic appeal. Academic appeals must be initiated in the College Office of Student Appeals, 455 Education Building, where appeal forms are available. Only written appeals are considered. A rationale for the appeal is required and documentation or other evidence may be attached. The written materials constituting the appeal are reviewed by an appeals committee, which serves in an advisory capacity to the dean. Examples of academic appeals include: appeals for reinstatement after being suspended or dismissed for academic reasons and appeals to drop and/ or change classes to or from $S / U$ beyond the specified deadline. The dean of the college reserves the right of final decision.

Appeals regarding the issuance of a grade originate with the instructor. Students wishing to appeal a grade must first contact the instructor who issued the grade. If the grade dispute cannot be resolved by the student/instructor, the student should first contact the department from which the grade was received. A member of each department, who is not a major departmental administrator, is designated to hear complaints, gather information, talk with both students and faculty, mediate disputes or identify appropriate channels for solving problems. If the dispute cannot be resolved at this level, the student should state the full particulars of the appeal in writing and submit them to the
department chair or policy committee. If the matter is not resolved at the department level, the student may request a hearing before the academic arbitration board of the appropriate school or college. The sole responsibility and authority for determining grades rests with the faculty member who assigned the grade.

The grade appeals procedure must be started by the end of the seventh week of the spring semester for grades received during the fall semester, and by the end of the seventh week of fall semester for grades received during the spring semester or during the summer session. All actions for grade changes must be completed during the semester in which the grade is appealed. Grade and absence grievances may not be appealed beyond the college level.

In cases related to academic honesty or other disciplinary action, a student is referred to the Student Code.

## Advising

Two types of advising are available to students enrolled in the College of Education and Human Development-faculty advising and college office advising.

Upon enrolling in the college, each student is assigned to a faculty adviser. Faculty advisers assist their advisees in career-decision making, selecting appropriate classes, checking progress toward a degree and long-range program planning.

To supplement faculty advising, the college maintains a staff of program counselors in the Program Advisement and Teacher Certification Office (PATCO), located in 365 Education Building. This staff provides initial advisement for all students entering the college, and supplements the advising at the faculty/departmental level. This staff can also explain certification and appeals procedures. and assist students with exploring career options.

The responsibility of contacting a faculiy or college office adviser rests with the student. Students are given a general orientation to the college upon their initial enrollment in the college, are assigned a faculty adviser, are introduced to the services of the Program Advisement and Teacher Certification Office, and are periodically sent communications from the college. It is each student's responsibility, however, to seek advice, to become familiar with the academic information avallable in the University or college offices and the Undergraduate Catalog, and to meet the established graduation and/or certification requirements. Program revision, certification changes and shifts in the demands of the marketplace support a close adviser/student relationship.

## Degree audit

juniors should request a degree audit by completing a Degree Audit Request Form in the Program Advisement and Teacher Certification Office, 365 Education Building. Once a degree audit is completed, the student is sent a listing of remaining unfulfilled graduation requirements. This information assists students in planning their senior year course selections.

## Certification

Successful completion of a Bowling Green teacher education program with at least a 2.5 accumulative GPA usually results in one or more of the seven types of Ohio certificates described below. The only times that certification does not result is 1) when a student does not successfully complete the state-mandated competency examination, 2) when a student elects to graduate on Planned Program (see this page), or 3) when a student is following a set of degree requirements that no longer meets Ohio teacher certification standards (Since the State Department of Education has the authority to change certification requirements at any time, students may be required to complete additional requirements for certification.). New standards will go into fect July 1, 1998. Students beginning their teacher education program prior to that date will have until August 31, 2002, to complete the specified program/testing requirements. Failure to complete program/testing requirements and certification application by this date will require the student to meet the July 1, 1998, standards.

All candidates seeking Ohio teacher certification must have a background check completed and must fill out an application(s) for certification. Applications, fingerprint cards and directions for completing them are available at the student teaching meeting which occurs the day before student teaching begins or from the Program Advisement and Teacher Certification Office. Completed certification applications and money orders should be submitted to 365 Education Building by the end of the second week of the student's final term of enrollment.

Ohio teaching certificates are not transferable to other states, but preliminary information on certification in other states is available in 365 Education Building.

Descriptions of the seven types of Ohio Four-year Provisional Teaching Certificates for which a candidate can be recommended by Bowling Green State University follow.

## Pre-Kindergarton

A graduate completing the child and family development major, possessing a 2.5 accumulative grade point average, and successfully completing the National

Teachers Examination is eligible for a prekindergarten certificate. Early childhood majors meeting the aforementioned criteria qualify for a pre-kindergarten validation on the K-8 certificate.

## Elementary

A graduate completing the elementary education major, possessing a 2.5 accumulative grade point average and successfully completing the National Teachers Examination is eligible for an elementary teaching certificate, valid for teaching grades one to eight. An elementary education major who meets the above criteria and who completes HDFS 224, EDCI 348, EDCI 357 and one of the following-EDFI 342, HDFS 321, PSYC 303 -will be eligible for a K-8 certificate. Students pursuing a K-8 certificate must student teach or do methods field experience in kindergarten, first, second or third grade.

## High School

A graduate completing a degree program with a major and/or minor in a secondary field, possessing a 2.5 accumulative grade point average and successfully completing the National Teachers Examination is eligible for a high school teaching certificate valid for teaching the major and/or minor subject area in grades seven through twelve. Majors and/ or minors leading to junior and high school teaching include biology, bookkeeping and basic business, chemistry, computer scierice, 'earth science, economics, English, general science, geography, health, history, home economics, journalism, mathematics, music, physical education, physics, political science, psychology/sociology, sales, stenography and typing. Elementary education majors desiring high school certification must successfully complete the subject area major or minor, the specified secondary methods course(s) and the appropriate National Teachers Examination.

## Comprehensive

A graduate completing a degree program in business education, communications, comprehensive science or comprehensive social studies is eligible for a comprehensive teachers certificate valid for teaching grades 7 and 8 in their respective major and for teaching grades 9-12 in their elected areas of concentration providing that a 2.5 accumulative grade point average and a successful score on the National Teachers Examination have been earned.

## Special

A graduate completing one of the following major programs-art, foreign language, health, industrial technology education, music or physical education-is eligible for a special teaching certificate, valid for teaching the subject in all grades, kindergarten through twelve, providing that the candidate has a 2.5 accumulative grade point average and has successfully completed the National Teachers Examination.

## Education of the Handicapped

A graduate completing one of the following majors-developmental handicaps; hearing handicaps, multihandicaps, severe behavior handicaps, specific learning disabilities-is eligible for a special exceptional children teaching certificate valid for teaching the major area in all grades, kindergarten through twelve, providing that the candidate has a 2.5 accumulative grade point average and has successfully completed the National Teachers Examination.

## Vocational

A graduate completing a marketing education, family and consumer sciences or business education major is eligible for a vocational teaching certificate, providing that the candidate has a 2.5 , accumulative grade point average and has successfully completed the National Teachers Examination.

## Planned Program

(Graduation without certification) Some students in the College of Education and Human Development decide late in the four-year sequence that they do not wish to teach or obtain teacher certification. Others may be counseled out of the teaching profession by advisers and professional education faculty. To accommodate such students, the college has a plan whereby students admitted to a program with at least a 2.5 accumulative grade point average can graduate but not be eligible for certification.

Students desiring to graduate under the planned program must complete a Planned Program Form, obtainable from and returnable to the Program Advisement and Teacher Certification Office, 365 Education Building.

If a planned program is approved, the student is not eligible for certification, and the student's official record in the registrar's office indicates "Not Eligible for Teacher Certification." Furthermore, if a candidate decides to pursue certification after a planned program has been approved, an appeal to be removed from the planned program must be filed. A petition cannot be submitted sooner than one year from the student's graduation date. If approved, the candidate must meet the requirements for student teaching and certification eligibility in effect at the time of the desired student teaching and/or recommendation for certification.

## Intercollege Curricula

A candidate for a degree from the College of Education and Human Development who desires a second degree from the College of Health and Human Services, College of Arts and Sciences, College of Business Adminis.tration, College of Musical Arts or College of - Technology may take work in that college after graduation to complete degree
requirements or qualify for the dual degree program prior to graduation. Students desiring a dual degree must:

1. secure permission of the deans of both colleges beiore the end of the junior year.
2. complete the requirements of both colleges for the degree sought.
3. complete at least 20 hours of credit beyond the hours required for a single degree.
A candidale for a degree in the College of Education and Human Development may elect a minor offered by one of the other BGSU colleges. The desired minor should be officially declared in 365 Education Building.

## Caneral faducation

The College of Education and Human Development has a strong commitment to genoral sducation and consequently requires al candidates for baccalaureate degrees to demonstrate, through satisfactory completion of a minimum of 32-33 semester hours of general education credit (which includes a minimum of eight courses from the University general education core), that they have:

1. developed skills in listening, speaking, reading, writing, mathematics computaBion, critical thinking and conflict resolufion and
2. achieved an understanding of the humanities and arts, the natural sciences, the social and behavioral sclences, and cultural diversity.
It is expected that the final outcome of each student's general education will be the ability to integrate the skills developed with the understandings achieved and that this fntegration will be incorporated in the student's personal development.

Of the $32-33$ hours of general education required, 29-30 must be completed from the five categories indicated below; the minimum number of hours in each category is also speolfied. The remaining three hours may be selected from coursework offered in categories II, III, IV, V. It should be noted that at least one course having an international perspective must be selected from Category III or N. Courses with an international perspecfive are followed by an asterisk (").

The following categories and minimum nours are required:

## 

 Minimum Total: 9 semester hoursA. Each student must satisfactorily complete ENG 112 (3); a penalty is imposed if ENG H2 is not completed before the junior year. (See page 8).
B. Each student must successfuily complete IPC 102 (3) with a grade of $C$ or better.

- $Q$, Each student must complete one of the following mathematics courses: MATH $115,116,120,126,128,130,131,134$, 135 or 232 . Elementary, early childhood, child and tamily development and special education (EDSE) majors may completo

MATH 241 and 242 (or 243) to fulfill the mathematics requirements.

## 1l. Natural Science <br> Minimum iotal: 6 semester hours (lwo courses)

A. Each student must complete two of the following natural science courses: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM $100,109 / 110,117 / 118,125,127 /$ 128, 135, 137/138; GEOG 125; GEOL 100, 104, 105, 205, 215, 322; HNRS 250; PHYS 101, 201, 202, 211, 212.

## 8II. Social and Behavioral Sciences

 Minimum total: 6 semester hours (two courses)Each student must complete two of the following: A\&S 250; CAST 201*; ECON 100, 200, 202, 203; ENVH 210*; ENVS 101, 301; GEOG $121^{*}, 122^{*}, 225,230^{*}$, $325^{*}, 331^{*}, 343^{*}, 344^{*}, 346^{*}, 349^{*}, 426$, 452*; GERO 405; HIST 151*, 152*, 180*, 205, 206, 310*, 311*, 370*, 377*, 382*, 411*, 429, 470*; HNRS 201, 240; POLS 110, $171^{*}, 172^{*}, 301,335,351^{*}, 361^{*}$, 372*, 402, 403; PSYC 201; SOC 101, 202, 231*, 361; TECH 302.

## IV. Humanities and Arts

Minimum total: 5 semester hours (two courses)

Each student must complete two of the following: ACS 200, 230, 300; ART 101; ARTH 145, 146; A\&S 250; CHIN 201*, 202*; CLCV 241, 242; ENG 150, 200, 203, 261, 262, 264, 265, 266, 267, 269*; ETHN 220*; FREN 201*, 202*, 211*, 212*; GERM 201*, 202*, 217*, 218*, 260*; GRK 201, 202; HNRS 260; ITAL 201*, 202*; JAPN 201*, 202*; LAT 201*, 202*; MUCH 101, 125*, 221, 233*, 234*, 235*; PHIL 101, 102, 103, 204, 211, 212, 230, 325; POPC 160, 165, 220; RUSN 201*, 202*; SPAN 201*, 202*, 211*, 212*; THEA 141, 202, 261, 347, 348.

## W. Cuitural Diversity in the Unitea

 StatesMinimum total: 3 semester hours (one course)

Each student must also select one of the following courses: ACS 250; EDFI 408; ENG D200, 424; ETHN 101, 120, 130 , 210, 260, 301, 302, 361, 410; GEOG 337; GERO 301; HDFS 107, 408; HIST 307, 319; MUCH 237, 431; POPC 170; SOC 316; TCOM 270; THEA 215; WS 200.

## Vi. Additional General Core Course

 Minimum total: 3 semester hours (one course)Each student must complete one additional course from categories II, III, IV or $V$.

## Professional Requirements

All students pursuing programs leading to teaching certification must complete a sequence of courses in professional education. This coursework is integrated with directed observation and participation in school settings (field experiences) and is accompanied by on-campus clinical experiences. Professional education coursework required in each of the teachor education program areas is shown below.
Business education: BUSE 497; EDCI 202 or EDFI 202; EDSE 311; EDCl 420 ; EDFI 302, 402 and 408; EDAS 409; and BUSE $314,352,354,358$ and 468. BUSE 356 also required if shorthand cerificication is desired.
Child and family development: HDFS 322, 423, 491; EDCl 202 or EDFI 202: EDFI 302, 408, 429; EDAS 405; EDSE 421; FCS 389.
Developmental handicaps: EDSE 492; EDCI 202 or EDFI 202; EDFI 302; EDF: 402 or EDF 429, and 408; EDAS 409; and EDSE 431, 437, 442 and 457.
Elementary education: EDCl 492; EDCl 202 of EDFI 202; EDSE 311; EDFI 302, 402 and 408 ; EDAS 409; and EDCI 350 , $351,352,353,355$ and 356.
Family and consumer science: FCS 497; EDCI 202 or EDFI 202; LEM 301; EDSE 311; EDCI 420; EDFI 302, 402, 408; EDAS 409; and FCS 250, 352, 353 and 354.

Foreign languages (French, German, Latin, Russian, Spanish): EDCl 497; EDCI 202 or EDFI 202; LEM 301; EDSE 311; EDFI 302, 402 and 408; EDAS 409; and EDCI 373 and EDCI 429 .
Health: HED 497; HED 216 or EDCI 202 or EDFI 202; EDSE 311; EDCI 420; EDFI 302, 402 and 408; EDAS 409; and HED 348, 393, 409 and 481.
Hearing handicaps: EDSE 492 o: 497; EDCI 202 or EDFI 202; EDF1 302; 402 or 429, and 408; EDAS 409; EDSE 431, 442, 451, 457; EDCI 366.
Marketing education: BUSE 497; EDCI 202 , or EDFI 202; EDFI 302, 402, 408; EDSE 311: EDCI 420; BUSE 314, 364, 46: 462, 463 or 465; EDAS 409.
Multihandicaps: EDSE 492; EDCI 202 or EDFI 202; EDFI 302, 402 or 429 and 408 ; EDAS 409; and EDSE 431, 437, 442 and 457.

Music education: MUED 497; EDFI 302, 402 and 408; EDAS 409; MUED 240 and 340. Music education is a major within the College of Musical Arts. See the College of Musical Arts section for content and general education requirements.
Physical education, K-12 with elementary emphasis: KNS 492, 497; KNS 247 or EDCI 202 or EDFI 202; LEM 301 or VCT 203; EDFI 302 and 408; KNS 402; EDAS 409; and KNS 238, 241, 332, 337, 428, 433 and 438.

Physical education, K-12 with secondary emphasis: KNS 241, 247, 332, 362, 402, 433, 497; EDFI 302 and 408; EDAS 409; LEM 301.
Secondary education: EDCI 202 or EDFI 202; EDCI 367; EDFI 302, 402 and 408; EDSE 431; EDAS 409; EDCl 420; EDCl 497; and one of the following: EDCI 371, $372,374,375,376$ or 378.
Severe behavior handicaps: EDSE 492; EDCI 202 or EDFI 202; EDFI 302; EDFI . 402 or 429; EDFI 408; EDAS 409; EDSE 431, 437, 442 and 457.
Specific learning disabilities: EDSE 492; EDCI 202 or EDFI 202; EDFI 302, 402 or 429, 408; EDAS 409; and EDSE 431, 437, 442 and 457.
Technology education: TE 497; EDCI 202 - or EDFI 202; VCT 203; EDFI 302, 402 and 408; EDAS:409; and TE 252, 352, 447, 449 and 462.
Visual arts: ARTE 492, 497; EDCI 202 or EDFI 202; EDFI 302, 402 and 408; EDAS -409; and ARTE 252, 352, 407, 452; ARTE 382 or EDSE 311.

## Student Teaching

Student teaching is the culminating field experience in the student's teacher education program. During student teaching, the student devotes full-time to teaching and to jarticipating in the school's activities under the guidance of a cooperating teacher and campus field supervisor. The student progresses from observation and directed participation to responsibility for full-time teaching. Students in art ordinarily teach in both elementary and secondary schools. Student teaching assignments for the student in public school music are individually planned to give proper balance or concentration in vocal or instrumental experience

The college attempts to place student teachers in the best available stations. While student preferences are taken into consideration, they cannot be met in all cases. Stations must have both college and program approval. Students are responsible for their own transportation to student - teaching stations.

Student teaching in a major area can only be repeated once. Thus only two opportunities to successfully complete student teaching in a major area are given.

All students who student teach in the spring semester must follow the spring break calendar of the school system to which they have been assigned; the University spring break is forfeited.

Upon completion of student teaching, - students receive a copy of their student teaching evaluation report. Students should retain this copy for their records and future reference since the University does not include/retain this report/evaluation as part of the permanent record.

## Student Teaching Eligibility Requirements

To be eligible for assignment in student teaching, the student must have:

1. Filed an application for student teaching at a sign-up meeting held the second Wednesday of fall semester for students planning to student teach the following spring and/or fall semester. Information is available in 365 Education Building.
2. Been fully admitted into the College of Education and Human Development (see College Retention).
3. Been fully accepted in a certification program either as an undergraduate or .baccalaureate degree holder.
4. Completed 90 hours of university credit, including:
a. EDCI 202 or EDFI 202 or a program alternative accepted by the College with a C or better.
b. ENG 112
c. IPC 102 with a C or better
d. EDFI 302
e. Methods course(s) required for the program.
5. Completed any additional program specific requirements listed on the official program check sheet available from the Program Advisement and Teacher Certification Office.
6. Earned an accumulative grade point average of 2.50 by the end of the semester prior to student teaching. Students who are declared ineligible for student teaching have the right to appeal the decision via a letter to the Field Experience Office. The appeal letter will then be forwarded to the appropriate program area for action. Program coordinators will notify the student in writing regarding the outcome of the appeal.

## International Teacher Education Programs

The College of Education and Human Development offers interested education majors an opportunity to complete the educational component of student teaching in an international setting.

Selected individuals will be placed in an international school in Rio de Janeiro, Brazil, or Montreal, Canada, for a student teaching program. Student teaching abroad enables individuals to understand aspects of another country and, its ramifications on the western world.

Interested students should direct initial inquiries to the Office of Field Experiences, 365 Education Building.

## Majors/Minors/Content/

## Endorsements Area Requirements

Following is an alphabetical listing of the majors/minors/endorsements available in the College of Education and Human Development. Offerings in the School of Health, Physical Education and Recreation and in the Department of Family and Consumer

Sciences are grouped by unit with selective cross-referencing in this list. It should be noted that all teacher certification majors, minors, validations and endorsements in the following list will lead to Ohio teacher certification only if completed and applied for before Septemeber 1, 2002. Degree requirements for any of the majors and minors must also include the specified general education requirements; those majors and minors leading to Ohio teacher certification must be accompanied by specified professional education coursework as well. The coursework indicated has been approved by the College of Education and Human Development.

Checksheets indicating all required coursework (content, professional, general) for each major and/or minor are available in the Program Advisement and Teacher Certification Office, 365 Education Building. These checksheets also indicate College retention requirements and, when appropriate, student teaching eligibility requirements, program area admission/retention requirements, and certification eligibility requirements.

## Art

1000 Fine Arts Building, 372-2786
Major ( 56 hours)
ART 102, 103, 112, 205, 263 (15)
ARTH 145 and 146 (6)
Select two of these: ART 261; 246; 320 or 321; 466; 365 or 366 (6)
Select two of these: ART 325; 371 or 373; 277; 390; ARTD 211 (6)
ART history elective (3)
ART electives (8)
ART sequence study in one area (6)
ARTH 442, 456 or 457 (3)
PHIL 204 (3)

## Other programs

Programs in art also are offered by the College of Arts and Sciences and its School of Art.

## Astronomy

365 Education Building, 372-7372
Endorsement (leads to a strong background in astronomy, but does not lead to teacher certification) (8-9 hours)

ASTR 201 (3)
Two of these courses-ASTR 212, 305, 307, 403, 321 (5-6)

## Other programs

Programs in astronomy also are available through the College of Arts and Sciences.

## Fohient coaching

See School of Health, Physical Education, and Recreation.

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See School of Heallh, Physical Education, and Pecreation.

Sionogical Sciences
365 Education Building, 372-7372
Hialor ( 56.58 hours)
BIOL 204, 205, 30t, 332, 350, 352, 451 (24)

BIOL 313 or 343 (4)
Select one: BIOL 407, 408, 411, 417, 431, 442, 443 (3-4)
Select one: BICL 331, 405, 413, 414, $420,422,424,425,427,435,472$, $470,474,476,477(3-4)$
CHEM 125 or 135 (5)
OHEM 127/128 of $137 / 138$ (5)
FHYS 201 (5)
GEOL 104 (4)
ASTR 201 or 212 or GEOG 125 or 213 (3)

Other programs
Programs in biological sciences are also offered through the College of Arts and Sciences.

## 

242 Bueiness Administration Building, 372-2901
hajor-Comprehensive business education ( 60 hours)

BUSE 101, 321, 210, 204, 205, 206, 207, $240,304,305,306,335,455$ (27)

ACCT 221, BA 203, ECON 202, LEGS 301 (12)
MGMT 305, MKT 300 (6)
Select one: ACCT 222 or ECON 203 (3)
Solect 12 hours from MKT 302, 310, 430, 440; ECON 302, 303, 304, 311; MEMT 361; FIN 300; BUSE 307, 311 , 401; CS elective (other than 100 or 130); MIS elective (other than 200) (12)

Upen graduation a student is eligible for vocational certification and high school certification for business education in grades 7 and 8 and bookkeeping/basic business and lyping in grades 9 - 12 provided the stateprescribed examination has been successfully completed. Careful selection of the 12 hours of business electives could also lead to high school certification in aconomics, sales or stenography. Students must follow the checksheet given to them; the checksheet indicates the business electives that must be selected to qualify for one or
more of the additional areas of secondary certification indicated above.
Minor-bookkeeping and basic business ( 30 hours) (leads to certification only if a certified major is also being pursued)

ACCT 221 and 222 (6)
BUSE 240, 321 and 335 (9)
MKT 300 and LEGS 301 (6)
ECON 202 and 203 (6)
Elective in ACCT, LEGS, ECON, MKT, MGMT (3)
Minor-sales ( 30 hours) (leads to certification only if a certified major is also being pursued)

BUSE 240 (3)
BA 203 (3)
MKT 300, 302, 310, 430, 440 (15)
ECON 202 and MGMT 305 (6)
Approved elective in ACCT, ECON, MKT, MGMT, LEGS (3)
Minor-stenography and typing ( 30 hours)
(leads to certification only if a certified major is also being pursued)

BUSE 204, 205, 206, 210, 304, 311, 321, $335,401,455$ (24)
BA 203 (3)
Elective selected from ECON, MKT, MGMT, LEGS (3)

Endorsement-typing/keyboarding (7 hours) (leads to certification only if a certified major is also being pursued)
BUSE 210, 204, 304 (7)

## Cfentisigry

365 Education Building, 372-7372
Major (49 hours)
CHEM 125, 127/128 (10) or CHEM 135, 137/138 (10)
CHEM 201 (for those having taken CHEM $125,127 / 128$ ) (3)
CHEM 341 and 342 (10)
CHEM 352 (3) or CHEM 405 (3-4)
CHEM electives selected from CHEM 321, 442, 413, 463, 308/309, 406, 407, 408, 445 (6-9)
BIOL 204 or 205 (5)
PHYS 201 (5)
GEOG 104 (4)
ASTR 201 or 212 or GEOG 125 or 213 (3)

Other programs
Programs in chemistry also are offered through the College of Arts and Sciences.

## Child and Family Community Services

See Department of Family and Consumer Sciences.

## Child and Eamuily Development

See Department of Family and Consumer Sciences.

## Communications

365 Education Building, 372-7372
Major ( $62-65$ hours plus EDCI 420 and 349 )
IPC 102, 201, 306 and 308 (12)
ENG 201 (4)
ENG 380 (4)
IPC 203 or 205 (3)
JOUR 100 and 414 (6)
JOUR 200 or 201 (3)
Select two, one of which must be ENG
266 or 267: ENG 264, 265, 266, 2.67 (6)

In addition to the 38 hours specified above, TWO areas of concentration of 12-15 hours each must be completed. The areas of concentration from which a student may choose are English, speech and journalism. Students must follow the checksheet given to them; the checksheet indicates the courses appropriate for the areas of concentration. Upon graduation, a student is cerifitied to teach communications in grades 7 and 8 and the two areas of concentration selected in grades 5 -12 provided the state-prescribed examination has been successfully completed.

## Compurer Science

365 Education Building, 372-7372
Major ( 30 hours)
CS 101, 205, 215, 217, 325 (15)
Select two: CS 324, 327, 335 (6)
Two CS electives at the 400 level, excluding CS 490 (6)
An approved societal impact course (see department for list) (3)
MATH 131 or 134 and 135 (5-6)
MATH 247 or 313 (3)
MATH 222 or 322 (3)
Students with a minor or joint major in
MATH need not complete the listed MATH courses.

## Other programs

Programs in computer science are also offered through the College of Arts and Sciences.

## Dance

See School of Health, Physical Education and Recreation.

## Devellopmental landicaps

451 Education Building, 372-7293

Major (See full admission, retention and student teaching eligibility requirements, page 91-93.) In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curriculum content, specialization and professional education coursework is required:
Curriculum Content ( 30 hours)
MATH 241; GEOG 121, 122 or 230; HIST 151, 152, 180, 205 or 206; ENG 342 or 343; HED 346; CDIS 223, 451 or 471 ; EDCI 349; KNS 433; MUED 248 or ARTE 482; one of these--EDSE 421, 456, 459, PSYC 405, SOC 341, ARTT 230, EDCI 366
Specialization (24 hours)
EDSE 433, 451, 454, 484, 447, 448, 453, 443 (taken 3 times)
Professional Education ( 37 hours)
EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDSE 431, 437, 442, 457, 492.

## Driver Education

See School of Health, Physical Education, nd Recreation.

## Dual Certification <br> Elementary and an area of Special Education <br> 365 Education Building, 372-7372

A special dual certification program is available for students desiring certification in both elementary education and one of the following areas of special educationspecific learning disabilities, developmental handicaps, multihandicaps, severe behavior handicaps. Students desiring this program must meet all of the full admission requirements for both the elementary and special education programs.
In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curriculum content, specialization and professional education coursework is required: Curriculum Content (39-43 hours)
BIOL 101 or 104; HIST 151, 152, 205 or 206; HED 346; ENG 342 or 343; MATH 241, 242; KNS 342 or 433 ; EDCI 349, 366; CDIS 471, 223 or 451; MUED 248 or ARTE 343 or 482; one from GEOL 100, 104, 105, 205 or 215; one from PHYS 101, 201, 202, CHEM 100, 09/110, 125
Specialization (24 hours)

EDSE 433, 451, 454, 484, 447, 448, 453, 443 (taken 3 times)
Professional Education ( 61 hours)
EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDSE 431, 437, 442, 457, 492; EDCl 350, 351, 352, 353, 355, 356, 492.
Notes: 1) The program outlined above is the dual program leading to elementary and SLD or DH or SBH certification. Students desiring MH/Elemenatry certification must take EDSE $440,443,445$ and 470 instead of EDSE 447. $443,448,452$. 2) Approximately 10 semesters are required for completion of the program.

## Early Childhood Education

See Department of Family and Consumer Sciences.

## Earth Science

365 Education Building, 372-7372
Major (49-50 hours)
GEOL 104, 105 (8)
GEOG 125, 213 (6)
GEOL 302, 304 (8)
GEOL 493 (6)
Select one: GEOL 205, 215, 322, 415 (3-4)
BIOL 204 or 205 (5)
CHEM 125 or 135 (5)
ASTR 201 or 212 (3)
PHYS 201 (5)

## Economics

365 Education Building, 372-7372
Major (30 hours)
ECON 202, 203, 303 (9)
ECON electives (21)
Other programs
Programs in economics also are offered through the College of Arts and Sciences and the College of Business Administration.

## Elementary Education

365 Education Building, 372-7372
Major See full admission, retention and student teaching eligibility requirements. In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curriculum content, specialization and professional education coursework is required:

Curriculum Content (42-46 hours) HED 346; ARTE 343; ENG 342; MUED 248; MATH 241, 242; KNS 342; EDCI 349, 366; CDIS 471; BIOL 101 or 104; HIST 151, 152, 205 or 206; one from GEOL 100, 104, 105, 205, 215; one from PHYS 101, 201, 202,
CHEM 100, CHEM 109/110, 125
Area of Concentration (20-33 hours)
See checksheet to select one of the six areas of concentration available. Professional Education ( 45 hours) EDFI 202 or EDCI 202; EDFI 302, 402, 408; EDSE 311; EDAS 409; EDCI 350, 351, 352, 353, 355, 356, 492.
Note: Elementary education majors or Ohiocertified elementary education teachers desiring to qualify for kindergarten certification ( $\mathrm{K}-3$ ) must successfully complete the Early Childhood Education specialty area test of the NTE and must complete the following 12 hours of coursework: EDCI 348 357; HDFS 224; EDFI 342 or PSYC 303 or HDFS 321.

Elementary education majors also desiring developmentally handicapped, specific learning disabled, multihandicapped or severe behavior handicapped certification, should follow the dual certification program indicated on the preceding page.

## English

201 University Hall, 372-2576
Major ( 38 hours beyond English 112, plus
EDCI 420 and A\&S 250 (3)
Group I
ENG 201 (4)
Group II
ENG 301, 343 (6)
Select one: ENG 261 or 306 (3)
Select two (at least one must be ENG 266 or 267): ENG 264, 265, 266, 267 (6)

Select one: ENG 320, 323, 325, 330, 333, 335 (3)
Select one: ENG 310 or if topic is appropriate ENG 423 (3)
Students are urged to take also at least one British literature course (other than Shakespeare). A second major author course is also recommended.
Group III
ENG 380*, 381*, 483 (10)
Select one: ENG 481 or 482 or 484 (3)
ENG 207, 208, 251 and 388 are also recommended.
*Prerequisites for EDCI 371. Students should also complete Groups I and II before taking EDCI 371.

Minor ( 29 hours of English beyond ENG 112 plus EDCl 420) (leads to certification only if a certified major is also being pursued) Group I

Select one: ENG 201 or (205 and 206) (46)

## Group 11

ENG 301 (3)
Select one: ENG 261 or 306 (3)
Select two: ENG 264, 265, 266 or 267 (6) (at least one must be ENG 266 or 267)

Select one: ENG 320, 323, 325, 330, 333 or 335 (3)
ENG 310 and 343 are also recommended.
Group II
ENG 380, 381, 483 (10)
One of the foliowing courses is also recommended-ENG 207, 208, 251, 388, 481, $482,484$.

##  <br> 

365 Education Buitding, 372-7372
Ping (does not lead to certification) (21-22 hours)

BIOL 103 (3)
Select two of these-EDF1 415, 490, 416 (6)

Selecitour of these-BIOL 104, GEOG 331, GEOG 442, HIST 338, ECON 435 , POLS 335, POLS 336, PHIL 332, ENVR 421 (12-13)

## Exderise Specianist

See School of Heaith. Physical Education and Fecreation.

## Fentily and Consumer Scivences

See Department of Farnily and Consumer sciences.

## mandeh

365 Education Building, 372-7372
Heajor ( 33 hours of French beyond 202)
FAEN 351, 352, 353, 361, 362, 371, 372 (21)

FREN electives at 400 -level (at least one course with francophone content must be included) (12)
Other programs
Programs in French also are available through the College of Arts and Sciences.

## fecgraphy

365 Education Building, 372-7372
Maior ( 30 hours)
Select two from this group: GEOQ 125 , $126,127,213,404,433,455,457$ (6)

Select two from this group: GEOG 225, $230,337,325,327,326,331,333$, 334, 335, 402, 426, 436, 442, 452, 475 (6)
Select two from this group: GEOG 341, $342,343,344,345,346,347,349$, 351 (6)
Geography electives (12)

## Other programs

Programs in geography also are offered through the College of Arts and Sciences.

## Gevman

365 Education Building, 372-7372
Major (31 hours of German beyond 202)
GERM 317, 318,417 (9)
Select two: GERM 315, 316, 416 (6)
GERM 311 or 313 (3)
GERM 491 (Senior Project) (2)
GERM electives beyond 202 (GERM 260 and 360 may not be counted toward the major) (11)

## Other programs

Other programs in German also are available through the College of Arts and Sciences.

## Health

See School of Health, Physical Education, and Recreation.

## Hearing Handicaps

451 Education Building, 372-7293
Major (See full admission, retention and student teaching eligibility requirements.) In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curriculum content, specialization and professional education coursework is required:
Curriculum Content (20-21 hours)
MATH 241; ENG 342; EDCI 349; KNS 433; HED 346; ART 101 or ARTH 145 or 146 or ARTE 343 or 482; MUCH 101 or 125 or MUED 248
Specialization (42 hours)
CDIS 223, 224, 302, 361; EDSE 461, 462,
$463,464,465,466,467,459,460,443$
(taken 3 times)
Professional Education ( 40 hours) EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDCI 366; EDSE 43i, 451, 457, 442, 492.

## Mistory

365 Education Building, 372-7372
Major ( 33 hours)
HIST 205, 206, 480 (9)
Select one: HIST 151, 152 or 180 (3)
History electives (21) Included in these 21 hours must be three 400 -level courses and at least one course from each of the following groups:
Select one: HIST 301, 303, 306, 307, $326,421,422,425,426,428,429$, 430, 433, 437 (3)
Select one: HIST 357, 363, 367, 377, $415,444,454,458,459,464,469$, 470, 471 (3)
Select one: HIST 304, 305, 309, 310, 311, 315, 360, 381, 382, 386, 401, 411, $413,414,441,442,462,483,486$ (3)

## Other programs

Programs in history are also offered through the College of Arts and Sciences.

## Journalism

365 Education Building, 372-7372
Major (31 hours)
JOUR 100, 200, 414 (9)
JOUR $310,320,330,341,345,430$ (18)
JOUR 400 (1-3)
JOUR elective (3)

## Other programs

Other programs in journalism are offered through the School of Mass Communication in the College of Arts and Sciences.

## Latin

365 Education Building, 372-7372
Major (31 hours beyond 202)
Courses in LAT beyond 202 (31) (included may be CLVC $380,381,485$ and a maximum of 6 hours of Greek)

Other programs
Programs in Latin also are offered by the College of Arts and Sciences.

## Marketing Eatucation

250 Business Administration Building, 372-8039

Major (45 hours)
BUSE 101 and 240 (6)
BA 203 (3)
ECON 202 (3)
MKT 300, 302, 310, 430 (12)
BUSE 204, 205 and 206 or MIS 200
(3)

ACCT 221 or 325 (3)

MGMT 300 or 305 (3)
Select 12 hours of electives from the 38 courses specified on checksheet available in 365 Educ. Bldg. (12)

## Mathematics

365 Education Building, 372-7372
Major (35 hours)
MATH 131, 232, 233, 322, 332, 341, 402 (26)

MATH elective at $300 / 400$ level, excluding 395, 414, 490, 495 (3)
MATH 339 or 403 (3)
MATH 421 or 465 (3)
Minor ( 31 hours)
MATH 131, 232, 233, 322, 332, 402 (22)

MATH 339 or 403 (3)
Two MATH electives selected from MATH 247 or any 300-400 level MATH course excluding $395,414,490,495$; one 400 -level course must be included (6)

Other programs
Programs in mathematics also are offered by the College of Arts and Sciences.

## Multihandicaps

451 Education Building, 372-7293
Major (See full admission, retention and student teaching eligibility requirements. In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curriculum content, specialization and professional education coursework is required: Curriculum Content ( 30 hours)
MATH 241; GEOG 121, 122 or 230; HIST 151, 152, 180, 205 or 206; ENG 342 or 343; HED 346; CDIS 223, 451 or 471 ; EDCI 349; KNS 433; MUED 248 or ARTE 482; one of these--EDSE 421, 456, 459, PSYC 405, SOC 341, ARTT 230, EDCI 366 Specialization (23 hours)
EDSE 433, 451, 454, 484, 440, 445, 470, 443 (taken 3 times)
Professional Education ( 37 hours)
EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDSE 431, 437, 442, 457, 492.

## Music

1031 Musical Arts Building, 372-2181
Major (see College of Musical Arts.)
All prospective music minors must complete
the music entrance examinations (see College of Musical Arts)

Minor-secondary instrumental (31-33
hours)
MUCH 131, 132, 231 (11)
MUCH 141, 142 (4)
MUED 150, 151 or 154 (1-2)
MUSP major instrument (3)
MUSP 305 and 306 (4)
MUED 340 (6-7)*
MUSP large ensembles (2)
Minor-secondary vocal (31-33 hours)
MUCH 131, 132, 232 (10)
MUCH 141, 142 (4)
MUED 150, 151 or 154 (1-2)
MUED 170, 177 or studio voice (4)
MUSP 305, 306 (4)
MUED 340 (6-7)*
MUSP large ensembles (2)

* See prerequisites, College of Musical Arts.


## Other programs

Programs in music also are offered by the College of Musical Arts and College of Arts' and Sciences.

## Philosophy

365 Education Building, 372-7372
The following endorsements lead to a background in philosophy, but do not lead to teacher certification:
Endorsement-teaching courses in
philosophy ( 15 hours)
PHIL 101, 103, 470 (9)
PHIL 102 or 204 (3)
EDFI 408 (3)
Endorsement-philosophy as a supplement to major field of study ( 15 hours)

PHIL 101, 103 (6)
EDFI 408 (3)
PHIL electives (6)

## Other programs

Other programs in philosophy also are offered through the College of Arts and Sciences.

## Physical Education

See School of Health, Physical Education, and Recreation.

## Physics

365 Education Building, 372-7372
Major (49 hours of physics plus MATH 232)
PHYS 211 and 212 (10)
PHYS 270, 301, 311, 317, 360 (10)
PHYS 303 and 307 (6)
MATH 232 (5)
BIOL 204 or 205 (5)
CHEM 125 or 135 (5)
ASTR 201 or 212 (3)
GEOL 104 (4)
PHYS electives at $300 / 400$ level (6)

## Other programs

Programs in physics also are offered through the College of Arts and Sciences.

Political Science<br>365 Education Building, 372-7372<br>Major ( 30 hours)<br>POLS 110, 331, 416 (9)<br>Select two: POLS 345, 346, 440, 443 (6)<br>Select two: POLS 351, 354, 355, 361, 366, 368, 458, 462 (6)<br>Select one: POLS 172, 460, 473, 475 (3)<br>Select one: POLS 301, 303, 423, 459 (3)<br>POLS elective at 300/400 level (3)

## Other programs

Programs in political science also are offered by the College of Arts and Sciences.

## Psychology/Sociology

365 Education Building, 372-7372
Major (37-39 hours)
PSYC 201 (4)
SOC 101, 202 (6)
Select three: PSYC 303, 307, 405, 460 (9)

Select three: SOC 231, 312, 340, 361 (9)
Select either Option A or Option B (9-11)
Option A-PSYC 270, PSYC 290, SOC 301 (11)
Option B-SOC 369, SOC 368, PSYC 311 (9)
Other programs
Programs in psychology are also offered by the College of Arts and Sciences.

## Recreation

See School of Health, Physical Education and Recreation.

## Restaurant Management

See Department of Family Consumer Sciences.

## Russian

365 Education Building, 372-7372
Major (29 hours beyond 202)
RUSN 317, 318, 417 (9)
RUSN 320, 419 (4)
RUSN 401, 480 (readings in literature) (6)
RUSN electives beyond 202 (10)
Other programs
Programs in Russian also are offered by the
College of Arts and Sciences.

## Schmee Compremensive <br> 365 Education Building, 372-7372

Major (62 hours)
GEOL 104 or 105 (4)
GEOG 125 or 213 (3)
CHEM 125 or 135 (5)
BIOL 204 or 205 (5)
ASTA 201 or 212 (3)
PHYS 201 or 211 (5)
In addition to the 25 hours specified above, Two areas of concentration must be completed. The areas of concentration from which a student may choose are blology, eerth sclence, chemistry, physics. Students must follow the checksheet given them; the checksheei indicates the courses appropriate for the areas or concentration. Upon graduation a siudent is certified to teach science in grades 7 and 8 and the areas of concentration selected in grades 9-12.

Miner (general science) ( $34-37$ hours)
BIOL204, 205 (10)
FHVS 201, 202 OH211, 212, 301 (10-13)
GHEM 125, 127/128 OR 135, 137/138 (10)

GEOL 104 (4)

## Sceoncury Education

365 Education Building, 372-7372
Biajor (Biology, Chemistry, Communications, Computer Science, Earth Science, Economics, English, Geography, History, Journalism, Mathematics, Physics, Political Science, Psychology/Sociology, Science Comprehensive, Social Studies.) See individual heading for coursework required in the above areas.

Eight of a secondary education major's required 10 professional education courses musi be taken in blocks. Specifically, EDFI 302 and EDSE 431 must be taken the same semester; EDCI 367, EDCI 420, EDFi 402 and one of the advanced methods courses (EDCl 371, 374, 375, 376) must be taken the samie semester; and EDAS 409 and EDCI 497 must be taken the same semester.

## Sevare Behavior

## Tlanticaps

451 Education Building, 372-7293
malor (See full admission, retention and student teaching eligibility requirements.) In addilion to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (seo page), the following curriculum content, specialization and professional oducation coursework is required: Curriculum Content (30 hours) MATH 241; GEOG 121, 122 or 230; HIST 151, 152, 180, 205 or 206; ENG 342 or 343; HED 366; CDIS 223, 451 or 471 ; EDCI 349;

KNS 433; MUED 248 or ARTE 482; one of these--EDSE 421, 456, 459, PSYC 405, SOC 341, ARTT 230, EDCI 366
Specialization (24 hours)
EDSE $433,451,454,484,447,448,453$,
443 (taken 3 times)
Professional Education ( 37 hours) EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDSE 431, 437, 442, 457, 492.

## Social Studies

365 Education Building, 372-7372
Major ( 60 hours)
SOC 101 and HIST 205 (6)
GEOG 230 (3)
ECON 200 or 203 (3)
POLS 110 (3)
In addition to the 15 hours specified above, TWO areas of concentration of 18-19 hours each must be completed. The areas of concentration from which a student may choose are history, economics, geography, political science, sociology/psychology. In addition, 8 -9 hours of additional social science must be completed OUTSIDE the areas of concentration for a minimum total of 60 semester hours.

A student desiring an American studies concentration in this major must complete/ include ACS 200, 230 and 400 in the "additional social science" category; must complete ENG 266 and 267; and must complete history and either geography or political science as areas of concentration.

Students must consult an assigned social studies adviser and follow the checksheet given them. The checksheet indicates the courses appropriate for the areas of concentration. Upon graduation a student is certified to teach social studies in grades 7 and 8 and the areas of concentration selected in grades 9-12, provided the stateprescribed examination has been successfully completed.

## Spanish

365 Education Building, 372-7372
filajor ( 33 hours beyond 202)
SPAN 351, 352, 367, 368, 371 (15)
SPAN 377 and 378 (6)
SPAN electives at 400 -level (12)

## Other programs

Programs in Spanish also are offered by the College of Arts and Sciences.

## Special Education

See hearing handicaps; developmental handicaps; multihandicaps; severe behavior handicaps; and specific learning disabilities. Also see adapted physical education in the School of Health, Physical Education and Recreation.

Special Education Minor (does not lead to certification) (15 hours)

EDSE 311 or 431 (2-3)
EDSE 433 (3)
EDSE 451 or 454 (3)
Select 7 hours from this group-EDSE 421, 432, 437, 440, 441, 442, 443, $445,447,448,453,456,457,461$, $462,463,464,465,470(7)$

## Specific Learнйing Disabilities

451 Education Building, 372-7293
Whajor See full admission, retention and student teaching eligibility requirements. In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the following curticulum content, specialization and professional education coursework is required: Curriculum Content ( 30 hours) MATH 241; GEOG 121, 122 or 230; HIST 151, 152, 180, 205 or 206; ENG 342 or 343; HED 346; CDIS 223, 451 or 471 ; EDCI 349 ; KNS 433; MUED 248 or ARTE 482; one of these--EDSE 421, 456, 459, PSYC 405, SOC 341, ARTT 230, EDCI 366 Specialization (24 hours) EDSE 433, 451, 454, 484, 447, 448, 453, 443 (taken 3 times)
Professional Education ( 37 hours)
EDFI 202 or EDCI 202; EDFI 302, 408; EDFI 402 or 429; EDAS 409; EDSE 431, 437, 442, 457, 492.

## Sport Management

See School of Health, Physical Education and Recreation.

## Sport Specialist

See School of Health, Physical Education and Recreation.

## Technology Ealucation

260 Technology Building, 372-2437:
365 Education Building, 372-7372

## Major-Technology Education

In addition to the degree requirements of the University (see page) and the general education requirements prescribed by the College of Education and Human Development (see page), the iollowing curriculum content, specialization and professional education coursework is required:
Major and Other Courses (57 hours)
TECH 101 or MIS 200; TECH 102, 302, 323;
CONS 235; DESN 131; DESN 104 or ARCH
105; ET 196; MFC 112, 220, 322; VCT 203;

15 hours of technology electives by adviseent; MATH 128; PSYC 201 rofessional Courses ( 39 hours)
TE 252, 352, 447, 449, 462, 497; EDFI/
EDCI202; EDFI 302, 402, 408; EDAS 409; EDSE 311.

Minor-Industrial Technology Education (36 hours)
This minor in technology education is restricted to teacher education majors and practicing teachers in the following areas: comprehensive science, physics, chemistry, biology, earth science, social studies, environmental science, or computer science. Alternatively, students and practicing teachers from other areas may petition for admission through the technology education faculty. This minor leads to high school certification for industrial technology education, provided a certified major is (or has been) successfuily completed.

TECH 101 or 102 or 302 (by advisement) (3)

DESN electives (by advisement) (6)
TE 352 (3)
TE 447 (3)
TE 449 (3)
MFG. 112 (3)
MFG 220 (3)
MFG 329 (3)
ET 191 (3)
CONS 235 or 306 (3)
VCT 203 (3)

## College of Education Retention/Full Acceptance Requirements

Several programs in the College of Education and Human Development have established retention/full acceptance requirements in addition to those specified by the college. Following is an alphabetical listing of these program areas and the additionally specified requirements.

## Elementary Education and Early Childhood Education

All students desiring admission to the elementary education program will be labeled pre-elementary education and must meet specific admission criteria. Prospective elementary education majors will be assigned an elementary education adviser, viven an elernentary education checksheet to fllow and advised to take courses required in the elementary education major. They will, however, need to be fully admitted in the program before enrollment in $\operatorname{EDCI} 350,351$,

352, 353, 355 and 356 methods courses will be permitted.

## Prerequisites for Full Admission

1. Completion of the following courses with a grade of C or BETTER:
ENG 112
IPC 102
EDCI/FI 202
EDFI 302
MATH 241 and 242 or MATH 243
2. Possession of at least a 2.5 accumulative grade point average.
3. Successful completion of at least 60 semester hours. Note: Transfer students must complete at least 15 of the 60 hours at BGSU with a BGSU GPA of at least 2.5.
4. A ranking in the top 100 of all "preelementary" students meeting the first three criteria according to the following policy:

The elementary education program
area accepts a maximum of 100
students each semester of the academic year-100 at the end of fall semester and 100 at the end of spring semester for a total number of 200 students per year. If a student become eligible for admission consideration because of summer school work, he/ she will not be considered for admission until the end of fall semester. If more than 100 preelementary education students meet criteria 1,2 and 3 above in a particular semester, all eligible students will be rank-ordered according to GPA. The top 90 eligible students will be admitted. An additional 10 will be admitted based on GPA and/or need to assure equal access to eligible students from historically underrepresented populations. It is possible for a student, therefore, to meet all eligibility requirements and not be admitted to the program. Admission to the program, however, is guaranteed if a student meets all eligibility requirements and possesses a GPA of 3.25 or better. If a completely eligible pre-elementary education student has not been admitted to the program after being considered for admission twice, the student should consult his or her assigned adviser and/or a counselor in the Counseling Center to discuss career alternatives. The elementary education program is a competitive one, since admission is limited to 200 student per year. An appeals procedure exists to handle potential errors in the admission process and to consider student appeals relating to exceptional circumstances.
Pre-elementary education students admitted to the program will be classified as "elementary education"
students and subsequently permitted to enroll in elementary methods courses-EDCl 350, 351, 352, 353, 355 and 356: (No student having the label of pre-elementary education will be permitted to take these courses.) Students admitted to the elementary education program will receive information about the two delivery systems for the methods coursework with their acceptance letters and will be asked to return a form indicating a preferred term/delivery system for these courses. The elementary program area, however, reserves the right to assign the term/delivery system.

## Student Teaching Eligibility Requirements

1. Full acceptance into elementary program (this includes C or better in ENG 112, IPC 102, EDCI/F| 202, MATH 241,242 or 243 and EDFI.302).
2. 90 semester hours of college credits.
3. Completion of all methods courses (EDCI $350,351,352,353,355$ and 356) with a grade of $C$ or better.
a. Methods courses must be taken at BGSU unless consent of Review Board is given. Methods courses must also be completed within the five-year period immediately preceding student teaching.
b. No methods course in elementary education (EDCI prefix) may be taken more than twice without the permission of the Review Board gained through the appeals procedure.
4. Application for student teaching is made at a sign-up meeting held the second Wednesday of fall semester for students planning to student teach the following spring and/or fall semester. Information is available in 365 Education Building.
5. Accumulative grade point average of 2.5 (with no incompletes in courses designated as student teaching prerequisites) at the end of the semester prior to student teaching.
Eligibility for student teaching can be revoked for reasons such as basic skills deficiency, poor interpersonal communication and unprofessional behavior by the written recommendation of two or more elementary teacher education faculty members, supported by the Review Board.

## Foreign Language

(French, German, Latin, Russian and Spanish Education Majors)

To be fully admitted to one of the above foreign language programs a candidate must have a 2.5 accumulative grade point average; must have completed the 202 level of the language or equivalent, and must have completed a diagnostic test evaluating the four language skills of the candidate.

To be eligible for graduation and certification as a foreign language major a candidate must have a 2.5 accumulative grade point average, must have a 2.75 major point average, must demonstrate to the Foreign Language Education Committee that serious deficiencies indicated by the diagnostic test (if any) have been remedied, must show a minimum of one semester of sludy abroad in a country in which the language is spoken or acceptable equivalency, and must have successfully completed the state-mandated examinations.

## Mysical Education

(See School of Health, Physical Education end Fecreation)

## Seconelary nexucation

Biology, Chemistry, Communications, Computer Science, Earth Science, Economics, English, Geography, History, Journalism, Mathematics, Physics, Political Science, Psychology/Sociology, Science Comprehensive, Social Studies majors
All students desining full acceptance to one of the secondary education majors listed above must meet the following criteria:

1. Completion of a minimum of 60 semester hours.
2. Completion of the following courses with a grade of C or beiter.
ENG 112
IPC 102
EDCI/EDFI 202
EOF 302

## EDSE 431

3. Atainment of a minimum BGSU GPA of 2.5.
4. Atainment of a minimum 2.2 GPA in the content specialty.
To be permitted to student teach, a secondary education major must meet the following student teaching eligibility requirements:
i. Full acceptance into the secondary cducation program.
5. Completion of 90 semester hours of University credits.
6. Completion of the following courses with a grade of C or better: EDCI 367
EDCI 37 X (Content Methods Course) EDCI 420 EDF 402
7. No incompletes in courses that are prerequisites for student teaching.
8. Successful completion of field and clinical experiences or rocommendations from field and clinical supervisors.
9. Attainment of a minimum accumulative GPA of 2.5 .
10. Attainment of a minimum 2.2 GPA in the content specialty area.

In addition to meeting all of the course and hour requirements for graduation, all secondary education majors must meet the following additional graduation requirements:

1. Completion of all professional education courses with C or higher.
2. Attainment of a BGSU GPA of 2.5 .
3. Satisfactory completion of the stateprescribed teacher tests.
All appeais will be processed through the normal departmental and college processes.

## Special Education

(Developmental Handicaps; Specific Learning Disabilities; Severe Behavior Handicaps; Multihandicaps; Hearing Handicaps)

All students desiring full admission to a special education program must meet specific admission criteria. Prospective special education majors will be assigned a special education adviser, given a special education checksheet to follow, and advised to take courses required in the special education major they are pursuing. They will, however, need to be fully admitted in the program before enrollment in EDSE methods courses will be permitted.

## Prezequisites for Full Acceptance

1. Completion of a minimum of 60 semester hours.
2. Completion of the following courses with a grade of C or better:
ENG 112
IPC 102
EDCI/EDFI 202
3. Possession of a minimum GPA of 2.5.
4. Proficiency in math, as demonstrated by a grade of C or better in MATH 241.
5. Completion of a minimurn of 6 hours of special education (EDSE) coursework selected from EDSE 431, 433, 451, 454 with at least a 2.5 in the EDSE courses.
6. Completion of or current enrollment in EDFI 302.
Students who have not met the above criteria upon attaining junior status ( 60 semester hours) will not be permitted to enroll in the following methods coursesEDSㄷ 437, 440, 443, 447, 448, 453, 464, 465. Readmission to the program requires completion of the above criteria.

## Student Teaching Eligibility

## Requirements

1. Full acceptance into EDSE program (this includes C or better in ENG 112, IPC 102 and EDCI/EDFI 202) and satisfactory performance in course-related field and clinical experiences.
2. 90 semester hours of college credits.
3. Completion of EDF1 302.
4. Completion of EDSE 431, 433, 437, 440, $443,447,448,451,453,454,484,464$, 465 with grades of $C$ or better.
a. Methods courses (EDSE 437, 440,
$443,447,448,453,464,465)$ must be taken at BGSU unless consent by the EDSE Department is given or unless the courses were taken at another institution prior to initial enrollment at BGSU.
b. No courses in special education (EDSE prefix) may be taken more than twice without approval gained through the EDSE departmental appeais procedure.
5. Application for student teaching is made at a sign-up meeting held the second Wednesday of tall semester for students planning to student teach the following spring and/or fall semester. Information is available in 365 Education Building.
6. An accumulative grade point average of 2.5 with no incompletes in student teaching prerequisite courses at the end of the semester prior to student teaching.
7. A 2.5 major point average (EDSE courses) at the end of the semester prior to student teaching.
Eligibility for student teaching can be revoked for reasons such as basic skilis deficiency, poor interpersonal communication and unprofessional behavior by the written recommendation of two or more EDSE faculiy members, supported by the department appeals committee.

# Department of Family and Consumer Sciences 

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/

206 Johnstón Hall, 372-2026
Degree programs offered by the Department of Family and Consumer Sciences address the several.functions used by individuals in a family environment: clothing, shelter, nutrition; care of the elderly, development of young children, management of resources. Degrees in family consumer sciences are offered through the Colleges of Education and Human Development, Arts and Sci ences; and Health and Human Services. The department provides students with the opportunity to major in foods and nutrition; family consumer sciences; child and human development; child and family community services; and textiles, clothing and interior
sign. There are 12 undergraduate majors, hich are identified below by college and degree.

Individuals completing degree requirements within family consumer sciences must meet the general education requirements specified by the college in which the program is housed. Advisers are available within the department to meet with students and to discuiss admission standards, degree requirements and employment opportunities related to each of the major programs.

## Bachelor of Science in Education

Teacher Certification Programs
(See introduction to College of Education and Human Development for general education requirements.)

## Early Childhood Education

206 Johnston Hall, 372-2026
Major (meets pre-kindergarten, kindergarten; id elementary certification requirements ovided the state-prescribed tests are also successfully completed. This triple certification will involve 9-1.0 semesters of full-time enrollment to complete., Also see full admission requirements under the College of

Education and Human Development.)
In addition to the degree requirements of the University (see page 5) and the general education requirements prescribed by the College of Education and Human Development (see page 83), the following curriculum content, specialization and professional education coursework is required: Curriculum Content (66-70 hours) BIOL 101 or 104; HIST 151, 152, 205 or 206; HED 346; ARTE 343; ENG 342; MUED 248; MATH 241, 242; KNS 342; EDCI 348, 349, 366; CDIS 471; HDFS 224, 320, 321, 322, 421, 422, 423; one from GEOL 100,104 , 105, 205 or 215; one from PHYS 101, 201, 202, CHEM 100, 109/110, 125
Area of Concentration ( $20-33$ hours) See checksheet to select one of the six areas of concentration available. Professional Education (48-49 hours) EDFI 202 or EDCI 202; EDFI 302, 402, 408; EDSE 421 or 311 ; EDAS 409; EDCI 350, 351, 352, 353, 355, 356, 357, 492.

## Pre-Kindergarten Validation/Minor

 (Leads to pre-kindergarten validation for students who are majoring in or who hold a valid teaching certificate in kindergartenprimary, elementary, family and consumer sciences or the special certificate for education of the handicapped provided the state-prescribed test is successfully completed.) (21 hours)HDFS 224, 320, 321, 322, 421, 422, 423

## Family and Consumer Sciences Education

206 Johnston Hall, 372-2026
Major-family and consumer sciences education
The program options in family and consumer sciences education are designed to prepare those who wish to teach family and consumer sciences from junior high school through adult education. The curricula are designed to meet the educational requirements necessary for one or more of the certification options available in vocational consumer homemaking education, child care services job training, community and home services job training, fabric services job training, food services job training, multi-area job training and family consumer sciences education.

In addition to the degree requirements of
the University (see page 5) and the general education requirements prescribed by the College of Education and Human Development (see page 83), the following curriculum content, specialization and professional education coursework is required: Content for Teaching Specialty ( 48 hours) AMID 101, 103, 202, 303; 406; F\&N 207,. 210, 212; FCS 205, 311, 405; HDFS 105, 302, 321, 322; ECON 200 Professional Education (43,hours) EDFI 202 or EDCI 202; LEM 301; EDFI 302, 402; 408; EDAS 409; EDSE 311; EDCI 420; FCS 250, 352, 353, 354, 497.

A family and consumer sciences education major with the preceding program may prepare for an additional certificate to teach job training in secondary vocational programs by completing the following additional coursework. In addition to the coursework specified, occupational work experience for three hours is also required.

Child care services-job training ( 32 hours)
FCS 389 (3)
ENG 342 (3)
MGMT 305 or ACCT 325 (3)
KNS 342 (3)
HDFS 224, 320, 421, 422, 423 (15)
FCS 489 (5)
Community and home services-job
training ( 33 hours)
FCS 311, 405 (7)
HED 209 (3)
MGMT 305 or ACCT 325 (3)
HED 313 (3)
FCS 389 (3)
FCS 489 (8)
ECON 200 (3)
F\&N 335 (3)
Fabric services-job training ( 30 hours)
FCS 389, 489 (9)
AMID 313, 404, 412,414 and 417 (15)
ART 103 (3)
MGMT 305 or ACCT 325 (3)
Food services-job training ( 30 hours).
FCS 389 (3)
F\&N 331, 333, 431 and 433 (12)
F\&N 230, 437, 335 (9)
DESN 104 (3)
MGMT 305 or ACCT 325 (3)
Multi-area job training ( 6 hours)
FCS 389 (3)
MGMT 305 or ACCT 325 (3)
A family and consumer sciences education major with the preceding program may also qualify for a pre-kindergarten
valldation by completing HDFS 224, 320, $424,422,423$ (15) and by successfully completing the state-prescribed test.

Winor (leads to certiflcation only if a certified major is being pursued and if the stateprescribed test is successfully completed) (40 hours)

AMID 101, 202, 303 (9)
HDFS 105, 302, 321 (9)
FRN 207, 210, 212 (9)
FCS 205, 250, 352, 405 (13)

## O 0 0nindis

206 Johnsion Hall, 372-2026
The emphases of the program are on human development, social relationships and the family ife cycle. Practical experience in the preschool and other community facilities provides opportunities for supervised observation and field work with various age groups.

Possible careers include teaching in preschools or day care centers; working in government Headstart programs and community social services; working with youth groups, retirement homes, nursing homes and vocations in which a knowledge of human relationships is required. A foundation is provided for graduate study and for protessional careers in which additional work is required, such as child and family counseling, and the administering of programs for families and children.

Malor-Child and family community services (non-certification)
in addition to the degree requirements of the Unlversity (see page 5) and the general education requirements prescribed by the College of Education and Human Developmont (see page 83), the following 59 hours of content specialty courses are required: PSYC 201; SOC 101; FCS 405; F\&N 207; HDFS 105, 107, 120, 302, 321, 328, 407, 408, 421, 425, 427, 429; ten hours from HDFS 322, FCS 389, 489. Note: At least 24 nours in the content specialty must be completed prior to enroliment in AHE 489.

* Content specially electives-40 hours
must be elected from these courses: HDFS 120, 224, 305, 320, 328, 421, 422, A25, 427, 428, 429; PSYC 305, 306, 307, 403, 406; IPC 306; SOC 202, 301, 341, 342; PHIL 319; BIOL 311; ARTT 230, 330;
HDFS 107 or 408; FCS 205; F\&N 207.
Major-Child and family development (meets pro-kindergarten certification-which prepares students to work with public or private preschool programs, day care or Head Start, as well as other agencies serving young children-provided stateprescribed examination is also successfully completed.)

In addition to the degree requirements of the

University and the general education requirements prescribed by the College of Education and Human Development, the following content for teaching specialty, area of concentration and professional education coursework is required:
Content for Teaching Specialty ( 36 hours) HDFS 105, 120, 224, 302, 320, 321, 407, 421, 422, 425; F\&N 207; EDCl 348
Area of Concentration (20-22 hours)
See checksheet to select one of the nine areas of concentration available.
Professional Education (37 hours)
EDFI 202 or EDCI 202; EDFI 302, 408, 429;
EDAS 409; EDSE 421; HDFS 322, 423, 491; FCS 389 .

## Bachelor of Science in Technology

The Department of Family and Consumer Sciences offers a program which leads to the Bachelor of Science in Technology degree. For information on other programs leading to the Bachelor of Science in Technology, see College of Technology.

This program, however, is not available during the 1997-98 academic year. Contact the Department of Family and Consumer Sciences, 206 Johnston Hall, (419) 372-2026 for additional information.

## Restaurant and Institutional Food Service Management <br> 206 Johnston Hall, 372-2026

Students who complete this program are qualified to work in food production, sales and service in institutions or restaurants at the management level. The flexibility of this program permits students to strengthen existing competencies in food science and food production management. Industrial experience is gained through supervised field experiences in a job related to the student's goals.

> Family and Consumer Sciences Programs In Other Colleges

## College of Arts and Sciences <br> Bachelor of arts degree

Some programs in family and consumer sciences are currently available through the College of Arts and Sciences. These are apparel design and history; consumer and
family resource management; fashion merchandising; food science and nutrition; and interior design. Programs must be planned with the adviser no later than the second year. Aifter the second year students may participate in a supervised field experience during the summer or academic year.

## Apparel Design and History

206 Johnston Hall, 372-2026
A major program designed for the student who wishes to specialize in the textiles and clothing fleld preparatory to graduate study or for a career in business and industry. A minor is required. See College of Arts and Sciences.

## Consumer and Family Resource Management

206 Johnston Hall, 372-2026
This planned program examines American social and economic conditions as they affect families. An understanding of consumer behavior and management in a market economy may lead to careers in consumer affairs, customer service and consumer education and information. This program currentiy is not avaliable for the 1997-98 academic year.

## Fashion Merchandising

206 Johnston Hall, 372-2026
This is a planned program designed to prepare students for careers in business an, industry. These may include executive management positions; retall or wholesale merchandising; educational and/or sales representative for fabric, apparel and accessory firms. Fashion merchandising students may choose the option to study at the Fashion Institute of Technology, New York, for a year during the junior or senior year. No minor is required. See College of Arts and Sciences.

## Food Science and Nutrition

206 Johnston Hall, 372-2026
A major program designed for the student who wishes to specialize in the lood science field preparatory to graduate study or a career in business or industry. A minor is required. This program currently is not available for the 1997-98 academic year.

## interior Design

206 Johnston Hall, 372-2026
The interior design program trains student in the planning and executing of residential and contract interiors. Coursework is designed to help students evaluate problems and devise solutions for them. Students who complete the approved four-year program are eligible to apply for membership in the American Society of interior Designers (ASID). The program received NKBA (National Kitchen and Bath Association) endorsement in fall 1994. It was the first program in the state of Ohio to receive such an endorsement. See College of Arts and Sciences.

# © School of Health, Physical Education and Recreation 

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/

Mary Ann Roberton, professor and director, 117 Gertrude M. Eppler Center, 372-2334

The School of Health, Physical Education and Recreation is organized into four divisions and two program areas. Programs are offered as majors unless otherwise noted.

## Health Education (HED)

Driver Education (certificate)
Health (minor only)
Health Education (major and minor)
lealth Promotion
chool Nurse (certificate)

## Kinesiology (KNS, DANC)

Adapted Physical Education (minor only)
Athletic Coaching (minor only)
Dance (major and minor)
Exercise Specialist
Human Movement Science
Physical Education Teacher Education
K-12 Elementary Emphasis (major, minor and endorsement)
K-12 Secondary Emphasis (major and minor)

## Recreation and Tourism (RTD) <br> Recreation Administration

Recreation Programming

## Sport Management (SMD)

Aquatics (minor only)
Athletic Training and Clinic Management (certificate also available)
Sport Information Management
Sport Information
Sport Marketing
port Organization
Sport Enterprise
The two program areas are the Graduate

Program (HPER) and the Physical Education General Program (PEG). The physical education general program offers instruction in physical activity/movement/dance forms to the general University student. These classes take advantage of the modern facilities available in the Gertrude M. Eppler complex, the Student Recreation Center, the Perry Fieldhouse and the ice arena.

Students majoring in recreation and tourism or sport management are preparing for leadership, management and supervisory positions within the sport, leisure, tourism and recreation industries or nonprofit agencies. An additional sport management option prepares students to be athletic trainers/clinic managers. Health education students have the option of majoring in health promotion to prepare for careers within corporate/public settings, or in health education to be public school educators. Training in driver education is also available. Students in the kinesiology division study a variety of careers dealing with human movement. They can become K-12 physical educators or clinical exercise specialists. Majors in dance focus on modern dance and ballet performance/choreography or teaching in nonschool settings. The kinesiology division also offers courses in athletic coaching and adapted physical education.

Each division has active student organizations which help students explore the career and graduate school opportunities within their majors.

Students seeking enrollment in the school's courses should consult with the appropriate program coordinator. Students seeking majors or minors within any of the divisions should consult with the appropriate program adviser for current admission and retention procedures.

## General Physical Education

PEG 100-General physical education Students may elect to take diverse activity coursesof their choice. Transportation to offcampus sites for some physical education activities may become the responsibility of the student. Students may contact the PEG program office for transportation information regarding the activity of their choice. In addition, students will be informed the first week of class if transportation is provided. All PEG 100 courses are graded on an $\mathrm{S} / \mathrm{U}$
basis. Most activities are coeducational and meet two hours per week.
PEG 200-General physical education Diverse activity courses are offered in conjunction with and at the same time as the PEG 100 activity courses. Activities are graded and open to any student. Emphasis is on knowledge, skill and understandings pertinent to each activity. The $S / U$ grading option may be selected if desired. Most activities are coeducational and meet two hours per week.

## Bachelor of Science in Education

All major programs in the School of Health, Physical Education and Recreation lead to the Bachelor of Science in Education degree.

## Dance

109 Eppler North, 372-6905
The dance program stresses the interdisciplinary nature of dance, encouraging the study of related courses in conjunction with the dance core curriculum to develop creative and innovative individuals.

## Major

The dance major is a four-year program leading to the Bachelor of Science degree. The curriculum is designed to provide a strong theoretical and anatomical mastery of movement technique. Students may choose a concentration in either modern dance or classical ballet.

Emphasis areas include the choice of the following: performance; education; production; history, philosophy and criticism; and ethnographic or scientific research in dance.

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following professional dance core requirements and a 21 -hour emphasis (in consultation with an adviser) are required.

Gere requirements ( 59 hours)
DANC 115-215, 120-220, 301 or 302, 224 , 315 or $320,325,326,327,424,425,426$
KNS 137, 230
PHHL 204
ARIH 145 or 146
MUCH 221
HED 393
RTD 487, 498

DANC $115 / 215,120 / 220,326,424$ and 426 (12)
Selact one of the following emphases: Dance education (12 hours) DANC 301, 302, 215/315, 325 and RTD 387/487, DANC electives Dance performance (12 hours) DANC 220/320, 224, 215/315, 325 and 327 , DANC electives

## 27

Teacher candidates can quality for a certhication endorsement in driver oducation by completing the following six hours:

HED 362 and HED 462 (6)

## 

This maior is a broad-based, scientific course of study drawing from kinesiology and sport management. Students are prepared for careers in private or corporate health and fitmess centers, sports medicine cilinics, allied medical and cardiac rehabilitation setings, recreation centers, and athietic or Olympic fraining facilifies and programs.

In addition to the degree requirements of the University and the general education requirements of the college, the following are required:

SMD 201, 305, 306, 375, 390, 489, 490
(33)

SND $310,366,414,429,440(15)$
KNS 230, 303, $360,361,387,423$ (17. 20)

BIOL 332 (4)
KNS/PEG/DANC activities (6)
F8N207 (3)
MKT 300 (3)
MGMT 305 or 360 (3)
ACCT 221 (3)
$08100(3)$

##  <br> 202 Eppler North, 372-2395

Hialof (meets special certification, kindergarten through twelth grade provided the National Teacher Examinations are successfully completed)

In addition to the degree requirements of the University and the general education requitemenis prescribed by the College of Education and Human Development, the
following content for teaching specialty and professional education coursework is required.

## Content for teaching specialty (36 hours)

HED 209 or 215
HED 313, 338, 340
KNS 360
SMD 250 or CS 100
PSYC 201
SOC 101
BIOL 331 and 332
F\&N 207
Professional education (41 hours)
HED 216 or EDCI 202 or EDFI 202
EDFI 302, 402, 408
EDSE 311
EDCI 420
EDAS 409
HED 348, 393, 409, 481, 497

To be fully admitted the student must have:

1. completed IPC 102 and ENG 112 with a grade of C or better
2. aftained an accumulative grade point average at BGSU of 2.5 or higher;
3. completed EDCI 202 or EDFI 202 or HED 216 with a grade of C or better.

To be eligible for student teaching the student must have:

1. met college student teaching eligibility requirements;
2. successfully completed EDCl 202 or EDFI 202 or HED 216 ; HED 209 or 315,313 , 338,340 and F\&N 207;
3. received a $C$ or better in HED 348 and 393.

White completing all of the above requirements, it is strongly recommended:

1. that the student see his or her adviser at least twice per year;
2. that the student seriously consider working toward at least one additional certification area.

## Health Promotion

202 Eppler North, 372-2395
Major (does not lead to certification; health in non-school settings)

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following professional core (83-86 hours) is required.

HED 209 or 215
HED 216, 310, 313, 338, 340, 348, 393 . 481, 489
HED 411 or RTD 384
CS 100
F\&N 207
KNS 360
BIOL 332
18 hours of program electives selected from courses specified on checksheet
9 hours of career-focus electives approved by adviser

School Health Minor (leads to seven through twelve certification only if another certified major is pursued and if the stateprescribed examination is successfully completed) (33 hours)

HED 209 or 215 (3)
SOC 101 (3)
BIOL 104 and 332 (8)
PSYC 201 (4)
F\&N 207 (3)
HED 313, 338, 340 (9)
KNS 360 (3)
Health Education Minor in other settings
( 25 hours)
HED 209 or 215 (3)
HED 216, 310, 313, 348, 393 and 414 (17)

Select minimum of two courses from: HED $338,340,481$ or F\&N $207(5-6)$

## School nurse

Certificate pattern with RN certificate and bachelor's degree (20-21 hours)

The following courses are required:
HED 348, 409,492 [3], 497 [3] (12)
EDFI 302, 342 (6)
Select one: EDAS 409 or EDFI 408 (3)

## Human Movement Science

212 Eppler South, 372-6905
The human movement science major prepares sludents with an indepth understanding of the scientific aspects of human movement. Through an emphasis on critical thinking, personal excellence, lifelong learning and the integration of subdisciplinary knowledge, students explore the "great, unanswered questions" of kinesiology. This program should appeal to students with broad vocational interestes in kinesiology, physical education, exercise. sport, allied health and medical lields, and sports medicine.

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following are required:

CS 100 (3)
KNS 164, 230, 303, 340, 350, 360, 387, 400, 402, 48: (29)
SMD 365, 414, 421, 425, (12)
BIOL 332 (4)
KNS/PEG/DANC activities (5)
STAT 200 or MATH 115 (3)
Any University minor of at least 21 hours or 2-3 cognates totaling 16 hours. (A cognate requires a minimum of eight hours in a discipline. Example: A student could have two eight-hour cognates or three eight-hour cognates.)

Note: These PETE curricula are under revision. See the kinesiology division and current checksheets for updated advising and scheduling information.

Major-K-12 Physical Education Teacher Education with Elementary Emphasis (leads to special certification in physical education, kindergarten-twelfth grade, provided the state-prescribed examinations are successfully completed). See College of Education and Human Development for admission requirements.

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following content courses and professional education courses are required.
Content courses (39 hours)
KNS 116, 121, 124, 137, 138, 164, 203 , 227, 229, 230, 303, 340, 350
HED 313
HED/KNS elective
BIOL 332
DANC 115, 120, 301 or 302
DANC/KNS professional activity electives (2)
fessional education courses (52
urs)
KNS 238, 241, 247, 332, 337, 402, 428, 433, 438, 492, 497
EDFI 302, 408
EDAS 409
LEM 301 or VCT 203
Major-K-12 Physical Education Teacher Education with Secondary Emphasis (leads to special certification in physical education, kindergarten-twelfth grade, provided state-prescribed examinations are successfully completed). See College of Education and Human Development for admission requirements.

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following content courses and professional education courses are required.
Content courses (47 hours)
KNS 110 or 112
KNS 116, 121, 123, 124, 137, 138, 164 $227,229,230,303340,350,360,412$
HED elective
HED 313
DANC 115 or 120 or 301 or 302
KNS/DANC professional activity electives (2)
fessional education courses (38 rs)
KNS 241, 247, 332, 362, 402, 433, 497
EDFI 302, 408
EDAS 409
LEM 301

To be officially admitted to either of the above physical education teacher education programs, the following college and kinesiology division criteria must be met.

## College of Education and Allied

Professions Requirements

1. Completion of 60 semester hours;
2. Completion of IPC 102 and ENG 112 with a grade of C or better;
3. University GPA of 2.5
4. Completion of early field experience course, KNS 247 with a grade of C or better.

## Kinesiology Division Requirements

1. Completion of 10 KNS semester hours on the BGSU campus;
2. Removal of all articulation deficiencies;
3. Completion of KNS 227;
4. Major GPA of 2.6 which is calculated by using the grades earned in the following courses:
a. Professional Physical Education

KNS 164, 227, 230, 247
b. Professional Physical Education Activities
Gymnastics: KNS 110/112, 138, 214
Dance: KNS 137, DANC 302, 301,
115, 120
Net games: KNS 121, 124, 202
Field games: KNS 116, 203, 208, 217
Aquatics: KNS 205, 218, 219, 222,
322
Other: KNS 123, 201, 204, 207, 209, 226, 229
5. Completion of physical education activity course requirement:
a. Major activity GPA of 2.7 in a minimum of four activity courses, and a total of eight semester hours (all courses listed in " $b$ " below are courses designated for the major activity GPA);
b. Successful completion of one course in four of the six activity categories with a minimum of eight semester hours:
Gymnastics: KNS 110/112, 138, 214
Dance: KNS 137; DANC 302, 301, 115, 120
Net games: KNS 121, 124, 202
Field games: KNS 116, 203, 208, 217
Aquatics: KNS 205, 218, 219, 222, 322
Other: KNS 123, 201, 204, 207, 209, 226, 229

To be eligible for student teaching a physical education major must meet the college's student teaching eligibility requirements and the additional program requirements indicated on the major checksheet.

Adapted Physical Education Minor--for physical education majors only. ( 24 hours)

A candidate must be interviewed by the area coordinator before declaring this validation. This is officially recognized by the state as a validation for $\mathrm{K}-12$ physical education certificate holders.

KNS 164 (2)
KNS 340 or 350 (3)
KNS 433, 435, 387, 487 (10)
EDSE 431 (3)
EDSE 324 or EDSE 459 (3)
Select one: EDSE 433, 442, 451, 457, PSYC 405, 406 (3)

A 10-hour cognate, Movement Performance of the Handicapped, is available for special education, early childhood, elementary, and sport management majors. See the area coordinator before declaring this cognate. This cognate does not lead to certification.

KNS 164, 340 or $350,387,433$ (10)
SMD majors may substitute SMD 240 for KNS 433.

Elementary School Physical Education
Endorsement/Minor (32 hours)
(certification as an endorsement for holders of a standard elementary certificate and holders of a K-12 certificate in health, music, physical education or special education)

KNS 137, 138, 238, 241, 247 (or EDCI/ EDFI 202), 332, 337, 402 (or EDFI 402), 428 and 492 (25-28)

HED 313 (3)
Select two hours from: KNS 164, 230, 303, 340 or 350 (2)
Select two hours from: KNS 433, 438, 387 or 487 (2)
Secondary Physical Education Minor
(leads to secondary certification in 7-12
physical education only if a certification
major is also being pursued) ( 33 hours)
Select four (8) from: KNS 110 or 112, 116, 121, 123, 124; DANC 302 OR 301 or 115 or 120
KNS 200-level elective professional activities (1)
KNS 230 (3)
KNS 303 (2)
KNS 350 (3)
KNS 362 (3)
KNS 412 (3)
HED 313 (3)
SMD 310 (2)
Select a minimum of 5 hours from: KNS 214, 328, 329, 331; 360, 433; HED 209; SMD 410, 431

Athletic Coaching Minor (27-29 hours)
KNS 164, 230, 328, 360 and 412 (14)
SMD 310, 391 and 429 (6)
HED 313 (3)
KNS 329 or 331 or 339 (2-3)
Select one: SMD 391, 425; KNS 303, 350, 423; SOC 417 (2-3)

## Recreation and Tourism

200 Eppler North, 372-2395
Students declaring recreation and tourism as a major must select one of two options-recreation administration or recreation programming. Each option has diverse career emphases. The recreation and

Soutism major is accredited by the National Tecreation and Park Association and the American Association of Leisure and Recreation Council on Accreditation. Fecreation and tourism majors must take specified professional coursework, must fulfill the general education requirements of the College of Education and Ailied Professsions and nust complete a semester-long intemship during the tall, spring or summer of the senior year. A study abroad or National Suden 1 Exchange experience is strongly encouraged to broaden recreation and toufism knowledge. To be officially accepted into the recreation and tourism major a candidate must have achieved a minimum accumulative grade point average of 2.3 and must have received a 2.5 average in RTD 190 and 210.

## hecraation Administration

The recraation administration option prepares students for supervisory and management positions in public and voluntary organizations which are nonprofii in rature and also for positions in private and commercial employment setings which are proff motivated. Employment settings inchue govemmental recreation services, commenity orgonizations such as YMCAs, Girl Soouts, services for special populations and the aging, and those agencies found in the private sector such as resorts, convention cenbers and the travel/tourism industry. The studen enrolled in the recreation administration option focuses on business skills such as financial management, merketing and promotion, public relations and persomnel management. Career electives will be chosen from the areas of tourism/rommercial recreation, public/ voluntary services, leisure/wellness and performing arts/enterainment.
in addition to the degree requirements of the University and the general education requiremenis prescribed by the College of Education and Human Development, the following protessional courses (71-75 hours) are requited:

RTD $190,210,384,385,386,387,482$, $483,484,487,488$
HED 313
SMD 390
SUDD 250 or CS 100 or CS 101 or MIS 200;
KNS 433 of RTD 260
21 hours of approved career electives

## Pecreation Programming

The recreation programming option is designed lo propare students for programming and leadership positions in public and voluntary organizations which are nonproft in nature and also for positions in private and commercial employment settings which are profit motivated. Employment settings include governmontal recreation services, community organizations such as YMCAs, Gin Scouts, services for special populations and the gging, and those agencies found in
the private sector such as resorts, convention centers and the travel/tourism industry. Students enrolled in the recreation programming option focus on the development of face-to-face leadership techniques, programming methods and activity skill acquisition. Career electives will be chosen from the areas of public/voluntary services, leisure/ wellness, special populations and leisure aging.

In addition to the degree requirements of the University and the general education requirements prescribed by the College of Education and Human Development, the following professional courses ( $71-75$ hours) are required:

RTD $190,210,384,385,386,387,482$, 483, 484, 487, 488
HED 313
SMD 390
SMD 250 or CS 100 or CS 101 or MIS 200
KNS 433 or RTD 260
21 hours of approved career electives

## Recreation Minor (21 hours)

A candidate must be interviewed by the area coordinator before declaring this minor.

RTD 190, 210, 384, 385 (12)
Select 9 hours from this group: RTD 215, $260,304,315,325,380,395,415$, 482, 483, 484

## Sport Management

237 Eppler Center, 372-2876
Subscription to SMDINFOLINE is encouraged. For details on subscribing, see SMD secretary, C237 Eppler Complex.

The sport management major is offered through the sport management division (SMD) of the School of Health, Physical Education and Recreation (HPER). This program and matriculation requirements are subject to revision.

A subscription to SMDINFOLINE is encouraged. For details on subscribing, see SMD secretary, C237 Eppler Complex.

To be formally accepted into the sport management major, a candidate must meet the following criteria:

1. Completion of 44 semester hours including a $C$ or better in ENG 112, IPC 102, SMD 201, CS 100 and SMD 306; 2 hours in KNS/PEG/DANC activity courses; and 27 hours in additional College of Education and Human Development general education courses. 2. University GPA of 2.5 .
2. Formal application and acceptance into the sport management program (see division office, 237 Eppler Center, for appropriate form).
To be retained in the sport management major, a candidate must meet the following prerequisites for enrollment in SMD 387 and SMD 489:
3. SMD 387-formal acceptance into the
sport management program;
4. SMD 489-52 hours in major field, satisfactory completion of SMD 387, Gf of 2.5 and major CPA of 2.7. Option 1 majors must also satisfactorily complete HED 313.
The three options and their emphases are athletic training and clinic management, sport information management (sports information emphasis, sport marketing emphasis) and sport organization management (sport enterprise emphasis).

## Major-Option $f$, athletic training and cinia management*

The athletic training and clinic management option develops skills and knowiedge necessary to become an athetic trainer/clinic manager with sports medicine clinics or corporate or industrial fitness programs, or athletic trainers with professional sport teams, and secondary school or college/ university athletic programs.

Option I requirements (83-86 hours in addition to general education requirements of the College of Education and Human Development; see College of Education and Human Development.) Professional liability insurance is required for Option I field. experience.

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SMD 201, 306, 375, 390, 489, 490(30)
SMD 387 (3-6)
CS 100 (3)
SMD 311, 410, 411, 413, 414, 429 (18)
HED 209, 313, 340 (9)
F\&N 207 (3)
KNS 164, 303 (4)
SMD 240, 310, 365 (9)
BIOL 331 (4)
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## Athietic Training Certification Program*

 (53 hours)This program is designed for students who major in education or other academic areas and wish to prepare themselves as athletic trainers. Professional liability insurance is required.

SMD 310, 311, 391, 410, 411, 413, 414, 429 (23)
HED 209, 313, 340 (9)
KNS 164, 230, 303, 360 (10)
BIOL 331, 332 (8)
F\&N 207 (3)
*Note: Students interested in athletic training must contact the athletic training coordinator for academic advisement and additional requirements (372-6810).

## Major-Option II, sport information management

Students who choose the sports information area usually seek careers as sport journalists, sport information directors in intercoliegiate athletic programs, athletic conference offices or working in public/community relations with professional teams. Student who select the sport marketing emphasis are preparing for careers such as account executives for professional teams, sales representatives for sporting goods compa-
nies, marketing directors in intercollegiate athletic programs, conference offices, verning bodies or in professional sport. Option II requirements ( $90-95$ hours in addition to the general education requirements of the College of Education and Human Development.)

SMD 201, 305, 306, 375, 390, 489, 490 (33)

SMD 387/487 (3-6)
CS 100 (3)
Sports information emphasis (51 hours) JOUR 100, 200, 341, 402, 400 (13)
Approved JOUR electives from checksheet (12)
PEG (2)
ACCT 221 or 325 (3)
MKT 300 (3)
MGMT 305 or 360 (3)
SMD 421 and 425 (6)
SMD 365 or 366 (3)
MKT 310 (3)
SOC 417 (3)
Sport marketing emphasis ( 53 hours)
JOUR 100, 201 and 341 (9)
Approved MKT electives from checksheet (9)

Approved communications electives from checksheet (9)
ACCT 221 or 325 (3)
MKT 300 and 310 (6)
MGMT 305 or 360 (3)
SMD 414, 421 and 425 (9)
SOC 417 (3)
PEG (2)
Major-Option III, sport organization
This option has a strong business component to help students develop skills applicable to management-level positions in organized sport. Examples of such positions are professional sport administrator, corporate administrator of sporting events, tournament director, college/university athletics director, business manager, fundraising administrator or sport facility manager.

Option III requirements ( 92 hours in addition to the general education requirements of the College of Education and Human Development; see College of Education and Human Development.) SMD 201, 305, 306, 375, 390, 489, 490 (33)

SMD 387/487 (3-6)
CS 100 (3)
Sport enterprise emphasis ( 53 hours)
SMD 421 and 425 (6)
PEG' 100 (2)
IPC elective (3)
SOC 417 (3)
BA 310 or MKT 405 (3)
MGMT 305 or 360 (3)
JOUR 341 (3)
VCT 203 (3)
ACCT 221 and 222 (6)
MKT 300 (3)
Approved electives from checksheet (18)

Minor-aquatics (20-22 hours)
SMD 229 and 245 (5)
SMD 387 (2-3)
HED 313 (3)
KNS 225, 322 (3)
SMD 240 or KNS 433 (3)
Select 4-5 hours from: SMD 231, 324, KNS 205, 218, 219, 339, PEG $100-$ 200

# College of Health  Human <br> Services 

Changes which supersede the printed catalog can be found in the online catalog athte://www.bgsu.edu/catalog/

Clyde R. Willis, Ph.D., dean, 101 Health Center, 372-824?
Barbara Keeley, R.N., M.S.N., director of program advisement, 102 Health Center, 372-7774

## Prograns

Applied Health Science, Bob Harr, M.A., director, 504 Life Sciences Building, 372 8109
Art Therapy, Michael Franklin, M.A., director, 127 Fine Arts Center, 372-2786
Criminal Justice, Steven Lab, Ph.D., director, 102 Health Center, 372-2326
Dietetics, Younghee Kim, Ph.D., director, 106 Johnston Hall, 372-8090
Environmental Health, Gary Silverman, D.Env., director, 102 Health Center, 3727774
Gerontology, Jennifer Kinney, Ph.D., director, 102 Health Center, 372-2326
Piysical Therapy, advisers, 101 Health Center, 372-8242 (or Catherine Hornbeck, M.S., PT., chair, Medical College of Ohio, 381-3519)

## Departments

Communication Disorders, Linda Petrosino, Ph.D., chair, 338 South Hall, 372-2515
Medical Technology, Bob Harr, M.A., chair, 504 Life Sclences Building, 372-8109
Sociai Work, Glenn Shields, D.S.W., chair, 114 Health Center 372-2441

## Sehools

School of Nirsing, Barbara Keeley, R.N., M.S.N., coordinator, 101 Health Center, 372-8760 (or Joyce Shoemaker, Ed.D., R.N., dean, Medical College of Ohio, 3815858)

## Phatioxaphy

Human dignily, health and safety are three of an individual's most prized possessions and, as such, should be protected. The professional programs offered in this college were founded in response to the needs of individuals. The education of students in this
college embraces knowledge from diverse sources, including a liberal general education. Students graduating from this college should be prepared to examine their roles and modify practice in response to new information. They should be able to act as catalysts in initiating and implementing new patterns of practice aimed at bettering tmic Policies. In addition, all students must complete all major requirements. Required internships, field work and clinical practicums completed during the last 30 hours will be considered in residence even though taken off campus.

Bowling Green State University also offers master's degrees in communication disorders and rehabilitation counseling as well as a doctoral degree in communication disorders.

## General education requirements

The College of Health and Human Services requires a minimum of eight (8) courses from the approved list of general education core courses. See Academic Policies. The requirement includes two courses in each of the functional understandings of natural sciences, social sciences, humanities and arts, and one course in cultural diversity in the United States plus one additional course from an international perspective from social sciences or humanities and the arts. Some programs may suggest which courses to take, so talk to your adviser.

## Readmission policy

Students returning to the University after an absence who have completed a portion of a professional program must have those courses reevaluated by the program or department. It should be understood that certain courses may be outdated or lack relevancy to the current professional curriculum and may have to be repeated. Additionally, new course requirements may have been added to the curriculum by the department or by the university. Furthermore, it shall be the responsibility of the depari-
ment or program to determine the appropriate checksheet for returning students.

## Grading opilion

A student may request the $\mathrm{S} / \mathrm{U}$ grading option for as many as 16 credits in a baccalaureate degree program, in addition to courses universally graded on an $\mathrm{S} / \mathrm{U}$ basis. Check with an adviser to be certain your major allows you to take a particular course $\mathrm{S} / \mathrm{U}$. (Please refer to grading system for. University requirements regarding $S / U$ standards.)

Students in the College of Health and Human Services should check their program requirements and the policy to graduate withonors before electing the S/U option.

##  <br> Degree Programs

In most cases, the sequence of courses listed below must be completed in order to meet the requirements for the major or for professlonal certification. Upon the recommendation of the program director, and with final approval resting with the dean of the College of Health and Human Services, some courses may be substituted.

## Applied Health Sciemce <br> 504 Life Sciences Building, 372-8109

The major in applied health science is designed to prepare graduates for work in applied microbiology and other health-related areas. The diversified curriculum provides a strong background in basic science and core courses that provide the knowledge needed to enter and advance in a variety of healthcare fields. The core includes basic understandings in lifespan development, statistics, computers, technical writing and problem solving.

Students are prepared to work in public health agencies, infection control, food production and sanitation and the biotechnology industry as well as for entry into postbaccalaureate programs in allied health such
as physical and occupational therapy, physician assistant and occupational health. the major also articulates with associate degree programs in allied health professions. Technical training received in approved programs may be used to meet practical course requirements in the major.

The coursework required of students will allow them, after a year of acceptable employment, to take the qualifying examination of the National Registry of Microbiologists of the American Academy of Microbiology, the categorical microbiology examination of the American Society of Clinical Pathologists and the categorical microbiology examination of the National Certification Agency for Medical Laboratory Personnel.

An individual with the bachelor of science in applied health science may pursue advanced degrees in medical schools or and graduate schools with programs in medical "microbiology, virology, microbial genetics, immunology and food sciences. The curriculum is sufficiently flexible to meet entrance requirements for medical, dental or veterinary schools, physical and occupational therapy and physician assistant graduate programs.

Suggested program (curricululm is under revision; see college or medical technology department office for current core and cognate courses)
First term (14-18 hours)
ENG 111 (3)
MATH 130 or equivalent (3-7)
General Chemistry (5)
CS 100 (3)
Second term (13-16 hours)
ENG 112 (3)
General Chemistry (4-5)
BIOL 205 (5)
Social science elective (3)
Third term (16 hours)
BIOL 313 or 314 (4)
MATH 115 (3)
Social science elective (3)
Cultural diversity in U.S. (3)
Humanities elective (3)
Fourth term (15-17 hours)
Program core courses (8-10)
Hurnanities elective (3)
Supportive requirements (6-8)
Fifth term ( $14-16$ hours)
Program core courses (6-9)
Supportive requirements (3-6)
Cognate courses (6-8)
Sixth term (14-17 hours)
Program core courses (6-9)
Cognate courses (8-12)
Seventh term (15-17 hours)
Program core courses (3)
Cognate courses (12-16)
Eighth term (12-16 hours)
Cognate courses (12-16)
A grade of $C$ or better is required in the core courses.

## Art Therapy

1000 Fine Arts Center, 372-2786
A bachelor of science in art therapy is available through the College of Health and Human Services in cooperation with the School of Art. The program offers studio art courses, art therapy methodology courses, supportive core requirements and a cognate or specialization in psychology, special education or gerontology. Additional cognates, as well as dual degree opportunities (art education and social work) are available: Students must meet with their advisers to secure permission to map out the most appropriate curriculum.

The interdisciplinary nature of this preprofessional program can lead to entry-level positions in a variety of social service agencies. The program also strives to fulfill requirements for entry into master's degree training programs in art therapy approved by the American Art Therapy Association. Students who are serious about pursuing a career in art therapy are strongly advised to continue with their education at the graduate level.

The role of the art therapist as a member of the health care team is gaining wide acceptance. In recent years, an increasing variety of clients have been served by art therapists. Changing practices in the field of mental health have created an even broader definition of the art therapy specialization. It is quite common today to find art therapists with graduate degrees working in special education programs, nursing homes, community art centers, community mental health centers, psychiatric hospitals and other health care and social service agencies.

Students graduating from this program are able to work for change within a variety of treatment and mental health settings in a way which is respectful of individual differences and cultural identities.

Students can enroll at the University as a pre-art therapy major. They can apply to the program once the following criteria have been met:

1. The completion of ARTT 230, Introduction to Art Therapy, with a grade of " C " or higher. Note: This course can only be taken at BGSU; transfer students will be required, if relevant, to retake this course. This course must also be completed prior to applying to the ant therapy program.
2. Have an overall accumulative GPA of 2.7 or better based upon completion of 40 graded hours (not S/U) preceding the application deadline which is the second Friday of Spring semester. Transfer students must submit all official transcripts and meet the same requirements of a 2.7 GPA, complete 15 graded hours (not S/U) at BGSU with at least a 2.7 GPA prior to the application process, and have the minimum total of 40 graded hours completed. S/U courses do not
count.' All program core courses,
supportive core courses, or cognate courses completed before application to the program must be graded " C " or higher in order to apply.
.3. Students will submit their application during the spring semester of the sophomore year. Students ranking, by GPA; in the top 18 will be selected. Notification of acceptance will be mailed out by mid-late March. Students must respond with a letter of acceptance one week after hearing from the art therapy program.
3. If the art therapy program does not hear from the student by this date their acceptance to the program will be canceled.
In order to continue in the program, all art therapy majors are required to have the grade of " C " or higher in all program core courses, supportive core requirements, studio concentration courses and cognate courses. It is important to note that students will be required to repeat courses if they fail to earn a " C " or higher; if they fail to do so, they will be denied permission to do their practicum. Only 2 courses required for the major (right side of sheet) can be repeated one time each. If a repeated course results in a $D$ or $F$ for the second time, the student will be dismissed from the program. All majors must also have an accumulative GPA of 2.7 before enrolling in ARTT 488. No class required in the major can be taken $\mathrm{S} / \mathrm{U}$. Transfer students must complete the appropriate prerequisites before enrolling in specific courses.

## Suggested program <br> First year

ENG 111 and/or 112 (3)/(6)
ART 102, 103 and 112 (9)
PSYC 201 (4)
ARTH 145 or 146 (3)
General education requirements (9)
Second year
ART 205 (3)
ARTT 230 (3)** (Fall only)
ENG 207 (3)*
PSYC 303* or EDFI 490 or HDFS 321 (3)
SOWK 324 (3):
PSYC 403 (3)*
PHIL 319 (3)
Two/three required beginning level studio courses (ART 261, 263, 277, 325, 373, 390) (6-9)
General education requirement (3)
Third year
ARTT 330 (Fall only) (3)
ARTT 331 (Spring only) (3)
PSYC 405 (3)*
Two/three required beginning level studio courses (ART 261, 263, 277, 325, 373, 390) (6-9)
ARTE 482 or 343 (3)
Cognate (6) ARTT 431 (3) plus one cognate course
ARTH 456 or 457 or 460 or 442 (3)*
Studio concentration (3)

## Fouth year

Cognate (remaining hours)
Studio concentration (remaining hours)
ARTT 488 (10-12) (Students can only
take one course with their practicum.)
General elective or ART elective
" Strongly recommended during this year.
** Must be taken during this year.

## Comminnication Disorders

338 South Mall, 372-2515
Speech-language pathologists and audiologists specialize in the study and treatment of human communication disorders. They work in a variety of professional settings such as publio and private schools, hospitais, community clinics, universities, nursing homes and other health care facilities, as well as in private practice. Speech-language pathologists and audiologisis work with all ages, from infants to the elderly.

The minimum entry level qualification for professional practice in the fields of speechlanguage pathology and audiology is a master's degree. The pre-professional undergraduate curriculum in communication disorders is designed to provide instruction in the basic components of the discipline and to prepare the student for entrance into a graduate training program. The undergraduate student will study the basic speech and hearing sciences and the normal human communication process, as well as the theoretical and practical aspects of therapy. Clinical observations are required and a supervised clinical practicum in which direct freatment is provided to a communicatively disordered client will be completed during the junior or senior year. The school practicum experience occurs at the graduate level, however it is strongly recommended that sludents take the necessary coursework for school certification at the undergraduate level. These courses can be taken as alectives.

Adinittance to the major is restricted to those applicants meeting the following requirements:

1. minimum grade of C in CDIS 223, 224 and 225 with a minimum GPA of 2.5 in these courses; and
2. completion of a speech-hearing screening exam; and
a. an overall GPA of 2.5 after 30 hours. For a student to maintain a CDIS major once adimited, the student must have:
3. minimum grade of C in all CDIS courses completed; and
4. 2.5 GPA in the major; and
5. 2.5 GPA overall

For a student to gain entrance into CDIS
421, the student must have:
t. minimum grade of C in all CDIS courses completed; and
2. 27 GPA in the major; and
3. 2.7 GPA overall.

All major core courses must be taken for a grade, except for those courses graded only S/U.

Suggested program
First year ( $28-34$ credits)
BIOL 104, or 205 (4-5)
ENG 112 or equivalent (3-6)
IPC 102 (3)
PHYS 101 or 201 (3-5)
CDIS 223 and 224 (6)
Humanities and arts (3)
International perspective course (3)
Cultural diversity in the United States (3)
Second year (31 credits)
MATH 120 or 128 (5)
CS 100 or 101 (3)
PSYC 201 (4)
EDFI 302 (3)
ENG 380 (4)
CDIS 225, 301, 302, 311 (12)
Third year (27-31 credits)
EDSE 431 (3)
EDCI 349 (3)
PSYC 270 or SOC 369 and PSYC 303 (67)

GERO 101 (3) or SOC 404 (3)
CDIS 351, 361, 401 and 421* (9-12)
Social science (3)
Fourth year (29-35 credits)
REHB 401 (3)
PSYC 304, 309 or GERO 330 and 405 (8)
EDSE 459 or EDSE 324 (3)
CDIS 421 (3)*
Natural science (3)
Social science (3)
Humanities and arts (3)
Electives (3-9)

* The student will be placed into CDIS 421 by his/her academic adviser during the junior or senior year. The student will only be able to take 421 at the time designated by the adviser because of the need to limit the enrollment in such a clinical practicum class.


## Criminal Justice

102 Health Center, 372-2326
In preparation for careers in law enforcement, investigative units, private security organizations, penal institutions, probation and parole work and other agencies in the criminal justice system, the criminal justice program integrates coursework and interaction with professionals in various disciplines. The graduate of the program receives a bachelor of science in criminal justice degree. The program prepares students for entry into all types of agencies in the criminal justice system-law enforcement, corrections, investigative, forensic, security. (Students interested specifically in corrections should also consider the corrections cognate in the social work program.)

Admittance to the program is restricted to those applicants meeting these three requirements:

1. have CRJU 210 or its equivalent on the record with a C or better:
2. have a 2.5 GPA or higher on a total of at least 25 graded hours; and
3. have completed one year of residency (at least 25 graded hours) at BGSU (effective for students applying for admission to criminal justice for fall 1994); and
4. rank in the top 30 applicants each year according to GPA. (Details may be obtained from the Criminal Justice Office, 102 Health Center.)
The program places emphasis on superior academic attainment, ability to communicate verbally and in writing, and research potential. Every student must complete an original proposal for research (CRJU 480, Senior Seminar) as well as the field placement or practicum of 480 agency hours. It is anticipated that a large number of CRJU graduates will go on to graduate school, law school or enter the field of practice with a view to becoming supervi-sory-level personnel.

Students must complete, after the junior year, a 480 -hour internship in an appropriate agency. The student is responsible for developing the internship site. However, all internships are subject to the approval and supervision of the program faculty.

All core courses and core elecilve courses must be taken for a grade, except those courses graded oniy S/U.

## University and general education group requirements

ENG 112 or equivalent
Natural sciences: (2 courses)
Humanities and arts: (2 courses)
General education international perspective: (1 course)
Social sciences: POLS 110, PSYC 201, SOC 101
Cultural diversity in the United States: SOC 316.
Core courses
CRJU 210, 220, 310, 320, 330, 420 and 480
CRJU 230 or 340 or 410
CRJU $3 X X$ or POLS 417
PHIL 327
POLS 303
POLS 419 or PHIL 318
PSYC 405 and 454
SOC 301 or PSYC 311
SOC 316, 340, 441 and 442
One computer science course
One statistics course
Internship
480 agency hours for 9 credit hours
(CRJU 491) and practicum seminar for 3 credit hours (CRJU 492)

## Core electives

14-17 hours selected from the list of approved courses and those for which special permission is granted; should be selected carefully to supplement and enrich the criminal justice core courses.

## Suggested program

rst year
CRJU 210
ENG 112 or equivalent
POLS 110
PSYC 201
SOC 101
Natural sciences
International perspective course
Humanities and arts
Second year
CRJU 220, 310 and 230 or 340
Computer science course
Statistics course
Completion of general education requirements
Third year
CRJU 320, 330,370, 420
Core courses and core electives
Fourth year
CRJU 491 and 492 (12)
CRJU 480
Completion of core courses and core electives

## Dietetics

302 Johnston Hall, 372-7859
This program, in the Department of Family and Consumer Sciences, meets undergraduate education requirements of the American
tetic Association*.
A declaration of intent to pursue the oretetics program should be filed in the college office during the first year at BGSU. Admission to the program further requires the completion of 45 hours of credit, approval through the program director, and a minimum GPA of 2.5. Graduates of this program will earn a Bachelor of Science in Dietetics degree.

Upon completion of one of the professional practicums (internship or AP4) after graduation, and the successful completion of the national registration examination, a graduate will be a licensed dietitian (in the state of Ohio) and a registered dietitian (with the American Dietetic Association).

## Suggested program

First year
BIOL 104 or 205 (4-5)
ENG 112 (3)
SOC 101 (3)
CHEM 125, 127 and 128 (10)
MEDT 101 (1)
General eclucation requirements (6-9)
Second year
F\&N 207, 210 and 212 (9)
CHEM 306 (4)
CS 100 (3)
BIOL 332 (3)
PSYC 201 (4)
POLS 110 (3)
FCS 250 or EDFI 302 (3)
STAT 200 (3)

Third year
F\&N 310, 331, 335 and 432 (12)
ACCT 325 (3)
BIOL 314 and 315 (4)
CHEM 308 (3)
HDFS 107 or 408 (3)
Two emphasis electives (6)

## Fourth year

F\&N 431, 433, 434, 435, 436, 438 and 440 (21)
MGMT 305 and 361 (6)
Two humanities electives (6)

* Program approval status: Bowling Green State University is currently granted approval status by the American Dietetic Association Council on Education Division of Education Accreditation/ Approval, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education.


## Environmental Health

102 Health Center, 372-7774
Environmental health graduates are specialists in protecting the environment. They are prepared to evaluate and control threats to air, water, and soil. Examples of threatened and threatening environments include such disparate settings as remote mountain lakes, steel mills, rural housing, print shops, restaurants, groundwater aquifers, plastics formulators and wetlands. The environmental health scientist may focus on the health of a particular occupational workforce, or the general well-being of a community. In all cases, the ability to look comprehensively at environmental problem solving is critical.

Graduates meet the educational requirements to become Registered Sanitarians (RS) and Certified Industrial Hygienists (CIH) after gaining sufficient experience and passing the appropriate professional examinations. Primary places of employment are in industry, government, insurance risk management agencies, environmental engineering firms, consulting firms, testing laboratories, health care facilities and educational institutions.

The curriculum emphasizes the biological, chemical and physical sciences with additional requirements linking policy with successful practice. Students learn to investigate and sample indoor and outdoor environments, and implement techniques to solve environmental problems. Further hands-on experience is obtained working in our dedicated environmental health laboratories. Study is enhanced through an internship experience as a working professional in either an agency or private company. As one of only 23 nationally accredited environmental health programs in the United States, the educational experience is notably compre-
hensive and well-directed. Please check with the program office for further specifics about the program, and for information about enrollment policies.

## Sample program <br> First year

ENG 112
MATH 128
CHEM 125 and 127 and 128
PSYC 270
CS 100
General education requirements and electives
Second year
BIOL 204 and 205
PHYS 201
POLS 336
ECON 200
CHEM 306
General education requirements and electives
Third year
ENVH 302 and 303
ENVH 304 and 305
ENVH 301
ENVH 306
Program option requirements
General education requirements and electives
Fourth year
ENVH 402 and 403
ENVH 405
ENVH 407
ENVH 449
ENVH 491 Internship
ENVH 492
Program option requirements
General education requirements and electives

## Other programs

Environmental programs are also offered by the College of Arts and Sciences and the College of Technology.

## Gerontology

102 Health Center, 372-2326
The Bachelor of Science in Gerontology degree prepares graduates for positions in agencies and institutions that administer and deliver services for older adults, including senior centers, nutrition programs, nursing homes, recreation and counseling agencies, research organizations and social service agencies.

While providing a basic background in general studies, the gerontology program is flexible enough to permit students to select courses that will best prepare them for particular types of careers within the general field of aging.

Each student in the gerontology program selects a cognate area from areas such as administration, biology, health, human resource management, psychology, recreation and sociology. Cognate areas are
designed by the student and his or her academic adviser.

New majors are admitted to the gerontology program according to the following criteria:

1. completed GERO 101 (Introduction to Gerontology) or its equivaient on the record with a C or better;
2. completed a 2.5 GPA or higher on a total of at least 30 credit hours.
Prior to admission, students will be ciassified as pre-gerontology majors in the College of Health and Human Services. Premajors are not permitted to take upper division gerontology courses. Majors who wish to transfer from one option to another within the gerontology program must also meet these requirements. Details about admission may be obtained from the gerontology office, 102 Health Center.

During the course of the program, each sludent completes either a 400 or 800 hour field placement in an agency or an institution serving older adulls. Prior to the field experience, each student must complete a 50 hour volunteer or paid experience in a facility or a program with elderly clients.

## Suggested program

First year
ENG 112 or equivalent (3-6)
GERO 101 (3)
PSYG 201 (4)
BIOL 104 or 205 (4-5)
F\&N 207 (3)
Cognate requirements
General education requirements Electives
Second year
BIOL 332 (4)
SOWK 324 (3)
GERO 440 Or PSYC 309 (3)
PSYC 270 or SOC 369 (3-4)
Cognate requirements
General education requirements

## Electives

Third year
BIOL 310 (2)
GERO 405 (3)
PHIL 319 (3)
F\&N 436 (3)
GERO 422 (3)
Cognate requirements
Electives
Fourth year
GERO 402, 410, 420 and 493 (10)
GERO 491 (10)
Cognate requirements
Electives
This program is subject to revision and may be modified to meet student needs.

## Loug-7erm Care Administration

 OplemA special option available to students majoring in gerontology is to elect a specially designed cognate, long-term care administration, which prepares the student to seek an Ohio Nursing Home Administrator's license. This cognate consists of 12 courses
in accounting, business administration, economics, finance, legal studies and management. The student is also required to complete a practicum of a minimum of 800 hours of experience in an approved nursing facility under the supervision of an Ohio licensed nursing home administrator.

Because of the need for close supervision. of the student registered for this practicum experience, it is recommended that the placement be in a facility in close proximity to Bowling Green. The student should also be aware that 132 hours are required for graduation in the long-term care administration option.

## Suggested program

First year
ENG 112 or equivalent (3-6)
GERO 101 (3)
PSYC 201 (4)
BIOL 104 or 205 (4-5)
F\&N 207 (3)
General education requirements

## Electives

Second year
CS 100 or MIS 200 (3)
ACCT 221 and 222 (6)
BIOL 332 (4)
ECON 202 and 203 (6)
SOWK 324 (3)
GERO 440 or PSYC 309 (3)
GERO 405 (3)
STAT 212 or PSYC 270 (3-4)

## Electives

Third year
BIOL 310 (2)
BA 325 (3)
FIN 300 (3)
LEGS 301 (3)
MGMT 305 or 360 (3)
PHIL 319 (3)
F\&N 436 (3)
GERO 422 (3)
Electives
Fourth year
BA 420 (3)
GERO 410, 411, 420, 493 (10)
GERO 491 (10)
LEGS 425 (3)
MGMT 361 (3)
MGMT 461 (3)
GERO 402 (3)
Electives
Fifth year
GERO 491 (20)
This option has been approved by the Ohio Board of Examiners of Nursing Home Administrators and may not be modified without the approval of the Board.

## Medical Record <br> Administration

101 Health Center, 372-8242
This program will not be available 1997-99.

Medical Technology<br>(Clinical Laboratory Science)<br>504 Life Sciences Building, 372-8109

Certified medical technologists (clinical laboratory scientists) perform tests that aid in the detection, diagnosis and tieatment of disease. Medical technology is composed of: five clinical laboratory sciences: blood banking, clinical chemistry, hematology, immunology and microbiology. Collectively, applications taken from each of these disciplines enable clinicians to make a comprehensive assessment of each patient. Most medical technologists work in laboratories. They may be located in hospitals, clinics, physicians' offices, research centers, industrial and commercial settings. Medical technologists also work in the areas of biotechnology, toxicology, and various speciaities such as cytogenetics and transplantation. Medical technologists may pursue careers in laboratory supervision, management, education, customer training or sales (instrumentation, pharmaceuticals and new technology).

Students are encouraged to acquire a liberal arts education during the first three years while completing the prerequisite science courses. The senior year is devoted to professional study and training through lectures, laboratory instruction, seminars and supervised clinical practice at an affiliated hospital laboratory. Upon successful completion of the program, students receive a Bachelor of Science in Medical Technology and certificate of clinical training, and are eligible to take either of the national certification examinations for medical technologists. The professional studies program in medical technology is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The major also prepares students for entry into graduate or professional school.

While acceptance to the major may occur at any time, application to professional training is required and is normally submitted during the junior year. Admission is granted to applicants who have a GPA of 2.5 or higher, have completed all major course requirements with a grade of C or better, and are chosen for a clinical practicum position at one of the program's affiliate hospitals.
These positions are assigned at the time of acceptance by a committee of hospital and University representatives. The clinical affiliates of the program are Blanchard Valley Hospital, Medical College of Ohio, St. Vincent Medical Center and St. Rita's Medical Center. The professional studes program provides experience in research as well as in clinical practice. As an alternative, students may apply for their professional training through an accredited hospital bas program that is affiliated with the University.

A grade point average of 2.5 or better must be maintained throughout the profes-
sional training program. During protessional
training no more than one lecture course in
hich a D or $F$ has been earned may be epeated; no more than one laboratory course in which a D or F has been earned may be repeated. A student may not proceed through the practicum portion until all prerequisites have been completed with a grade of $C$ or better.

Three plus one $(3+1)$ plan
(course sequencing may vary)
First term (14-18 hours)
ENG $111{ }^{\prime \prime}$ (3)
MATH-130 or equivalent (3-7)
CS 100 (3)
CHEM 125 (5)
Second term (13-16 hours)
ENG 112 (3)
BIOL 205 (5)

- CHEM 127 and 128 (5) Elective
Third term (15-16 hours)
Physical science/math elective (3-5)
BIOL 332 (4)
BIOL group elective (3-4)
Cultural diversity in the U.S. elective (3)
Fourth term (13-18 hours)
Physical science/math elective (3-5)
BIOL 313 (4)
BIOL group elective (3-4)
MEDT 201 (1)
Humanities and arts elective (3)
Fifth term (14-16 hours)
. CHEM 306 or 341 (4-5)
Social science elective (3).
BIOL grớup electives (3-4)
Humanities elective (3)
Sixth term (14-16 hours)
CHEM 308-309 or 342 (4-5)
MEDT 411-12 (4)
MEDT 434 (3)
Social science elective (3)


## Professional Training

Seventh term (16-18 hours)
Didactic and laboratory courses in clinical laboratory sciences.
Eighth term (16-18 hours)
Didactic and laboratory courses in clinical laboratory sciences.

## Clinical practicum

## Ninth term

As scheduled at either Blanchard Valley Hospital, Medical College of Ohio, St. Vincent Medical Center, or St. Rita's Medical Center. (18-19 hours)

Students may take CHEM 341-342 as physical science/math electives if using CHEM 306-308-309 as program requirements. Students who take CHEM 341-342 as program requirements may take CHEM 308309 as physical science electives (but not CHEM 306).

Students taking both CHEM 306 and CHEM 341 may apply credit from one or the other toward the 122-hour graduation requirement.
BIOL group elective courses-3 required

BIOL 310, 331, 350, 405, 406, 407, 408, $411,421,426,431,433,435,438$, 439, 443, 446, 447, 449
ENG 388
Other courses by departmental approval
Physical science/math elective courses2 required

CHEM 201, 308-309, 321, 341, 342, 352, 445
MATH 115, 131
PHYS 201, 202
ENG 388
CS 101, 130, 180
Other courses by departmental approval

## Physical Therapy

101 Health Center, Bowling Green State University, 372-8242
Collier Building-4th floor, Medical College of Ohio, at Toledo, 381-3518

The physical therapy educational program provides opportunities for development of the knowledge, skills and attitudes which enable students to be competent entry-level clinical practitioners, to participate in clinical research and to have the basis for future graduate study. The professional education phase:

- fosters values and attitudes that promote caring and concern for the individual and for society
- enhances concepts and principles derived from knowledge of the natural sciences, the social sciences, and the humanities
- develops skills in:
- the collection of information from and about patients
- the establishment of rapport with patients to facilitate both problem identification and therapeutic intervention
- the application of the scientific method to the analysis, synthesis and management of practice-related problems
- the critical appraisal of relevant literature and clinical evidence
- the continuation of one's own professional development
The physical therapist is a highly skilled practitioner who is knowledgeable of the health problems of the disabled in all age groups and in a variety of environments. Phýsical therapy provides a career option for men and women who want to work with other health care professionals in the restoration of maximal functional capabilities of individuals of all ages temporarily or permanently disabled by illness, disease, trauma or congenital abnormalities. Physical therapists provide services in.hospitals, public health agencies, health maintenance organizations, rehabilitation and extended care facilities, public schools and governmental agencies, or they may establish their own independent practices.

During the freshman and sophomore years, students complete pre-professional coursework that permits them to fulfill all prerequisite requirements and to attain a general education background in communication skills, natural sciences, social and behavioral sciences and the humanities.

The professional education phase of the program is provided on the campus of the Medical College of Ohio. Courses in the professional curriculum, which continues for seven consecutive semesters, include courses in the basic sciences, physical therapy theory and procedures and applied clinical sciences. Concurrent clinical practicums and a six-month clinical internship, which are required of all students, provide supervised experiences that ensure professional competency.

Instructional fees for the baccalaureate physical therapy program are the same as for all other undergraduate degree programs. There are, however, additional costs for uniforms, required professional liability insurance and laboratory fees. Transportation to and from classes at the Medical College of Ohio, room and board, expenses incurred with clinical education experiences (e.g., travel, lodging) that may take the student out-of-state for up to three months and any other specific health tests required by the clinical education facilities are the financial responsibility of the students.

## Admission Procedures

Candidates for acceptance to the physical therapy professional phase in the third and fourth years at the Medical College of Ohio in cooperation with the University of Toledo and
Bowling Green State University must have:

1. been enrolled at Bowling Green State University for a minimum of 30 semester hours;
2. filed the physical therapy professional curriculum application prior to the deadline date of January 2 of the year the student wishes to enroll in the professional curriculum of the physical therapy program at the Medical College of Ohio;
3. obtained a minimum of 2.8 cumulative GPA. No S/U options are permitted in required courses, except for those graded only on that basis;
4. completed each of the following courses or their equivalent with a minimum grade of $C$ :
Natural Sciences:
BIOL 205 and 331
CHEM 125 and 127-128

## PHYS 201

Behavioral and Social Sciences:

## PSYC 201

SOC 101;
5. completed prerequisites and all other general program requirements specified by Bowling Green State University ;
6. provided documentation of volunteer or paid experience(s) under the direction of two licensed physical therapists totalling 200 hours;
7. completed a personal interview as stipulated by the Admissions Committee for the proiessional curriculum, and
8. filed a certified letter of acceptance with the program chair by April 30.
The availability of clinical facilities and faculy currently limits the number of students that can be admitted from each university. Admission to the professional component is highly competitive; therefore, completion of the admission requirements does not guarantee acceptance to the proiessional physical therapy program.

## 

The responsibility for selecting students for enrollment into the professional component of the curriculum is vested in the Committee on Admissions, which is composed of representatives from the Department of Physical Therapy at the Medical College of Ohio and appointees from Bowling Green State University and The University of Toledo. Criteria for selection include the strength of the academic record with particular emphasis on performance in science courses, evidence of observation of physical therapy services, and personal characteristics important when working with people in the health care fields.

Suggeateci program: * courses required for admission into the professional curriculum in the third and fourth years.
First year
ENG 112 or equivalent (3-6)
SOC 101 (3)
MATH 130 (3)
OHEM 125 and 127-128 (10)*
PSYC 201 (4)*
MEDT 101 (1)
Generel education requirement (2-3)
Second year
PHYS 201 (5)*
BIOL 205 and 331 (9)*
IPC 102 (3)
MEDT 301 (2)
PHIL 342 (3)
PEYC 240 (3)
CS 100 or 101 (3)
General education requirements: select from humanities and ant, cultural diversity in the United States
Thirg year "curriculum under revision at time of printing

Anatomy \& Physiology (7)
Neurosciences (5)
Pathophyslology (2)
Physical Therapy Theory and Procedures (8)

Introduction to Physical Therapy (2)
Foundations of Physical Therapy (3)
Therapeutic Exercise (2)
Kinesiology (5)
Musculoskoletal Problems (3)
Early Development (3)
Clinical Practicum (4)
Computer Applications in PT (2)
Fourth year "curriculum under revision at time of printing

Psychology of Physical Disability (3)
Musculoskeletal Problems (3)
Scientific Inquiry (2)
Therapeutic Exercise (4)
Clinical Practicum (2)
Exercise Physiology (3)
Management of Physical Therapy Services (3)
Principles of Rehabilitation (3)
Research Topics (1)
Gerontology in PT (2)
Clinical Problem Solving (2)
Fundamentals of Teaching \& Learning in PT (3)
Professional Issues (1)
Seminar (1-3)

## Summer

Clinical Internship (6)
Fall (fith year)
Clinical internship (6)
To enroll in the summer/fall clinical internships the student must have a GPA of 2.5 or above in professional courses with a PHYT prefix and faculty consent.

This program is subject to revision and may be modified to meet student needs.

## Social Work

114 Health Center, 372-2441
This program is designed to prepare students to be generalist social work practitioners, which is considered the entry level for social workers. The program is built upon a liberal arts foundation. Thus, it provides students with the knowledge and value base of the social work profession as well as the practice skills necessary to work with a variety of clients in various social service agencies.

Students successfully completing the social work program are eligible to take the state license examination in order to become a Licensed Social Worker (LSW). Social workers are employed in public welfare, corrections, health and mental health, and services to the elderly and children and families. Among social workers' clientele are those affected negatively by economic structure, those who have committed or been victims of crimes, persons who have physical and mental disabilities, and those who have experienced discrimination and oppression. Besides individuals, clients include families, small groups and communities experiencing conflict and crisis.

The course of study begins with premajor status. Students take two introductory social work courses along with general education courses. All other social work courses are taken after being accepted for social work major status. A written application requesting major status must be submitted to the department (see College of Health and Human Services Academic Handbook for specific requirements). Students are admitted to major status on a competitive basis.

In addition to the course of study, students participate in area social service agencies through observation, volunteer work and supervised fieid instruction. The social work program is accredited by the Council on Social Work Education at the baccalaureate level. Graduates of the program receive a Bachelor of Science in Social Work.

## Admission and Continuanton in the Social Work Program:

1. Students who declare social work as a major will be classified as pre-social work majors prior to admission to the program.
2. Students may apply for admission to the program after:
a. Completion of 30 credit hours.
b. The attainment of a 2.5 accumulaïve GPA.
c. Satisfactory completion of SOWK 110 and 227 with a grade of C or better.

- Transfer students will also be evaluated upon the same criteria and must complete 12 semester hours at BGSU before application.

3. Program applications are submitted the first full week of each semester.
4. Faculty will review applications the second full week of aach semester.
5. Notification of acceptance/rejection will be mailed by the fourth week of the semester. See application form for exact dates:
6. Students who apply for senior field placement must have a minimum GPA of 2.5 in the core courses as well as accumulative. To apply for graduation in social work, a 2.5 accumulative GPA is required as well as a 2.5 in the core courses.

## Suggested Program <br> First year

SOWK 110 (3)
ENG 112 or equivalent (3-6)
BIOL. 104 (4)
SOC 101 (3)
CS 100 (3)
POLS 110 (3)
General education requirements ( 9 )
Second year
SOWK 227 (3)
IPC 306 (3)
PSYC 201 (4)
ECON 200 (3)
General education requirements (6)
Electives (12)
Third year
SOWK 300, 312, 320, 321, 322, 324 and 332 (21)
SOC 301, 369 (6)
Electives (3)
fourth year
SOWK 325, 326, 423, 430 (22)
PSYC 405 (3)
Electives (5)
This program is subject to revision and may be modified to meet student needs. All students must have 122 hours of 100 -level or above courses for graduation.

## School of Nursing


#### Abstract

Changes which supersede the printed catalog can be found in the online catalog


 at http://www.bgsu.edu/catalog/101 Health Center, Bowling Green State University, 372-8760
Firelands College, 433-5560
Medical College of Ohio, 381-5800

The School of Nursing offers the student an opportunity to become actively involved in health care as a professional nurse with a Bachelor of Science in Nursing degree. The curriculum emphasizes a liberal education combined with the nursing theory and clinical practice needed to develop the educated nurse. A graduate of the nursing program is rapable of providing health services for drividuals, families and communities and eligible to take the licensing examination to become a registered nurse. The program provides preparation for future graduate study and leadership in nursing.

The School of Nursing is accredited by the National League for Nursing and has full approval of the Ohio Board of Nursing.

Fees for the nursing program are the same as for all other degree programs. Additional charges, however, are required for uniforms, professional liability insurance, specific health tests and immunizations, and lab fees. The classes in the nursing major are taught in Toledo at the Medical College of Ohio. For the RN/BSN track, classes are also offered at Firelands College, and in the Archbold and Lima areas. Transportation to classes and to clinical placements is the responsibility of the student.

The School of Nursing offers two tracks to obtain a Bachelor of Science in Nursing degree:

1. BSN for students entering the nursing profession.
2. RN/BSN for students who are A.D. or diploma graduates and licensed as registered nurses.

Admission requirement information is available from the nursing office.

## Bachelor of Science in Nursing - BSN

A candidate for the Bachelor of Science in Nursing degree must earn a minimum of 123 semester hours of credit either in residence, by advanced standing or through transfer of credits, in addition to the requirements under Academic Policies.

A minor is not required for graduation.

## Admission requirements

Admission to the pre-professional nursing program is through the Office of Admissions of the University. Successful completion of the pre-professional requirements is a prerequisite for admission to the professional nursing program. The number of students accepted into the nursing program is limited by the availability of clinical facilities and faculty. Admission to the professional program through the School of Nursing, is competitive and based upon:

1. Completion of the following prerequisite courses with a C or better:
ENG 111, 112
MATH-demonstrated competency above 095 level
CHEM 109, 110 and 117, 118
BIOL 205, 331, 332, 314, and 315
PSYC 201
If a grade of less than $C$ is earned, two courses may be repeated, one time only.
2. Minimum cumulative grade point average of 2.5 overall including all transfer work.
3. Faculty evaluation of all candidates for admission to include, but not limited to (a) Academic progression (including age of coursework) and (b) Repeated coursework.
Admission applications are available from the nursing office and must be submitted by January 1.

## University requirements

These courses are offered at the BGSU main campus or at Firelands College in Huron, Ohio. Each student is required to complete ENG 112 or demonstrate a proficiency in written expression equivalent to that attained by students who have completed the course. A penalty is imposed if ENG 112 is not completed within the first 60 hours. See Academic Policies.

## Suggested program

First year (pre-professional program)
CHEM 109, 110 and 117-118 (8)
MATH-demonstrated competency above 095 level
Cultural diversity in the U.S. elective (3)
ENG 111 and 112 or equivalent (3-6)
BIOL 205 (5)
PSYC 201 (4)
NURS 100 (1) optional
General education (3)
Second year
PHIL 102 (3)
BIOL 331, 332, 314 and 315 (12)
PSYC 240 (3)
F\&N 207 (3)
PSYC 270, SOC 369 or MATH 115 (3-4)
Course in international perspective (3)
Elective computer course (3)

## Third year

NURS 301 (summer between sophomore and junior years
NURS $311,312,313,314,321$, and 362 , - 363 or 401, 364

Fourth year
NURS 362, 363 or 401, 364 and 495, 403, 402, 496
Electives may be required to meet the 123 hours required for graduation

The above is a suggested program that may be modified according to individual needs and capabilities. The School of Nursing recommends regular academic advisement as the student progresses.

##  <br> Bachelry of Science in 

Becyre track for the registered nurice
The School of Nursing also offers an opportunity for graduates of associate degree and diploma nursing programs to earn a baccalaureate degree with a major in nursing. The RN student achieves the same terminal objectives as the basic student. However, this alternate track for the RN provides for fiexibility and an individualized curricuium approach for the nurse in practice. This program is offered through the Bowling Green main campus, the Firelands campus and outreach campuses in Archbold and Lima.

## Manissim requirements

Criteria for seeking admission to the major are:

1. Minimurn cumulative grade point average of 2.5 overall including all transfer work.
2. Successful completion of selected NLN Examinations for diploma graduates.
3. Currenl license to practice as a registered nurse in the state of Ohio.
4. Graduation from an NLN accredited school of nursing.
5. Completion of following prerequisite fourses with a minimum grade of " C ". Biology 205, 331, 332, 314, 315 Chemistry 109, 110 and 117, 118 English 111, 112
Math (competency above 095 level)
Psychology 201
if a grade of less than " $C$ " is earned, two courses may be repeated, one time only.

Applications to the nursing major are available in the nursing offices on the main and Firelands campuses, in the LAHEC and the Archbold offices.

A lab fee is assessed for all clinica! courses.

## (4) Redmaton requirements

A minimum of 123 hours is required for graduation, of which 40 hours must be in upper-division course work. In addition, the 30 hours earned immediately before graduation must be completed through Bowing Green State University uninterrupted by coursework at another university or college.

## University requirements

Each student is required to complete ENG 112 or demonstrate a proficiency in written expression equivalent to that attained by students who have completed the course. A penalty is imposed if ENG 112 is not completed within the first 60 hours. See Academic Policies.

RN students must take or transfer in equivalent to Math as demonstrated by a competency examination score above 095 level.

## Required Supportive Courses

Additional required credit hours exclusive of major include PSYC 240; either PSYC 270, SOC 369 or MATH 115; PHIL 102; F\&N 207; computer course.

There are 33 hours in the nursing major. Typically, students take the 33 hours parttime spread out over two years. An accelerated plan is possible; however, prior approval must be obtained from the Director for the RN/BSN track.

# College of Musical Arts 

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/
H. Lee Riggins, Ph.D., dean, 1031 Moore Musical Arts Center, 372-2188
Richard Kennell, Ph.D., associate dean, 1031 Moore Musical Arts Center, 3722181
Department of Music Composition/History, Donald M. Wilson, D.M.A., chair, 1031 Moore Musical Arts Center, 372-2182
Department of Music Education, P. Thomas Tallarico, Ph.D., chair, 1031 Moore Musical Arts Center, 372-8578
Department of Music Performance Studies, Paul Hunt, D.M.A., chair, 1031 Moore Musical Arts Center, 372-2181

## Objectives

The mission of the College of Musical Arts is fourfold: (1) to educate qualified students for careers in music teaching, performance, composition, analytical or historical research, and related technical and support fields; (2) to serve state, national and international communities through support and dissemination of creative work in composition and performance; (3) to serve state, national and international communities through support and dissemination of research in musicology, music theory, music technology, music education and music pedagogy; and (4) to serve as a cultural resource for the University community and Northwest Ohio.

## Music for the Non-Major

The student interested in music but not planning to be a major will find a wide variety of courses and performing options from which to choose. Courses range from a basic music appreciation class that embraces both popular and classical styles to more specific ourses in art music, jazz, world music, usic theory and composition. Those Interested in learning piano, voice or guitar will find group instruction offered in these areas. Private instruction and membership in University performing ensembles are
available on a limited basis by audition for people with previous performing experience.

## Accreditation

Since 1947, the College of Musical Arts has been an accredited institutional member of the National Association of Schools of Music. In addition, the Department of Music Education is accredited by the National Council for the Accreditation of Teacher Education (NCATE).

## Entrance Examinations

Students wishing to major or minor in music (recording technology minor excepted) are required to audition in their principal performance medium and to take diagnostic examinations in general musicianship. A study guide is provided prior to the examination. In addition, a personal interview is strongly recommended. Applicants with performance skills in more than one medium are encouraged to audition in the second medium as well. Admission to a degree program in music is dependent upon satisfactory completion of these auditions. The diagnostic examinations will determine whether remedial coursework is necessary or not. Students with majors in disciplines other than music who wish to register for applied music instruction (private lessons) are also required to audition in the principal performance medium. For information about other University entrance/placement examinations, see Academic Policies and Admissions Requirements.

## Music Performance Ensembles

Membership in music ensembles is open to all students in the University who qualify on the basis of auditions. These ensembles include the A Cappella Choir, Men's Chorus, Women's Chorus and Collegiate Chorale; Concert, University, Athletic, Marching and Symphonic Bands; Philharmonia Orchestra, and a variety of small vocal and instrumental ensembles, including Brass Choir, Jazz Lab Band, Early Music Ensemble, Balinese

Gamelan Ensemble and New Music
Ensemble. See course descriptions for a full listing of ensembles.

## Programs Offered

## Bachelor of Music

The College of Musical Arts offers majors leading to the Bachelor of Music degree as follows:

## Jazz studies (MUCH) <br> Music composition (MUCH) <br> Music education (MUED)

Choral option-keyboard emphasis
Choral option-vocal emphasis
Choral/musical theater option-keyboard emphasis
Choral/musical theater option-vocal emphasis
Classroom option-keyboard emphasis
Classroom option-vocal emphasis
Instrumental option-brass, percussion, guitar, string or woodwind emphasis
Instrumental option-keyboard emphasis
Music history and literature (MUCH)
Music Performance (MUSP)
Church music option (organ or voice)
Instrumental option Brass
Guitar (jazz emphasis)
Harp
Percussion String
Woodwind
Keyboard option Harpsichord
Organ Piano accompanying
Piano literature Piano pedagogy
Voice option
Voice/musical theater option
Vocal pedagogy option
Woodwind specialist option
A minor in jazz is available to Bachelor of Music degree candidates majoring in any of the fields listed above, with the exception of jazz studies.

The Bachelor of Music degree provides undergraduate preparation for a professional career and a background for graduate study. The curriculum for each Bachelor of Music
program stresses not only technical and musical skills，but also a broad understand－ ing of the social and cultural environment in which the art of music is practiced．See the sections immediately following as well as the course descriptions for specific details of eech of these majors．

## 

The Bachelor of Arts degree with both majors and minors in music is also available（see College of Atts and Sciences）．Bachelor oŕ Atts degree candidates who wish to pursue a major of minor in music should contact the associate dean of the College of Musical Arts．
 A minor in music is available to students majoring in education（see College of Education and Human Development）．The following options are offered：
a Secondary instrumental music（meets secondary certification requirements）
－Secondary vocal music（meets secondary certification requirements）

All prospective music minors must complete the music entrance examination including an audition in the major performance medium．

## A蔡povel for Contineation as Music


The progress of sach music major or minor toward a degrea is reviewed each semester by the faculty of the appropriate department（s）．Only students whose musical and academic pertormance is satisfactory are permited to continue in the program．

##  <br> 䍡踝helor of Ausic <br> Westice

## 

## Degrae

A candidate for a degree in the College of Musical Arts must fulfill the general Univer－ sity requirements for the baccalaureate degree（see Academic Policies）and meet the requirements for the degree listed in the tollowing pages．To further assist students in academic program planning，curricular check sheets are avallable from each department．

## 

A deparimental adviser is available to assist students with career advisement，curricular planning，course selection and determining progress toward meeting graduation requirements．Ulimate responsibility for knowing and meeting requirements rests with the student，who thus needs to be thoroughly familiar with the Undergraduate Catalog and With appropriate curricular check sheets． Students admitted to the College of Musical Arte as music majors or minors are encour－ aged to meet with the chairs or advisers of
the appropriate departments to discuss their academic programs．

## Choice of a Major

Upon successfully meeting entrance requirements，a student wishing to pursue the Bachelor of Music degree should select a suitable major within music in consultation with an adviser．Students considering a major in jazz studies should meet with the coordinator of the jazz studies program． Students planning to major in music composition or music history and literature usually do not declare their major until the end of the sophomore year．Such students should consult the chair of the music composition／history department for academic advisement during the first semester of their first year at BGSU．Students planning to major in music education must first enter a pre－music education track．These students must meet all admissions criteria for the University，the College of Education and Human Development，and the College of Musical Arts．

## Deuble Major

A student interested in a double major should consult the chairs of the departments involved for information pertaining to the requirements．Double majors must be approved by the chairs of the appropriate departments．Such programs ordinarily require more than eight semesters to complete．

## Recital Attendance

All freshman，sophomore and junior music majors（and minors during terms in which they are engaged in performance study）are required to attend 15 music recitals or concerts on campus each term，exclusive of those in which the student is a participant． Attendance at the biweekly College Recitals may be counted toward the minimum of 15 recitals per term．To monitor recital atten－ dance，students majoring in music must register for and successfully complete six semesters of MUS 099 （Recital Attendance）． Students are also required to attend biweekly seminars according to major applied medium．

## Minor in Another Discipline

A music major interested in concentrated study in another discipline should consult the chair of the department in which the major is being taken．With judicious course selection it is often possible to earn a minor or its equivalent in another field．This additional study may require more than eight semesters to complete．

## Jazz Rellinor

The jazz minor is a supplementary program of courses and performance experiences presenting the historical and stylistic features of jazz．The jazz minor may be added to existing undergraduate degree programs in music composition，music education，music history and literature，or music performance．

Siudents interested in the jazz minor should consult their department chair and the coordinator of jazz studies for assisiance in planning for the additional required coursework．

Jazz minor program（31）
MUCH 211，212－Jazz improvisation and Repertoire（4）
MUCH 236－Intro Jazz and Commercial Music（2）
MUCH 237－Jazz（3）
MUCH 311，312－Jazz Arranging and Analysis（6）
MUCH 411－Jazz Pedagogy（2）
MUCH 436－Recording Techniques（2）
MUSP Jazz Lab Band or Jazz Ensemble （4）
MUSP Applied instruction（8）
Applied credits earned in any music major program count toward this require： ment．

## Recording Technolagy $\begin{gathered}\text { wimor }\end{gathered}$

The recording technology minor is a supplementary program that provides students with appropriate terminology and allows them to become familiar with the equipment and techniques of a recording studio．By means of elective courses， students can emphasize either the business or technological aspects of the program，or create any combination of those aspects． Open to all University students who meet th course prerequisite．No performance audilis required．Obtain further information from chair，Department of Music Composition／ History．

## Recording Technology minor program

 （28）Required courses
PHYS 350－Musical Acoustics（3）（spring only－offered alternate years）
MUCH 436－Recording Techniques（2）
MUCH 437－Advanced Recording Techniques（2）（spring only）
MUCH 444－Music Technology I（3）（fall only）
MUCH 445－Music Technology II（3） （spring only）
MUCH 446－Music Technology 111 （3）（fall only）
Elective courses，at least 12 hours selected
from the following：
MUCH 447－Music Technology IV（3） （spring only）
ET 240－Electricity（4）－Prereg：MATH 120 or equivalent（fall only）
ET 241 －Electronics（4）－Prereq．ET． 240 （spring only）
CONS 235－Intro to Consiruction（3）
CS 100－Computer Basics（3）－Prereq： one year high school algebra or MATH 095＊
BA 102－Introduction to Business（3）
ECON 200－Introduction to Economics （3）

MGMT 305-Principles of Organization \& Management (3)
MKT 300--Principles of Marketing (3) Prereq: any ECON course
ACCT 325-Accounting Concepts for Non-Business Students (3) - Prereq: Junior Standing

* Credit not applicable toward major or minor in computer science


## S/U Grading

No required music courses may be taken for $\mathrm{S} / \mathrm{U}$ grades. Music education field experiences, general education and professional requirements outside of music, however, may be taken for $\mathbb{S} / \cup$ credit. Elective hours within and outside of music may also be taken on an $\mathrm{S} / \mathrm{U}$ basis provided that the general grading policies of the University are maintained.

## Ensemble Participation

All music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University. Ensemble choices should be appropriate to the student's major. Students who qualify may also participate in ensembles in other media. See degree programs for individual requirements and limitations (e.g., music education majors may not participate in an ensemble during the semester in which they student teach).

## Aural Skills

in order to acquire those hearing and sight singing skills which are basic to any career in music, all music majors are required to pass level IV of Aural Skills prior to graduation (see course descriptions). Qualified students may progress faster than the normal rate of one level per semester. See music composition/history chair for information regarding credit waiver for levels skipped.

## Course Prerequisites

For all music majors, completion of MUCH 131, 132, 141 and 142 with passing grades is prerequisite to enrollment in MUCH 231. Certain upper-division courses have specific prerequisites (see course description for details).

## Jazz Studies

1031 Moore Musical Arts Center, 372-2181
Admittance as a Jazz Studies Major In addition to the audition in the student's principal performance medium for acceptance into the College of Musical Arts, students wishing to pursue studies in jazz and jazz-related music-industry activities must demonstrate their understanding and facility in the jazz idiom. This will normally be accomplished by a separate audition with the coordinator of jazz studies. Acceptance into the program is contingent upon the approval
of the coordinator of jazz studies. It is also possible to add jazz studies to an existing major for a double major.

## Jazz Performance Ensembles

Jazz studies majors must perform in either the jazz lab bands or jazz combos (or both) as part of the requirements for this degree program. Refer to the specific performance requirements listed below. All music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University. Performance opportunities in the jazz lab bands and combos are open to any University student by audition.

## Jury Examinations

Jazz studies majors must complete jury examinations in their major applied medium as described in the course description section of this catalog under Applied Instruction. In addition, jazz studies majors must perform a jazz jury examination at the end of each semester. This jury examination is conducted by the coordinator of jazz studies.

## Keyboard Proficiency Requirement

Functional keyboard proficiency test Level I is required. See Music Education: Functional Keyboard Requirements and pertinent course descriptions.

## Recital Requirement

Candidates for the bachelor's degree in jazz studies are required to present a full recital. This is usually given in the senior year. Permission to perform a recital is given by the coordinator of jazz studies and the appropriate performance studies faculty. The recital requirement for jazz studies majors shall include an equal amount of Western art music and jazz.

## Degree Requirements

The Bachelor of Music degree in jazz studies requires 127-135 total credits distributed as follows:

1. 27-33 credits in general education;
2. 25 credits in basic musicianship (music core);
3. 22 credits in advanced courses in jazz studies;
4. 38 credits in music performance studies courses and keyboard proficiency;
5. 6 credits in music electives;
6. 3 credits in ENG 112;
7. $6-8$ credits in a foreign language.

For specific information, consult the coordinator of jazz studies.

## General Requirements

All jazz studies degree candidates are subject to the general requirements listed under Academic Policies in this catalog as well as general requirements listed under Bachelor of Music degree, none of which are superseded by individual degree programs.

## Writing Proficiency

See Academic Policies, Writing Proficiency
Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year.

## General Education Requirements

1. Humanities and Arts

Two courses from the approved general education list- 6 hours.
II. Natural Sciences

Two courses from the approved general education list- 6 hours.
III. Social and Behavioral Sciences

Two courses from the approved general education list-6 hours.
IV. Cultural Diversity

At least one course from the approved general education list-3 hours.

## Additional requirements outside of music

ETHN 120 Introduction to Black Studies3 hours
POPC 280 Introduction to Popular Music-3 hours
One additional course from the approved general education list-3 hours
Two courses in one foreign language-68 hours

## Music Requirements

All jazz studies majors are required to complete the following music courses. Total: 91 hours.

## Music core

MUCH 131, 132, 141, 142, 231, 232, 233, 236, 241 and 242. Total: 25 hours.

## Music Performance

Large ensembles 4 hours; small ensembles 12 hours; major instrument/ voice 16 hours; MUSP 3052 hours; MUSP 495 recital 2 hours. Total: 36 hours.
Piano
MUED 150, 151 (reg. track), or 154 (adv. track) (may be waived by proficiency exam). Keyboard proficiency tests I and II are required. Total: 2 hours.
Music electives
(MUCH 234 and 235 strongly recommended) Total: 6 hours.
Jazz studies major courses
MUCH 211, 212, 213, 237, 311, 312, 411, 436 and 438. Total: 22 hours.
Recital requirement (see above).

## Suggested Program

Note: Exact order of courses is dependent upon semester of entry into program and frequency of offerings, which is subject to change. This is a general guide only.

First year ( 32 hours)
MUCH 131, 141, 142, 236 and 237 (13)
Applied music (4)
Ensembles (4)

MUED 150 and 151 (2)
ENG 112 (3)
Sociai and behavioral sciences general education requirements (6)
Second year ( 31 hours)
MUCH 132, 231, 233, 241, 242, 211 and 212 (17)
Applied music (4)
Ensembles (4)
POPC 280 (3)
ETHN 120 (3)
Third year (32 hours)
MUCH 213, 232, 311 and 312 (1i)
MUSP 305 (2)
Applied music (4)
Ensembles (4)
Music elective (2)
Natural sciences general education requirements ( 6 )
Humanities and arts general education slective (3)
Fourth year ( $32-34$ hours)
MUCH 411, 436 and 438 (6)
MUSP 495 Recital (2)
Applied music (4)
Ensembles (4)
Music electives (4)
English literature general education elective (3)
Foreign language courses (6-8)
Cultural diversity general education elective (3)

The above is a sample program which may be modified with the approval of the coordinator of jazz studios and individual department chairs according to the student's individual needs and capabilitios.

## 


(courses coded MUCH)
1031 Moore Musical Arts Center, 372-2182

## 

Music students who have developed a strong interest in music composition and have demonstrated a significant aptitude in this erea may apply to the chair of the music composition/history department for acceptance as a major in music composition. It is also possible to add music composition to an existing major for a double major.

Application for admission to the composition program is usually made prior to the end of the sophomore year, although students prepared to do so may apply as early as the beginning of the freshman year. Applicants should submit a portfolio of scores and tape recordings. These will be reviewed by the composition faculty to determine acceptance into the program. If deficiencies are noted, a student may be admitted on probationary status. Students accepted on this status must achieve a 3.0 grade point average in maior area courses within two semesters (summer is not included). Failure to do so will result in discontinuation as a composition major.

## Collegium Musicum

The department maintains a Collegium Musicum as a training ground for performance practice and showcase for music not usually performed by other music ensembles. Ensemble credit is available in New Music Ensemble, Early Music Ensemble, Balinese Gamelan Ensemble and AfroCaribbean Ensemble. Participation in the New Music Ensemble by music composition majors is strongly encouraged. All music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University.

## Jury Examinations

Composition jury examinations occur each semester during final examination week. The composition faculty as a whole comprises the jury for the examinations. All composition majors are required to take jury examinations each term in which they are registered for MUCH 216 or 416.

The final grade in composition is determined by combining the grade from the individual instructor with the grade given at the jury. A final grade lower than $B$ earned in fall or spring will result in probationary status in composition for the following semester, except summer. A letter will be sent to the sludent indicating the reason for probationary status, its duration and the steps necessary for its removal. If the student eliminates the deficiencies within the probationary period, regular status will be reinstated. If the conditions for removal are not met, probationary status will be continued for one more semester. Failure to remove deficiencies at the end of the second probationary semester will result in discontinuation as a composition major.

## Reyboard Proficiency Requirement

Functional keyboard proficiency tests I and II are required. See Music Education: Functional Keyboard Requirements below and pertinent course descriptions.

## Completion Requirement

Candidates for the bachelor's degree in music composition are required to present a half-recital of original compositions (or equivalent, such as music for a stage play or film of substantial length). Composition majors planning to give a degree recital must be registered for MUCH 416 during the semester in which the recital is given, or must give the recital within four weeks of the beginning of the semester immediately following the last semester of MUCH 416.

## Approval for Senior Status

Each candidate for senior status as a music composition major must submit at least one score or tape of an original composition.

## Degree Requirements

The Bachelor of Music degree in music composition requires 127-142 total credits distributed as follows:

1. 29-31 credits in general education;
2. $27-28$ credits in basic musicianship (music core);
3. $18-24$ credit hours in music performance requirements and electives;
4. 44-48 credit hours in advanced courses in music composition, theory and literalure;
5. 3 credits in ENG 112;
6. $6-8$ credits in a foreign language.

For specific information, consult the chair of the music composition/history department.

## General Requirements

All composition degree candidates are subject to the general requirements listed under Academic Policies in this catalog as well as general requirements listed under Bachelor of Music degree, none of which is superseded by individual degree programs.

## Writing Proficiency

See Academic Policies, Writing Proflciency
Requirement. Note that a penalty is imposed if ENG 112 is not compieted by the end of the junior year. Total: 3 hours.

## General Education Requirements

1. Humanities and Arts

Two courses from the approved general education list - 6 hours.
II. Natural Sciences

Two courses from the approved general education list - 6 hours.
ili. Social and Behavioral Sciences
Two courses from the approved general education list - 6 hours.
IV. Cultural Diversity

At least one course from the approved general education list - 3 hours.

## Rlectives outside of mustc

Three or four additional courses, including at least one from the approved general education list. Totai general education plus electives: 29-31 hours.

## Foreign Language

Two courses in the same language. Total 6-8 hours.

## Music Requirements

All composition majors are required to complete the following music courses. Minimum total: 89 hours.

## Music Core

MUCH 131, 132, 231, 232; either 236 or 237, and one the following: 233, 234 or 235.
MUCH 141, 142, 241, 242 and 341. Total: 27-28 hours.
Music Performance
Large ensembles 4 hours; small ensembles 3 hours; major instrument/voice 4 hours; MUSP 305 and 3064 hours;
performance electives 3 hours. Total: 18 hours.
Piano Proficiency
MUED 150 and 151, plus 250 or 252
(may be waived by proficiency exam).
Experienced pianists may be eligible for accelerated courses in Class Piano. Keyboard proficiency tests I and II are required for all composition majors. Total: 4 hours.
Music Literature Electives
Two courses from the following: MUCH 318, 401, 408, 412. Total: 4 hours.
Music Composition Major Courses
MUCH 308, 309, 315, 216-416 (12-16 hours),
320 or $325,403,404,410$ ( 4 hours), MUCH 444, 445, 446, 447
(Total: 40-44 hours).
Completion Requirement (see above).

## Suggested Program

Note: Exact order of courses is dependent upon semester of entry into program and frequency of offerings, which is subject to change. This is a general guide only.

First year (31-32 hours)
MUCH 131, 141, 142, 233 or 234 or 235, and 236 or 237 (12-13)
Applied music (2)
Arts and humanities general education requirement (3)
Cultural diversity general education requirement (3)
MUCH 116 or 216 (4)
Ensembles (2)
MUED 150 and 151 (2)
ENG 112 (3)
Second year (31-33 hours)
MUCH 132, 231, 232; 241 and 242 (13)
Applied music (2)
Foreign language (6-8)
Ensembles (2)
MUED 250 or 252 (3)
General education electives (6)
Third year ( 34 hours)
MUCH 341 (2)
MUCH 308 and 309 (4)
MUCH 315 (2)
MUCH 320 or 325 (2)
MU゙CH 416 (6)
MUCH 444 and 445 (6)
Ensembles (2)
Music literature electives (4)
Natural sciences general education
requirement (3)
Music performance electives (3)
Fourth year ( 32 hours)
MUCH 416 (6)
MUSP 305 and 306 (4)
MUCH 403 and 404 (4)
MUCH 410 (4)
MUCH 446 and 447 (6)
Electives in and out of music (4)
Social sciences general education requirements ( 3 )
Ensembles (1)
The above is a sample program which may be modified with the approval of the chair of the music composition/history department
according to the student's individual needs and capabilities.

## Music Education

(courses coded MUED)
1031 Moore Musical Arts. Center, 372-8578
The music education curriculum is designed to prepare students to become elementary and secondary school music teachers. The department believes that this can be accomplished by providing for the student:

1. a program of general studies in the sciences and humanities;
2. advanced study in music performance and comprehensive musicianship; and,
3. a program of professional training including field experiences, methods courses and laboratory training.

## Degree Programs in Music Education

All bachelor of music degree programs in music education lead to provisional special certification for teaching music in grades K 12. Four degree options are offered in music education: choral, instrumental, classroom music and choral/musical theater. The choral option is intended for those who wish to teach junior and senior high school choral ensembles; the instrumental option for those who wish to work with bands and/or orchestras at elementary and secondary levels; the classroom option for those who are interested in teaching elementary and secondary school general music; and the choral/musical theater option for those who are interested in teaching choral music at the secondary level and in producing musical shows. For complete degree requirements for each option, refer to music education options below.

To graduate in four years, a śtudent must take approximately 34 hours of required coursework each year. Music education majors usually take between 16 and 18 credit hours per semester. The total number of hours required is distributed over the areas of general and professional study which appear below and vary slightly according to the specific options.

1. 36-42 hours of credit in general studies;
2. 22 hours of credit in professional education;
3. 47 hours of credit in music core courses including music theory, music history, performance, conducting, ensembles, methods courses and student teaching;
4. 18-22 hours of credit in the music education option;

## Admittance as a Music Education Major

Professional degree option students on the pre-music education major track must meet the following requirements: GPA of 2.5; grade of $C$ or better in each course with a

MUED prefix; MUCH 131-pass both history/ theory; grade of $C$ or better in MUCH 141.

## Selecting a Degree Option

All freshman pre-music education majors are enrolled in a general course of study for the first academic year. Students are required to select a degree option during that year. Approval of an option is initially determined on the basis of the student's academic standing and performance achievement. (See Admittance as a Music Education Major above.)

1. Academic standing is determined on the basis of cumulative grade point hours and quality points, and standing in the basic music courses.
2. Performance proficiency is measured through applied juries which are scheduled at selected times and are posted for each academic year. These performance juries are used to determine a student's performance proficiency for choosing a specialty area, and to determine whether performance progress has been satisfactory. Only students whose performance status is satisfactory will be granted an area of specialty.
3. To remain in a degree option, students must exhibit teaching competency as judged by the music education faculty.

Students who decide to change from one option to another must first consult with the department chair. In addition, they may be required to meet additional professional and performance requirements. Any student changing an option must complete at least 10 credit hours in one performance area.

## Degree Requirements

## General Requirements

All music education degree candidates are subject to the general requirements listed under Academic Policies in this catalog, as well as general requirements listed under Bachelor of Music degree, none of which are superseded by individual degree programs.

## Writing Proficiency

See Academic Policies: Writing Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year. Total: 3 hours.

## General Education

To ensure a general education background in addition to the teaching major, a student is required to complete a minimum of eight courses from the areas of knowledge indicated below.

## I. Humanities and Arts

Students are required to complete two courses from the approved general education list. Courses in music may not be used. Exceptions to this requirement are described below.

Fiequirements for the classroom music option
The following courses are listed as required courses in the professional education course list for the classroom music option and may be used in the humanities and arts requirements as well as to fulfill the 8 -course requirement beyond the natural science, social and behavioral science, and cultural diversity in the U.S. requirements: English literature from the approved general education list, ART 101, and a choice of one of the following: ART 145, 146 or THEA 347.

## Requirements for the choral/musical

 theater optionThe following courses are listed as required courses in the professional education course list for the classroom music option and may be used in the humanities and arts requirements as well as to fulfill the 8 -course requirement beyond the natural science, social and behavioral science, and cultural diversity in the U.S. requirements: THEA 202, 241, 341 and 353 and THEA 243 or 343 or 349.

Courses in music may not be used. Choral/musical theater students must also complete 3 hours of recreation in dance from among ballet, ballroom dance, square dance, folk dance, jazz dance, modern dance and tap dance. These courses may be used to fulfill electives outside of music.

## II. Natural Science

Students must complete at least two courses selected from the approved natural science general education list.

## ill. Secial and Behavioral Sciences

Each student must complete at least two courses selected from the approved social and behavioral science general education list.

## IV. Cultural Diversity

Students are required to take one course from the approved cultural diversity general education list.
international Perspectives in the United States
All students must take one course in international perspectives from either the social and behavioral sciences or the humanities and arts lists.

## Communications and Mathematics

All music education students are required to take ENG 112 (C or better), IPC 102 (C or better) and one mathematics course.

## Total group requirements

Music education degree options are divided into three categories: professional music oiferings (minimum of $50 \%$ of hours), professional education offerings (minimum of

15-20\% of hours) and general education offerings (minimum of $30-35 \%$ of hours) which include communications and mathematics. Each student is responsible for meeting with the departmental adviser to ensure that these requirements are met.

## Professional Education Requirements

To ensure adequate professional preparation for a career in teaching, the following courses are required: EDFI 302 and 402 and EDAS 409. (The prerequisite for EDFI 302 is PSYC 201). EDFI 408 appears as a requirement.

## Music Core Requirements

All music education majors are required to complete a common core of courses and experiences offered by the music composition and history department, the performance studies department and the music education department.

Music history, theory and aural skills
Music modules 131, 132, 231, 232, 236
and MUCH 233, 234 or 235 in select degree options. In addition, either 315, 320 or 325 taken according to specific option. Aural skills I-IV (MUCH 141, 142, 241 and 242). Minimum total: 25-27 hours.
Conducting
MUSP 305 and 306 required in the junior year before student teaching. Minimum total: 4 hours.

## Performance

10 hours minimum in one performance medium (e.g., trumpet, violin, voice).

## Ensembles

5 hours of large ensembles and one hour of small ensembles. Total: 6 hours.

## Music methods

MUED 240. Introductory Music Field Experience. Total: 3 hours. Prerequisites: sophomore standing in music, 2.5 GPA; grade of C or above in each MUED course; pass both history and theory in MUCH 131; grade of C or above in MUCH 141. C=10 hours; $F=32-40$ hours. Lab fee.
Junior Methods Project in Music [A group of 3 courses and 1 field component designed to be taken simultaneously.] Includes MUED 340, MUED 341, and two of the following depending on the student's option: MUED 342 and MUED 343 (Band); MUED 344 and MUED 345 (Choral); MUED 346 and MUED 347 (Classroom); MUED 348 and MUED 349 (Strings) Minimum total: 9 hours.
Prerequisites: MUED 240; GPA of 2.5; grade of C or better in each course with a MUED prefix; instrumental majors must have successfully completed two techniques classes and the voice class with a grade of C or better; MUCH 132-pass both historyl theory; grade of C or better in MUCH 142; pass Piano Proficiency I.

## Student teaching

MUED 497. Eligibility requirements for student teaching are specified under
"Student Teaching" in this section of the Undergraduate Catalog. Total: 10 hours.

## Music Education Options

In addition to the core requirements listed above, each major in music education must complete the requirements of one of the following options:

Choral option (keyboard emphasis)
(MUED 240, MUED 340, MUED 341, MUED 344, MUED 345) MUED 359, MUSP 310, 3. hours of instrument classes (see additional requirements-instrument classes), 3 hours of class or studio voice, 2 hours of class piano, functional proficiencies I and II, and MUSP 264. Total: 21 hours.

## Choral option (vocal emphasis)

(MUED 240, MUED 340, MUED 341, MUED 344, MUED 345) MUED 359, MUSP 310; 3 hours of instrument classes (see additional requirements-instrument classes), 3-5 hours of class piano, functional proficiencies I, II and III, and one hour of studio piano.

Classroom option (keyboard emphasis) (MUED 240, MUED 340, MUED 341, MUED 346, MUED 347) MUED 451, 3 hours of instrument classes, 3 hours of class or studio voice, 2 hours of class piano, functiona! proficiencies I and II, and MUSP 264.

## Classroom option (vocal emphasis)

 (MUED 240, MUED 340, MUED 341, NUED 346, MUED 347) MUED 451, 3 hours of instrument classes, $3-5$ hours of class piano, functional proficiencies I, II and III, and one hour of studio piano.instrumental option (instrument emphasis in woodwind, brass, string, guitar or percussion) (Instrumentalists wishing to know more about the classroom option should contact the chair.)
(MUED 240, MUED 340, MUED 341, MUED 342, MUED 343-Band; MUED 348, MUED 349 -Strings), 7 hours of instrument classes, 1 hour of class voice, $3-5$ hours of class piano and functional proficiencies I, II and III.

Instrumental option (keyboard emphasis) (Instrumentalists wishing to know more about the classroom option should contact the chair.)
(MUED 240, MUED 340, MUED 341, MUED
342, MUED 343 -Band; MUED 348, MUED
349-Strings), 7 hours of instrument classes, 1 hour of class voice, 3 hours of class piano and functional proficiencies I and il.

[^0]and III, and one hour of studio piano.
Choral-musical theater option (keyboard emphasis)
(MUED 240, MUED 340, MUED 341, MUED 344, MUED 345) MUED 359, MUSP 310, 3 hours of instrument classes (see additional requirements-instrument classes), 3-5 hours of class piano, functional proficiencies I, II and III, and one hour of studio piano.

## Performance requirements-musical theater option

Students must participate in one University musical (theater program and College of Musical Arts) and three theatrical productions well distributed over the following: opera, opera workshop, educational theater, community theater, professional theater, and dance theater. Each production must be approved by the chair of music education.

MUED 340/341 consists of four major methods components: elementary general music, junior high school general music, the student's major option area of emphasis, and à field component (MUED 341). Specific option areas will be offered only during certain semesters. Students should consult the department for details.

## Performance Requirements

In addition to specific course requirements, music education majors must meet the following performance-oriented requirements.

## Performance jury examinations

Students in music education must have a major performance emphasis and must pass an examination in that area at jury examination times. Jury examinations are scheduled at selected times and are posted for each academic year. Students wishing to change their area of performance emphasis must do so with the approval of the chair of music education and the appropriate performance faculty.

## Recital

A half recital (or its equivalent) is required of all music education majors. Students must be enrolled for studio lessons during the semester of the recital. The recital may not be given while student teaching. Permission to perform a recital is given by the appropriate performance faculty and is based upon the student's performance at a recital jury examination. Students desiring to meet this requirement through equivalent means must receive approval from the chair of music education and the appropriate performance faculty. Students are encouraged to give a full recital; however, a full recital may only be given with the consent of the performance area faculty.

## Functional Keyboard Requirements

Music education majors are required to pass the three functional proficiency examinations below. Piano requirements for all degree programs cannot be met simply by taking
piano for a specified number of credit hours. The following skills are required for each proficiency examination:

Proficiency t: (freshman level) scales, basic chord progressions, chording melodies, and sight reading
Proficiency II: (sophomore level) harmonization, score reading, and transposition, etc.
Proficiency III: (sophomore level) accompanying

All entering freshmen are auditioned on piano and placed according to their keyboard skills. Students with no keyboard background are placed in the introductory class piano sequence of MUED 150 and 151 . Students with some keyboard experience are placed in either 151 or 154 depending upon their level of proficiency. Keyboard emphasis students are placed in MUED 154 in lieu of taking MUED 150-151 and take MUSP 264 in lieu of proficiency III.

All freshmen are expected to pass functional proficiency / by the end of the second semester. Sophomore level piano course requirements are unique to each option in music education. They are specified in the music education handbook and are designed to prepare students for the second and third functional proficiency examinations.

Any of these proficiency examinations may be passed ahead of schedule. Proficiency I must be completed prior to entry into any of the 4 courses in the Junior Methods Project in Music block of courses: MUED 340; MUED 341; and two of the following courses appropriate to the option: MUED 342 and MUED 343 (Band); MUED 344 and MUED 345 (Choral); MUED 346 and MUED 347 (Classroom); MUED 348 and MUED 349 (Strings). Proficiencies I and II must be completed prior to student teaching. Students who have not passed functional proficiency I and II will not be allowed to student teach. Because of the time required to place students in student teaching assignments proficiencies must be passed in semester prior to student teaching. Proficiency III may be taken after student teaching and must be passed to qualify for graduation and certification. Summer session is considered equivalent to one semester. Proficiency examinations are scheduled on an arranged basis (excluding finals week) for students not attending class piano courses.

All piano classes must be passed with a grade of $C$ or better. This is indicated in the course descriptions. Additional information about functional piano requirements is available from the chair of music education. Students are responsible for knowing and meeting all proficiency requirements.

## Additional Requirements

Academic minor or second major Ordinarily students pursuing a degree in music education do not carry an academic minor or second major; however, a minor or second major can be pursued provided the student is willing to take additional credits
beyond the minimum required for graduation. Students with this interest should consult the chair of music education.

## Elements of music

All entering freshmen are required to take a diagnostic examination in general musicianship (see Entrance Examination above). On the basis of this examination, students may . be required to enroll in MUCH 110, Elements. of Music. Credit for MUCH 110 will be applied to the elective in music category.

## Field experiences

Field-based experiences are an essential part of professional teacher preparation. In compliance with state and learned society requirements, students are required to participate in such experiences as a part of certain music education courses.

## Instrument classes

Music education majors pursuing the instrumental option are required to take the following six instrument classes: MUED 130, 136, 140, 145, 146 and 180 . (It is strongly recommended that MUED 130; 140, 145 and 146 be taken initially, preferably during the freshman/sophomore years.) Students in the choral, classroom and theater options are required to take 3 hours of instrument classes including 1 woodwind, 1 brass and MUED 195 (guitar). The following instrument classes are ayailable as highly recommended electives: MUED 190 (harp), MUED 125 (percussion), MUED 147 (bassoon reed class).

## Conducting requirements

All music education majors must pass second semester conducting with at least a grade of C . Those students receiving a grade of $D$ or less will be required to repeat MUSP 306 (Conducting).

## Methods requirements

Music education majors must pass all required methods courses (MUED 240, junior methods project in music) with at least a grade of C. Those students receiving a grade of $D$ or less will be required to repeat the course(s) in question.

## Ensemble participation

Music education majors are expected to participate in ensembles throughout their undergraduate program except the semester they student teach. Instrumental option students must acquire five semester hours of large ensemble credit (exclusive of marching band credit which may apply toward elective hours) and one semester hour of small ensemble credit. Students in the choral, classroom and musical theater options must acquire five semester hours of large ensemble credit and one semester hour of small ensemble credit; A total of one semester hour of credit for men's or women's chorus may be applied toward the large ensemble requirement. Any remaining hours of credit accumulated through men's and
women's chorus may apply toward elective credit hours.

## Student teaching

The requirements for student teaching in music are established by the State of Ohio,
the College of Education and Human Development, and the Department of Music Education. To be eligible for an assignment in student teaching the student must meet the general requirements of the College of Education and Human Development and those prerequisites established by the
Depariment of Music Education. An overall GPA of 2.5 is required.

## Deparimental prerequisites

Music requirements for student teaching
include the successful completion of
MUED 240 (C or better), MUED 340 (C or
better), MUED 341 (with an S), MUSP
306 ( C or better), and the required
functional piano proficiency examinations.
(Refer to course descriptions for additional details.) Instrumental option students should attempt to complete the seven-semester-hour instrument class component prior to student teaching. In addition, classroom option students should complete MUED 451.
Registration
Each student teacher must register in two places: (a) with the University Office of Student Teaching in the College of Education and Human Development; and
(b) with the coordinator of student teaching in the College of Musical Arts.
Speech and hearing test
Prospective teachers may also take speach and hearing tests so that they may avail themselves of appropriate corrective services if necessary.
Transportation and housing
Students must provide their own transportation to assigned schools. Students without transportation are expected to live in the assigned community. Requests for stations close to the campus because of apartment leases, etc., may not be honored.
Station assignment
Students will be assigned to teaching stations and supervisors at the discretion of the coordinator of student teaching. Requested stations or supervisors cannot be guaranteed.
Pre-teaching interview
Any school systom has the right to interview a prospective student teacher. If the student is not accepted, the coordinafor reserves the right to designate a reassignment. If necossary, the coordinafor may request that the student seek an interview with school authorities.
Radius
The radius for student teacher placement is not more than 50 miles from campus.

- Withdrawal from student teaching

Once an assignment has been accepted by a school system, a student teacher may not withdraw except in cases of
emergency (e.g., ill health, a death in the family).
Changing semester of teaching
Students requesting to change their assigned semester of student teaching may have to wait one or more semesters if no opening in the semester requested exists.
Extended student teaching
If a student does not successfully meet the performance objectives and competencies outlined by the Office of Student Teaching and the Department of Music Education during the semester of student teaching, s/he may be required to do extended student teaching. A student doing unusually ineffective teaching in any of the competency areas may be required to pursue further academic study in that area(s) before being allowed to do extended student teaching.
Time requirement
All students must complete the time requirement for student teaching.
Written requirements
Student teachers must complete all written requirements connected with their final evaluations or receive an incomplete for the semester.
On-campus activities
For a student to be effective, total commitment to teaching is necessary. Students may not take an academic course, present recitals, perform in ensembles or take private lessons during student teaching.
Graduate students
Graduate students seeking teaching certification must meet all undergraduate teaching requirements.
Summer student teaching
Student teaching during summer term is not permitted.

## Suggested Programs

NOTE: Exact order of courses is dependent upon semester of entry into program, and time frequency of offerings which is subject to change. This is a general guide only.

## Choral Option-Keyboard Emphasis

First year (33-35 hours)
Semester 1
MUCH 141 (2)
MUCH 236 (offered fall only) (2)*
Electives outside of music (3)
ENG 112 or IPC 102 or MATH (3)
Applied Study ( 10 semester hrs. required) (2)

Large Ensemble (A Cappella or Collegiate Chorale) ( 5 semester hrs. required) (1-2)
MUED 154 (adv, level)
Woodwind or Brass or Guitar Class (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)

IPC 102 or ENG 112 or MATH (3)
Applied Study (2)
Large Ensemble (1-2)
General education elective (3-4)**
Woodwind or brass or guitar class (1)
Voice class or studio voice (1)
MUS 099 (0)
** Students must take 8 general education electives plus seven hours of electives outside of music.

* Students requiring remedial or review work in English (ENG 110/111) may need to attend summer term in order to
complete all coursework in four years.
Second year (36-37 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
ENG 112 or IPC 102 or MATH (3-4)
MUED 251 (adv. level)
MUED 240 (3)
Small ensemble ( $t$ )
Applied study (2)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 and 242 (4)
MUSP 264 (1)
General education electives (6-8)
Large ensemble (1-2)
Applied study (2)
MUS 099 (0)
Third year ( $33-38$ hours)
Semester V
Junior Methods Project in Music (fall only for choral option, check prerequisites)
MUED 340 (2)
MUED 341 (3)
MUED 344 (2)
MUED 345 (2)
MUSP 305 (2)
MUED 359 (2)
MUSP 310 (1)
Large Ensemble (1-2)
Applied study (2)
MUS 099 (0)
STUDENTS SHOULD REFRAIN FROM TAKING OTHER COURSES DURING THE PROJECT
Semester VI
MUCH 325 (spring only) (2)
MUSP 306 (2)
Voice class or studio voice (1)
EDFI 302 (3)
EDAS 409 (3)
Woodwind or brass or guitar class (1)
Large ensemble (1-2)
General education elective (3-4)
MUS 099 (0)
Fourth year (29-31 hours)
Semester VII
Student teaching (first 10 weeks) (10)
EDFI 402 (last $5-6$ weeks) (3)
EDFI 408 (last 5-6 weeks) (3)
Semester VIII
Voice class or studio voice (1)
General education electives (12-16)
Electives outside of music (4)

Choral Option-Vocal Emphasis
rst year (33-35 hours)
Semester I
MUCH 141 (2)
MUCH 236 (offered fall only) (2)* or MUCH 233, 234, 235 (2)
Electives outside of music (3)
ENG 112 or IPCO 102 or MATH (3)
Applied study ( 10 semester hrs. required) (2)

Large ensemble (A Cappella or Collegiate Chorale) ( 5 semester hrs. required) ( 1 2)

MUĖD 150, 151 (reg. level) or 154 (adv. level) (1)
Woodwind or brass or guitar class (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUCH 233, 234, 235 (2)
MUED 150, 151 (reg. level) or 154 (adv. level) (1)
IPC 102 or ENG 112 or MATH (3)
Applied study (2)
Large ensemble (1-2)
General education elective (3-4)
Woodwind or brass or guitar class (1)
MUS 099 (0)

* Students requiring remedial or review work in English (ENG 110/11) may need to attend summer term in order to complete all coursework in four years.
econd year (36-37 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
ENG 112 or IPC 102 or MATH (3)
MUED 251 (adv. level) (offered fall only)
(1) or 252 (reg. level) (2)

MUED 240 (3)
Small ensemble (1)
Applied study (2)
MUS 099 (0)
Semester IV
MUCH 231 and 232 (5)
MUCH 242 (2)
MUED 256 (reg. level) or 257 (adv. level) (1)

General education electives (6-8)
Large ensemble (1-2)
Applied study (2)
MUS 099 (0)
Third year (33-38 hours)
Semester V
Junior Methods Project (fall only for choral option; check prerequisites)
MUED 340 (2)
MUED 341 (3)
MUED 344 (2)
MUED 345 (2)
MUSP 305 (2)
MUED 359 (2)
MUSP 310 (1)
Large ensemble (1-2)
Applied study (2)
MUS 099 (0)
STUDENTS SHOULD REFRAIN FROM TAKING OTHER COURSES DURING THE PROJECT

Semester VI
MUCH 325 (spring only) (2)
MUSP 306 (2)
EDFI 302 (3)
EDAS 409 (3)
Woodwind or brass or guitar class (1)
Large ensemble (1-2)
General education elective (4)
Studio piano (1)
MUS 099 (0)
Fourth year (29-31 hours)
Semester VII
Student teaching (first 10 weeks) (10)
EDFI 402 (last 5-6 weeks) (3)
EDFI 406 (last $5-6$ weeks) (3)
Semester VIII
General education electives (12-16)
Electives outside of music (4)

## Classroom Option-Keyboard

Emphasis
First year (32-35 hours)
Semester 1
MUCH 141 (2)
MUCH 236 (offered fall only) (2)*
Electives outside of music (3)
ENG 112 or IPC 102 or MATH (3)
Applied study ( 10 sem. hrs. required) (2)
Large ensemble (A Cappella or Collegiate
Chorale) ( 5 sem. hrs. required) (1-2)
Woodwind or brass or guitar class (1)
MUED 154 (adv. level) (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPC 102 or ENG 112 or MATH (3)
Applied study (2)
Large ensemble (1-2)
General education elective (3-4)**
Woodwind or brass or guitar class (1)
Voice class or studio voice (1)
MUS 099 (0)

* Students requiring remedial or review work in English (ENG 110/111) may need
to attend summer term in order to
complete all course work in four years.
Second year (33-37 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
ENG 112 or IPC 102 or MATH (3-4)
General education elective (3-4)
MUED 251 (adv. level) (offered fall only) (1)

Small ensemble (1)
Applied study (2)
MUS 099 (0)
Semester IV
MUCH 231 and 232 (5)
MUCH 242 (2)
MUSP 264 (1)
MUED 240 (3)
Large ensemble (1-2)
General education elective (3-4)
Applied study (2)
MUS 099 (0)
Third year (33-38 hours)
Semester V
Studio piano (1)

EDFI 302 (3)
MUSP 305 (2)
Applied study (2)
Large ensemble (1-2)
General education electives (6-8)
Voice class or studio voice (1)
Woodwind/brass or guitar class (1)
MUS 099 (0)
Semester VI
Junior Methods Project (spring only for classroom option; check prerequisites)
MUED 340 (2)
MUED 341 (3)
MUED 346 (2)
MUED 347 (2)
MUSP 306 (2)
MUCH 325 (spring only) (2)
Voice class or studio voice (1)
EDAS 409 (3)
Large ensemble (1-2)
MUS 099 (0)
STUDENTS SHOULD REFRAIN FROM TAKING OTHER COURSES DURING THE PROJECT
Fourth year (33-35 hours)
Semester VII
MUED 451 (2)
General education electives (15-20)
Semester VIII
Student teaching (last 10 weeks) (10)
EDFI 402 (first $5-6$ weeks) (3)
EDFI 408 (first 5-6 weeks) (3)

## Classroom Option-Vocal Emphasis

First year (32-35 hours)
Semester 1
MUCH 141 (2)
MUCH 236 (offered fall only) (2)* or MUCH 233, 234, 235 (2)
ENG 112 or IPC 102 or MATH (3)
Applied study ( 10 sem. hrs. required (2)
Large ensemble (A Cappella or Collegiate Chorale) ( 5 sem. hrs. required) (1-2)
Woodwind or brass or guitar class (1)
MUED 150, 151 (reg. level), or 154 (adv. level) (1)
Electives outside of music (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUCH 233, 234, 235 (2)
IPC 102 or ENG 112 or MATH (3).
Applied study (2)
Large ensemble (1-2)
General education elective (3-4)
Woodwind or brass or guitar class (1)
MUED 150, 151 (reg. level), or 154 (adv. level) (1)
MUS 099 (0)

* Students requiring remedial or review work in English (ENG 110/111) may need to attend summer term to complete all coursework in four years.
Second year (33-37 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
ENG 112 or IPC 102 or MATH (3-4)
MUED 251 (adv. level) (offered fall only)
（1）or 252 （reg．level）（2）
Small ensemble（1）
Applied study（2）
General education elective（3－4）
MUS 099 （0）
Semester IV
MUCH 231 （3）
MUCH 232 （2）
MUCH 242 （2）
MUED 256 （reg．level）or 257 （adv．level） （1）
MUED 240 （3）
Large ensemble（1－2）
General education elective（3－4）
Applied study（2）
MUS 099 （0）
Thirdi year（33－38 hours）
Semester V
EDFI 302 （3）
Studio piano（1）
MUSP 305 （2）
Applied study（2）
Large ensemble（1－2）
Woodwind or brass or guitar class（i）
General education electives（6－8）
MUS 099 （0）
Semester VI
Junior Methods Project（spring only for classroom option；check prerequisites）
MUED 340 （2）
MUED 341 （3）
AUED 346 （2）
MUED 347 （2）
STUDENTS SHOULD REFRAIN FROM TAKING OTHER COURSES DURING THE PROJECT
MUSP 325 （spring only）（2）
MUSP 306 （2）
EDAS 409 （3）
Large ensemble（1－2）
MUS 099 （0）
Fourth year（33－35 hours）
Semester VII
MUED 451 （2）
General education electives（15－20）
Somester VIII
Siudent teaching（firsi 10 weeks）（10）
EDFl 402 （first 5 －6 weeks）（3）
EDFI 408 （first 5－6 weeks）（3）


## Rns⿱宀㠯 umental－Keyboard Emphasis

first year（ $33-35$ hours）
Semester 1
MUCH 236 （offered fall only）（2）
MUCH 141 （2）
ENG 112 or IPC 102 or MATH（3）＊
Applied study（10 sem，hrs．required）（2）
Large ensemble（ 5 sem．hrs．required）（1－ 2）
Instrumental techniques（7 hrs．required） （1）
MUED 154 （adv．level）（1）
Electives cutside of music（3）
MUS 099 （0）
Semester II
MUCH 131 （4）
MUCH 142 （2）
IPC 102 or ENG 112 or MATH（3）
Applied study（2）
Large ensemble（1－2）

Instrumental techniques（1）
General education elective（3－4）＊＊
Class voice（1）
MUS 099 （0）
＊Siudents requiring remedial or review
work in English（ENG 110／111）may need
to attend summer term to complete all
coursework in four years．
Second year（34－35 hours）
Semester III
MUCH 132 （4）
MUCH 241 （2）
ENG 112 or IPC 102 or MATH（3）
MUED 240 or general education elective （3－4）
MUED 251 （adv．level）（fall only）（1）
Small ensemble（1）
Applied study（2）
Instrumental techniques（1）
MUS 099 （0）
Semester IV
MUCH 231 （3）
MUCH 232 （2）
MUCH 242 （2）
MUED 240 or general education elective （3－4）
MUSP 264 （1）
Applied study（2）
Large ensemble（1－2）
Instrumental techniques（1）
MUS 099 （0）
Third year（ $31-34$ hours）
Semester $V$
Instumental majors will be placed in the Junior Methods Project in Music in either the fall（V）or spring（VI）semesters as follows：

1．String emphasis－fall only
2．Wind／percussion／guitar or keyboard emphasis－University Cooperative Schools－fall only，by permission of chair
3．Wind／percussion／guitar or keyboard emphasis－all others－spring only．
The following semesters will be reversed
based on 1， 2 or 3 as listed above．
Semester V or VI
Junior Methods Project in Music
MUED 340 （2）
MUED 341 （3）
MUED 342 （2）
MUED 343 （2）
EDFI 302 （3）
MUSP 305 （2）
Large Ensemble（1－2）
Instrumental techniques（1）
Applied Study（2）
MUS 099
Semester V or VI
MUCH 315 or 320 （2）
MUSP 306 （2）
EDAS 409 （3）
General education electives（3－4）
Instrumental techniques（2）
Large ensemble（1－2）
MUS 099 （0）
Fourth year（28－30 hours）
Semester VII
Student teaching（first 10 weeks）（10）
EDFI 402 （last 5－6 weeks）（3）
EDFI 408 （last 5－6 weeks）（3）

Semester VIII
EDAS 409 （3）
General education electives（9－12）
Instrumentali－Wind／Strlng／Guitarl
Percussion Emphasis
First year（32－34 hours）
Semester 1
MUCH 141 （2）
MUCH 236 （offered fall only）（2）${ }^{*}$ or MUCH 233／4／5（2）
Electives outside of music（3）
ENG 112 or IPC 102 or MATH（3）＊
Applied study（10 sem．hrs．required）（2）
Large ensemble（ 5 sem．hrs．required）（1－ 2）
MUED 150， 151 （reg．level）or 154 （adv． leval）（1）
Insirumental techniques（1）
MUS 099 （0）
＊Students requiring remedial or review work in English（ENG 110／111）may need to attend summer term to complete all coursework in four years．
Semester II
MUCH 131 （4）
MUCH 142 （2）
MUCH 233／4／5（2）
MUED 150， 151 （reg．level）or 154 （adv． level）（1）
IPC 102 or ENG 112 or MATH（3）
Applied study（2）
Large ensemble（1－2）
General education elective（3－4）
Instrumental techniques（1）
MUS 099 （0）
Second year（36－37 hours）
Semester III
MUCH 132 （4）
MUCH 241 （2）
ENG 112 or IPC 102 or MATH（3－4）
General education elective（3－4）
MUED 251 （offered fall only）（1）or 250 （2）
Small ensemble（1）
Applied study（2）
instrumental techniques（1）
MUS 099 （0）
Semester IV
MUCH 231 （3）
MUCH 232 （2）
MUCH 242 （2）
MUED 256 （reg．level）or 257 （adv．level） （1）
MUED 240 （3）
Instrumental techniques（1）
Large ensemble（ $1-2$ ）
Applied study（2）
General education elective（3－4）
MUS 099 （0）
Third year（34－38 hours）
Semester VNI
Instrumental majors will be placed in the junior methods project in music in either the fall（V）or spring（VI）semesters as follows：

1）String emphasis－fall only
2）Wind／percussion／guitar emphasis－ University Cooperative Schools－fall only，by permission of chair
3）Wind／percussion／guitar or keyboard emphasis－all others－spring only

The following semesters will be reversed based on 1, 2 or 3 as listed above.
Semester VNI
Junior Methods Project in Music
MUED 340 (2)
MUED 341 (3)
EDFI 342 (2)
MUSP 343 (2)
EDFI 302 (3)
MUSP 305 (2)
Large ensemble (1-2)
Instrumental techniques (1)
Applied study (2)
MUS 099 (0)
Semester V or VI
MUCH 315 or 320 (2)
MUSP 306 (2)
EDAS 409 (3)
General education electives (6-8)
Instrumental techniques (2)
Large ensemble (1-2)
MUS 099 (0)
Fourth year ( 31 hours)
Semester VII
Student teaching (first 10 weeks) (10)
EDFI 402 (last 5-6 weeks) (3)
EDFI 408 (last 5-6 weeks) (3)
Semester VIII
EDAS 409 (3)
General education electives (9-12)

Music History and
Literature
(courses coded MUCH)
1031 Moore Musical Arts Center, 372-2182

## Admittance as a Music History and

## Literature Major

Music students who have developed a strong interest in music history and have demonstrated a high standard of academic achievement may apply to the chair of the music composition/history department for acceptance as a major in music history. It is also possible to add music history to an existing major for a double major. Application for admission to the music history program is made prior to the end of the sophomore year.

Applicants should submit sample papers to the departmental chair. These will be reviewed by the music history faculty. For full acceptance into the program a student must have achieved a 3.0 average in each of the following groups of courses: MUCH 131 and 132; Non-Western Music (MUCH 233, 234 or 235); MUCH 236; and MUCH 141, 142 and 241. Students with an average of 2.5 to 2.9 may be accepted as majors on probationary status. Students accepted on this status must achieve a 3.0 average in major area courses within two semesters (summer is not included). Failure to do so will result in discontinuation as a music history major.

## Collegium Musicum

The department maintains a Collegium Musicum as a training ground for performance practice and as a showcase for music
not usually performed by other ensembles. Ensemble credit is available in: Early Music Ensemble, New Music Ensemble, Balinese Gamelan Ensemble and Afro-Caribbean Ensemble. Participation in these ensembles by music history and literature majors beyond the required four hours is strongly encouraged. All music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University.

## Keyboard Proficiency Requirement

Functional keyboard proficiency tests I and II are required. See Music Education: Functional Keyboard Requirements and pertinent course descriptions.

## Completion Requirements

Candidates for the bachelor's degree in music history and literature are required to submit scholarly papers which demonstrate an understanding of historical issues and basic research techniques. This is accomplished through MUCH 406, Problems in Music History.

## Degree Requirements

The Bachelor of Music degree in music history and literature requires 122-135 total credits, distributed as follows:

1. $30-36$ credits in general education
2. 43-48credits in basic musicianship, including performance and piano proficiency;
3. 30 credits in advanced courses in music theory, history and literature;
4. 3 credits in ENG 112;
5. 8 credits each in two foreign languages.

For specific information consult the chair of the music composition/history department.

## General Requirements

All music history and literature degree candidates are subject to the general requirements listed under Academic Policies in this catalog, as well as general requirements listed under Bachelor of Music degree, none of which is superseded by individual degree programs.

## Writing Proficiency

See Academic Policies: Writing Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the end of the junior year. Total: 3 hours.

## General Education Requirements

I. Humanities and Arts

Two courses from the approved general education list.-6 hours.
II. Natural Sciences

Two courses from the approved general education list.- 6 hours.
III. Social and Behavioral Sciences

Two courses from the approved general education list. - 6 hours.
IV. Cultural Diversity

At least one course from the approved general education list. -3 hours.

## Electives outside of music

One additional course from the approved general education list and at least two of the following: one fine arts elective; one English literature elective; one English literature/ composition elective, and one philosophy elective. Total general education plus electives: 30-36 hours.

## Foreign Language

Two courses in the same foreign language and two courses in a second language. Total: 16 hours.

## Music Requirements

All history majors are required to complete the following music courses. Minimum total: 73 hours.

## Music Core

MUCH 131, 132, 231, 232, 236 or 237, and 233, 234 or 235.
MUCH 141, 142, 241, 242 and 341.
Minimum total: 27-28 hours.

## Music Performance

Large ensembles 4 hours; small ensembles (Early Music Ensemble) 4 hours; major instrument/voice 4 hours; MUSP 305 and 3064 hours. Total: 16 hours.

## Piano Proficiency

MUED 150 and151, plus 250 or 252 (may be waived by exam). Experienced pianists may be eligible for accelerated courses in Class Piano. Keyboard proficiency exams I and II required for all music history majors. Total: 4 hours.

## Music Theory

MUCH 308 and 309 plus 315, 320 or 325.
Total: 6 hours.

## Music History and Literature Courses

MUCH 318, 406 ( 6 hours), 407, 408, 412, electives ( 10 hours). Total: 24 hours.

Completion Requirement (see above).

## Suggested Program

NOTE: Exact order of courses is dependent upon semester of entry into program and frequency of offerings, which is subject to change. This is a general guide only.

First year ( 34 hours)
MUCH 131, 141; 142, 233 or 234 or 235, 236 (12)
MUED 150, 151 (2)
Applied music (2)
Large ensembles (2)
Collegium Musicum (1)
Humanities and arts general education requirements (6)
Natural sciences general education requirements (6)
ENG 112 (3)
Second year ( 30 hours)
MUCH 132, 231, 241, 242 (11)

MUED 250 or 252 (2)
Applied music (2)
Large ansembles (2)
Collegium musicum (1)
Social sciences general education
requirements (6)
Electives outside of music (6)
Third year (32 hours)
MUCH 232 (2)
MUCH 308 and 309 (4)
MUCH 315 or 320 or 325 (2)
MUCH 318 and 407 (4)
MUCH341 (2)
Music theory, merature, and ethnomusicology electives (6)
Colleglum Musicum (1)
Cultural diversity general education requirement (3)
Foreign language (8)
Fourth year (30 hours)
MUCH 406 ( 6 )
MUCH 408 and 412 (4)
MUSP 305 and 306 (4)
Music theory, literature, and othnomusicology electives (4)
Collegium Musicum (i)
Elective outside of music (3)
Foreign language (8)
The above is a sample program which may be modified with the approval of the chair of the music composition/history department according to the student's individual needs and capabilitiee.

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(courses coded MUSP)
1031 Moore Musical Arts Center, 372-2181

## The Deparment of Music Performance

 Studies provides applied instruction and coursework in performance for music majors and minors, as well as for all qualified students of the University. The department also administers the Bachelor of Music degree program in performance with options as tolows:Church music (organ or voice emphasis)
Gultar (jazz emphasis)
Harpsichord
Instrumental (brass, harp, percussion, string, woodwind)
Organ
Piano Accompanying
Piano Literature
Piano Pedagogy
Voice
Voice/Musical Theater
Vocal Pedagogy
Woodwind specialist
(The woodiwind specialist option is a limited enrollment program. Acceptance is based on an audition which is to be scheduled at the end of the student's first semester. Successfut completion of the option requires high performance standards in the major woodwind
instrument and a proficiency level in two other woodwind instruments equivalent to that of entering freshmen with these instruments as their major performing medium.)

## Piano Proficiency

Applied piano instruction is required of all music performance majors. A prerequisite to individual applied instruction is class piano, MUED 151, or equivalent. (See coordinator of class piano for placement assessment.) In addition, majors in brass, guitar, harp, parcussion, strings, voice and woodwinds are required to demonstrate piano proficiency through examination. The examination, which is to be scheduled through the keyboard coordinator during the final semester of applied piano study, consists of satisfactory performance of one Baroque, one Classical and one Romantic or contemporary composition. One work is to be memorized.

## Admittance as a Music Performance Maior

A student is accepted for the Bachelor of Music degree program in music performance by audition before the appropriate area faculty. This audition may be held at the time of the initial College of Musical Arts audition or during the course of degree study. It is highly recommended that the acceptance audition take place during the freshman year. Acceptance later than the freshman year may necessitate studies beyond the fourth year to meet repertoire and performance standards.

Upon acceptance the student, in counsel with an adviser, develops a course of study based on degree requirements and the student's needs and interests.

## Jury Examinations

Information on jury examinations can be found in the Course Descriptions section of this catalog under Applied instruction.

## Recital Requirement

At least one full recital is required of all performance majors. This is usually music given in the senior year. Permission to perform a recital is granted by the appropriate performance studies faculty and is based upon the successful completion of a recital jury.

A student must be registered for applied study during the semester when the recital is presented.

## Ensemble Participation

All music performance majors are expected to participate in ensembles each semester of registration. Ensemble choice should be appropriate to the student's principal performance medium (e.g., strings: orchestra; woodwinds, brass, percussion and harp: band and/or orchestra; guitar: small ensembles; voice: choral ensembles and/or opera theater; piano: accompanying and/or
small ensembles). In cases subjeci to question, students should consult the department chair.

## Degree Requirements

General Requirements
All music performance degree candidates are subject to the general requirements listed under Academic Policies in this catalog, as well as general requirements listed under Bachelor of Music degree, none of which is superseded by individual degree programs.

## Writing Proficiency

See Academic Policies.
General Education Requiroments
Students are required to take eight courses from the current list of approved general education courses (see Academic Policies). The eight courses are to be distributed as follows: two each from natural sciences, the social and behavioral sciences, and the humanities and arts; one course from cultural diversity in the United States; and one additional courso from the current list of approved general education courses. In addition, one of the courses taken from either the social and behavioral sciences, OR the humanities and arts must be taken from the list of international perspectives courses.

## Electives In or Out of Music

The required number of electives in or out of music will vary according to the student's program option; however, at least 25 percent of the total degree credit hours must be outside of music.

## Music Core Requirements

Program options: church music, harpsichord, organ.

MUCH 131, 132, 231, 232, 141, 142, 241 and 242 (21)
Program options: all others
Same as above with addition of MUCH 236 (2) or 237 (3) (guitar option requires both)
NOTE: Some students may be required to enroll in MUCH 110 prior to MUCH 131 and 141.

## Total Requirements

Miore than the 122 -hour University minimum total is required for certain music performance degree program options. Specific course requirements not listed above for the various options follow, aiong with a suggested order of courses over a four-year period.

## Specific Requirements for music Performance Program Optifons

Church Music Option (125-126 hours)
Voice or Organ Emphasis
MUED 359 Choral Repertoire (2)
MUCH 403 Counterpoint I (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2)

MUSP 100/300, 277-79/477-79 Ensembles (8)
MUSP 261/461 Applied Piano (2)
MUSP 215-216 or 311-312 Repertoire (4)
MUSP 272/472 or 263/463 Applied Principal Performance Medium (16)
MUSP 272/472 or 263/463 Applied Secondary Performance Medium (4)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 396 Service Playing I (2)
MUSP 397 Service Playing II (2)
MUSP 415 Organ Construction (2)
MUSP 416 Church Music (2)
MUSP 459 (2) or 370 (3) Pedagogy
MUSP 495 Senior Recital (2)
French (8)
German (8)
Each student in the church music option is expected to participate in the music program of a church of his or her choice.

## Guitar Option (127 hours)

Jazz Emphasis
MUCH 211 Jazz Improvisation and Repertoire I (2)
MUCH 212 Jazz Improvisation and Repertoire II (2)
MUCH 237 Jazz Theory (3)
MUSP 305 Conducting I (2)
MUCH 311 Jazz Arranging Analysis I (3)
MUCH 312 Jazz Arranging Analysis II (3)
MUCH 411 Jazz Pedagogy (2)
MUCH 436 Recording Techniques (2)
MUSF 458 String (guitar) Pedagogy (2)
MUSP 100/300 Small Ensembles (16)
MUSP 261/461 Applied Piano (2)
MUSP 286/486 Applied Guitar (28)
MUSP 495 Senior Recital (2)
Harpsichord Option (126 hours)
MUCH 100/300 Early Music Ensemble (4)
MUCH 308 Keyboard Harmony I (2)
MUCH 309 Keyboard Harmony II (2)
MUCH 315 Orchestration (2)
MUCH 403 Counterpoint I (2)
MUCH 404 Counterpoint II (2)
MUCH 406 Problems in Music History (3)
MUCH 407 Performance Practice (2)
MUCH 408 Chamber Music Literature (2)
MUSP 238-239, 277-279, 288-289, 438439, 477-479, 488-489 Large Ensembles (4)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 367 Piano Pedagogy I (3)
MUSP 410 Harpsichord Repertoire I (3)
MUSP 411 Harpsichord Repertoire II (3)
MUSP 262/462 Applied Harpsichord (30) MUSP 495 Senior Recital (2)

Instrumental Option (124-125 hours)
MUCH 320 Band Scoring or 315 Orchestration (2)
MUCH 318 Symphonic Literature (2) MUCH 408 Chamber Music Literature (2) MUSP 305 Conducting I (2) MUSP 453, 454, or 458 Pedagogy (2) MUSP 238-39/438-39, 288-89/488-89 Large Ensemble (16)

MUSP 100/300 Small Ensemble (4)
MUSP 261/461 Applied Piano (2)
MUSP 221/421, 231-35/431-35, 241-45/
441-45, 281-85/481-85 Applied Major Instrument (32)
MUSP 495 Senior Recital (2)
Organ Option (122 hours)
MUCH 315 Orchestration (2)
MUCH 403 Counterpoint I (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 215 Organ Repertoire I (2)
MUSP 216 Organ Repertoire II (2)
MUSP 396 Service Playing I (2)
MUSP 397 Service Playing II (2)
MUSP 415 Organ Construction (2)
MUSP 459 Organ Pedagogy (2)
MUSP 100/300 Small Ensembles (4)
MUSP 263/463 Applied Organ (32)
MUSP 238-39/438-39, 277-79/477-79,
288-89/488-89 Large Ensembles (4)
MUSP 495 Senior Recital (2)
Piano Accompanying Option (127-128 hours)

MUCH 315 Orchestration (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2)
MUCH 408 Chamber Music Literature (2)
MUCH 410 Contemporary Music ProSeminar (2)
MUCH 300 or 400 Literature (2)
MUSP 160 Sight-reading I (1)
MUSP 210 Piano Repertoire I (3)
MUSP 211 Piano Repertoire 11 (3)
MUSP 264 Accompanying Techniques I (1)

MUSP 265 Piano Four-Hand Class (1)
MUSP 100/300R Accompanying Practicum (2)
MUSP 100/300S Mixed Chambers Ensemble (2)
MUSP 100/300R or 100/300S Accompanying Practicum or Mixed Chamber Ensemble (1)
MUSP 305 Conducting I (2)
MUSP 360 Sight-reading 11 (1)
MUSP 361 Style and Interpretation (1)
MUSP 364 Accompanying Techniques II (1)

MUSP 367 Piano Pedagogy I (3)
MUSP 466 Piano Pedagogy Practicum (1)

MUSP 261/461 Applied Piano (32)
MUSP 495 Senior Recital (2)
Piano Literature Option (125-126 hours)
MUCH 315 Orchestration (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2).
MUCH 408 Chamber Music Literature (2)
MUCH 410 Contemporary Music Pro-
Seminar (2)
MUCH 300 or 400 Literature (2)
MUSP 160 Sight-reading I (1)
MUSP 210 Piano Repertoire 1 (3)
MUSP 211 Piano Repertoire II (3)

MUSP 264 Accompanying Techniques I (1)

MUSP 100/300R Accompanying Practicum (1)
MUSP 100/300S Mixed Chamber Ensemble (2)
MUSP or MUCH Ensembles (at least one large) (3)
MUSP 305 Conducting I (2)
MUSP 361 Style and Interpretation (1)
MUSP 367 Piano Pedagogy I (3)
MUSP 466 Piano Pedagogy Practicum (1)

MUSP 495 Senior Recital (2)
MUSP 261/461 Applied Piano (32)
Piano Pedagogy Option (130-131 hours)
MUCH 315 Orchestration (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2)
MUCH 408 Chamber Music Literature (2)
MUCH 410 Contemporary Music ProSeminar (2)
MUCH 300 or 400 Literature (2)
MUSP 160 Sight-reading I (1)
MUSP 210 Piano Repertoire I (3)
MUSP 211 Piano Repertoire 11 (3)
MUSP 264 Accompanying Techniques I (1)

MUSP 100/300R Accompanying Practicum (1)
MUSP 100/300S Mixed Chamber Ensemble (1)
MUSP or MUCH Ensembles (at least one large) (4)
MUSP 305 Conducting I (2)
MUSP 361 Style and Interpretation (1)
MUSP 367 Piano Pedagogy I (3)
MUSP 368 Piano Pedagogy II (3)
MUSP 466 Piano Pedagogy Practicum (3)

MUSP 261/461 Applied Piano (32)
MUSP 495 Senior Recital (2)
Voice Option (127-128 hours)
MUCH 412 Opera Literature (2)
MUSP 214 Singer's Diction I (2)
MUSP 224 Singer's Diction II (2)
MUSP 261/461 Applied Piano (4)
MUSP 272/472 Applied Voice (28)
MUSP 275 Introduction to Opera Theater (2)

MUSP 305 Conducting I (2)
MUSP 311 Vocal Repertoire I (2)
MUSP 312 Vocal Repertoire II (2)
MUSP 370 Vocal Pedagogy (3)
MUSP 378 Opera Theater (4)
MUSP 100/300, 277-79/477-79 Ensembles (6)
MUSP 495 Senior Recital (2)
FREN 101 (4)
GERM 101 (4)
ITAL 101 (4)
FREN, GERM or ITAL 102 (4)
Voice/Musical Theater Option (128-129
hours)
MUCH 412 Opera Literature (2)
MUSP 305 Conducting I (2)
MUSP 311 Vocal Repertoire I (2)
MUSP 312 Vocal Repertoire II (2)

MUSP 214 Singer's Diction I (2)
MUSP 224 Singer's Diction II (2)
MUSP 272-472 Applied Voice (20)
MUSP 261/461 Applied Piano (4)
MUSP 370 Vocal Pedagogy (3)
MUSP 378 Opera Theater (4)
MUSP 100/300, 277-79/477-79 Ensembles (6)
MUSP 495 Senior Recital (2)
THEA 202 Oral Interpretation (3)
THEA 241 Principles of Acting (3)
THEA 344 Intermediate Acting (3)
THEA 345 Advanced Acting (3)
THEA 352 Hist. of Mus. Thea. (3)
PEG 127 Dance: Jazz (1)
PEG 130 Dance: Modern (1)
PEG 133 Dance: Tap (1)
DANC 120 Classical Ballet | (2)
DANC 220 Classical Ballet II (2)
French (4)
German (4)
Voca! Pedagogy Option (125-126 hours)
MUCH 412 Opera Literature (2)
MUSP 214 Singer's Diction 1 (2)
MUSP 224 Singer's Diction II (2)
MUSP 264 Accompanying Techniques I (1)

MUSP 261/461 Applied Piano (4)
MUSP 272/472 Applied Voice (14)
MUSP 2.75 Introduction to Opera Theater (2)

MUSP 305 Conducting I (2)
MUSP 378 Opera Theater (4)
MUSP 311 Vocal Repertoire 1 (2)
MUSP 312 Vocal Repertoire II (2)
MUSP 370 Vocal Pedagogy (3)
MUSP 473 Vocal Pedagogy Practicum (3)
MUSP 100/300, 277-279/477-479
Ensembles (6)
MUSP 495 Senior Recital (2)
PSYC 201 General Psychology (4)
EDFI 302 Educational Psychology (3)
FREN 104 (4)
GERM 101 (4)
PAL 101 (4)
FREN, GERM or ITAL 102 (4)
Woodwind Specialist Option (129-130 hours)

MUED 140 Clarinet/Saxophone (1)
MUED 145 Flute/Percussion (1)
MUED 146 Oboe/Bassoon (1)
MUCH 320 Band Scoring or 315 Orchestration (2)
MUCH 318 Symphonic Literature (2)
MUCH 408 Chamber Music Literature (2)
MUSP 305 Conducting I (2)
MUSP 454 Pedagogy (4)
Major 2
First minor i
Second minor 1
MUSP 238-39/438-39, 288-89/488-89
Large Ensemble (16)
MUSP 100/300 Small Ensemble (4)
MUSP 261/461 Applied Piano (2)
MUSP 241-45/441-45 Applied instrument (32)

Major 16
Firsi minor $8 \&$ half recital or equivalent proficiency hearing

Second minor 8 \& half recital or equivalent proficiency hearing
MUSP 495 Senior Recital (major instrument) (2)

## Suggested Programs

Note: Exact order of courses is dependent upon semester of entry into program, and time and frequency of offerings which is subject to change. This is a general guide only.

## Church music option

Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 100, 277-79 (1)
MUSP 263 or 272 (2)
ENG 112 (3)
French (4)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 100, 277-79 (1)
MUSP 263 or 272 (2)
Arts and humanities (3)
French (4)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 100, 277-79 (1)
MUSP 263 and 272 (3)
German (4)
MUSP 261 (1)
MUS 099 (0)
Additional general studies course (3)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUSP 100, 277-79 (1)
MUSP 263 and 272 (3)
German (4)
MUSP 261 \& Proficiency (1)
Social Science (3)
MUS 099 (0)
Semester $V$
MUCH 232 (2)
MUSP 300, 477-79 (1)
MUSP 463 and 472 (3)
MUSP 215 or 311 (2)
MUSP 305 (2)
MUSP 396 (2)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
Semester VI
MUSP 463 and 472 (3)
MUSP 300, 477-79 (1)
MUSP 216 or 312 (2)
MUSP 306 (2)
MUSP 397 (2)
MUSP 459, if organ emphasis (2)
Natural science (3)
MUS 099 (0)
Semester VII
MUED 359 (2)
MUCH 403 (2)

MUCH 407 (2)
MUSP 370, if voice emphasis (3)
MUSP 463 or 472 (2)
MUSP 415 (2)
MUSP 300, 477-79 (1)
Social or behavioral science (3)
Semester VIII
MUSP 463 or 472 (2)
MUCH 404 (2)
MUSP 416 (2)
MUSP 495 (2)
MUSP 300, 477-79 (1)
Electives (4)

## Guitar Option

Semester 1
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (2)
MUSP 286 (4)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 100 (2)
MUSP 286 (4)
Arts and humanities (3)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 100 (2)
MUSP 286 (2)
Social science (3)
MUCH 236 (2)
MUCH 211 (2)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 100 (2)
MUSP 286 (2)
MUCH 237 (3)
MUCH 212 (2)
MUS 099 (0)
Semester V
MUSP 461 (1)
MUSP 300 (2)
MUSP 486 (4)
MUCH 311 (3)
MUSP 305 (2)
Natural science (3)
Elective (1)
MUS 099 (0)
Semester VI
MUSP 461 and proficiency (1)
MUSP 300 (2)
MUSP 486 (4)
MUCH 312 (3)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
Semester VII
MUSP 300 (2)
MUSP 486 (4)
MUCH 411 (2)
MUSP 458 (2)
Social or behavioral science (3)
Additional general studies course (3)

## Semester VIII

MUSP 300 (2)
MUSP 486 (4)
MUCH 436 (2)
MUSP 495 (2)
Electives (5)

## Marpsichord Option

Semester I
Arts and humanities (3)
MUCH 141 (2)
MUCH 100 (Early Music Ensemble) (1)
MUSP 262 (4)
ENG 112 (3)
MUSP 238-39, 277-79, 288-89 (1)
MUS'099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUCH 100 (Early Music Ensemble) (1)
MUSP 262 (4)
Arts and humanities (3)
MUSP 238-39, 277-79, 288-89 (1)
MUS 099 (0)
Semester III
MUCH 13 2 (4)
MUCH 241 (2)
MUSP 262 (4)
MUSP 238-39, 277-79, 288-89 (1)
Natural science (3)
Social science (3)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 262 (4)
MUSP 238-39, 277-79, 288-89 (1)
Natural science (3)
MUS 099 (0)
Semester V
MUCH 300 (Early Music Ensemble) (1)
MUCH 308 (2)
MUCH 315 (2)
MUSP 305 (2)
MUSP 367 (3)
MUSP 462 (4)
Social science (3)
MUS 099 (0)
Semester VI
MUCH 300 (Early Music Ensemble) (1)
MUCH 309 (2)
MUSP 306 (2)
MUSP 462 (4)
Cultural diversity (3)
Additional general studies course (3)
MUS 099 (0)
Semester VII
MUCH. 403 (2)
MUCH 406 (3)
MUCH 407 (2)
MUSP 410 (3)
MUSP 462 (4)
Electives (2)
Semester VIII
MUCH 404 (2)
MUCH 408 (2)
MUSP 411 (3)
MUSP 462 (2)
MUSP 495 (2)
Electives (3)

## Instrumental Option

## Semester I

Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (1)
MUSP 221, 231-35, 241-45, 281-85 (4)
ENG 112 (3)
MUSP 238-39, 288-89 (2)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 221, 231-35, 241-45, 281-85 (4)
Arts and humanities (3)
MUSP 238-39, 288-89 (2)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 100 (1)
MUSP 221, 231-35, 241-45, 281-85 (4)
MUSP 238-39, 288-89 (2)
MUCH 236 or 237 (2-3)
MUSP 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 221, 231-35, 241-45, 281-85 (4)
MUSP 238-39, 288-89 (2)
Social science (3)
MUSP 261 (1)
MUS 099 (0)
Semester $V$
MUSP 461 and proficiency (1)
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 442-45, 481-85 (4)
MUCH 315 or 320 (2)
MUSP 305 (2)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
Semester VI
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUCH 318 (2)
MUSP 300 (1)
Natural science (3)
Social science (3)
MUS 099 (0)
Semester VII
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUSP 453, 454, 458 (2)
MUSP 300 (1)
Arts and humanities (3)
Additional general studies course (3)
Semester VIII
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUCH 408 (2)
MUSP 495 (2)
Electives (4)

## Organ Option

Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (1)
MUSP 263 (4)

MUSP 238-39, 277-79, 288-89 (1)
ENG 112 (3)
MUS 099 (0)

## Semester II

MUCH 131 (4)
MUCH 142 (2)
MUSP 100 (1)
MUSP 263 (4)
MUSP 238-39, 277-79, 288-89 (1)
Arts and humanities (3)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 100 (1)
MUSP 263 (4)
MUSP 238-39, 277-79, 288-89 (1)
MUSP 215 (2)
Social science (3)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 100 (1)
MUSP 238-39, 277-79, 288-89 (1)
MUSP 263 (4)
MUSP 216 (2)
MUS 099 (0)
Semester V
MUCH 315 (2)
MUSP 305 (2)
MUSP 463 (4)
MUSP 396 (2)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
Semester VI
MUSP 306 (2)
MUSP 397 (2)
MUSP 463 (4)
Natural science (3)
Social science (3)
MUSP 459 (2)
MUS 099 (0)
Semester VII
MUCH 403 (2)
MUCH 407 (2)
MUSP 415 (2)
MUSP 463 (4)
Additional general studies course (3)
Electives (2)
Semester VIII
MUCH 404 (2)
MUSP 463 (4)
MUSP 495 (2)
Electives (4)
Piano Accompanying Option
Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 160 (1)
MUSP 261. (4)
MUSP 100R (1)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 261 (4)

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    Arts and humanities (3)
    Social science (3)
    MUS 099 (0)
Semester III
    MUCH 132 (4)
    MUCH }241\mathrm{ (2)
    MUCH 236 or 237 (2-3)
    MUSP 261 (4)
    MUSP 210 (3)
    MUSP264(1)
    MUS 099(0)
Semester IV
    MUCH231 (3)
    MUCH232 (2)
    MUCH 242 (2)
    MUSP211(3)
    MUSP 265 (1)
    MUSP 261 (4)
    MUSP 360 (1)
    MUS 090 (0)
Semester V
    MUCH 315 (2)
    MUSP 300R (i)
    MUSP 300S (1)
    MUSP 305 (2)
    MUSP 461 (4)
    Natural science (3)
    MUCH 300/400 literaiure (2)
    Social science (3)
    MUS 099 (0)
    Semester Vi
        MUSP 300R (1)
        MUSP 300S (1)
        MUSP 361 (1)
        MUSP }364\mathrm{ (1)
        MUSP 461 (4)
        Cultural diversity (3)
        Natural science (3)
        Electives (2)
        MUS 099 (0)
    Semester vII
        MUCH 404 (2)
        MUCH }407\mathrm{ (2)
        MUSP }367\mathrm{ (3)
        MUSP 461 (4)
        MUSP 466(1)
        Additional general studies course (3)
Semester VIII
    MUSP }461\mathrm{ (4)
        MUCH408(2)
        MUCH 410 (2)
        MUSP 495 (2)
        Electives(4)
    Miano Literakure Option
    Semesterl
    Arts and humanities (3)
    MUCH }141\mathrm{ (2)
    MUSP 261 (4)
    ENG 112 (3)
    MUSP 160(1)
    MUSP {00R (1)
    MUS 099(0)
Semester il
    MUCH 131 (4)
    MUCH 142 (2)
    MUSP 261 (4)
    MUSP or MUCH ensemble (1)
    Arts and humanities (3)
    MUS 099(0)
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MUSP 264 (1)
MUSP 100R (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 261 (4)
MUSP 211 (3)
MUSP or MUCH ensemble (1)
Cultural diversity ( 3 )
MUS 089 (0)
Semester V
MUCH 315 (2)
Natural science (3)
MUSP 361 (1)
MUSP 305 (2)
MUSP 461 (4)
MUSP 367 (3)
Natural science (3)
MUS 099 (0)
Semester VI
MUSP 368 (3)
MUSP 461 (4)
MUSP 466 (1)
MUSP or MUCH ensemble (1)
MUCH 300/400 literature (2)
Social science (3)
Additional general studies course (3)
MUS 099 (0)
Semester VII
MUCH 404 (2)
MUCH 407 (2)
MUSP 461 (4)
MUSP 466 (1)
MUSP or MUCH ensemble (1)
Electives (4)
Semester VIII
MUCH 408 (2)
MUCH 410 (2)
MUSP 300 S (1)
MUSP 461 (4)
MUSP 466 (1)
MUSP 495 (2)
Electives (2)

## Voice Option

Semester I
Social science (3)
MUCH 141 (2)
ENG 112 (3)
MUSP 214 (2)
MUSP 272 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 224 (2)
MUSP 100 (1)
MUSP 272 (3)
Arts and humanities (3)
Additional general studies course (3)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 or 237 (2-3)
MUSP 272 (4)
FREN 101 (4)
MUSP 261 (1)

MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 272 (4)
MUSP 277 (1)
MUSP 261 (1)
FREN 102 (4)
MUS 099 (0)
Semester V
MUSP 472 (4)
MUSP 477 (1)
MUSP 275 (2)
MUSP 305 (2)
MUSP 311 (2)
GERM 101 (4)
MUSP 461 (1)
MUS 099 (0)
Semester VI
MUSP 472 (2)
MUSP 477 (1)
MUSP 461 and proficiency (1)
MUSP 312 (2)
MUSP 378 (2)
ITAL 101 (4)
Natural science (3)
MUS 099 (0)
Cultural diversity (3)
Semester VII
MUSP 370 (3)
MUSP 472 (4)
MUSP 477 (1)
MUCH 412 (2)
MUSP 378 (2)
Arts and humanities (3)

## Semester VIII

MUSP 472 (4)
MUSP 495 (2)
MUSP 477 (1)
Natural science (3)
Social science (3)

## Voice/Musical Theater Option

## Semester I

Social science (3)
MUCH 141 (2)
MUSP 272 (2)
MUSP 261 (1)
MUSP 277 (1)
MUSP 214 (2)
ENG 112 (3)
MUS 099 (0)
Semester II
MUÇ゙H 131 (4)
MUCH 142 (2)
PEG 127 (1)
Arts and humanities (3)
MUSP 224 (2)
MUSP 272 (4)
MUSP 277 (1)
MUSP 261 (1)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 272 (2)
MUSP 261 (1)
FREN 101 (4)

THEA 202 (3)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUCH 236 or 237 (2-3)
MUSP 272 (2)
MUSP 261 and proficiency (1)
MUSP 277 (1)
PEG 130 (1)
THEA 241 (3)
MUS 099 (0)
Cultural diversity (3)
Semester V
MUSP 472 (2)
MUCH 232 (2)
MUSP 305 (2)
MUSP 311 (2)
GERM 101 (4)
THEA 344 (3)
DANC 120 (2)
MUS 099 (0)
Semester VI
MUSP 472 (2)
MUSP 300 (1)
MUSP 312 (2)
MUSP 378 (2)
MUSP 477 (1)
THEA 345 (3)
DANC 220 (2)
THEA 352 (3)
MUS 099 (0)
Semester VII
MUSP 370 (3)
MUSP 472 (2)
MUSP 378 (2)
MUCH 412 (2)
Natural science (3)
PEG 133 (1)
Electives (1)
Semester VIII
MUSP 477 (1)
MUSP 472 (4)
MUSP 495 (2)
Natural science (3)
Social science (3)
Additional general studies course (3)

## Vocal Pedagogy Option

Semester I
MUCH 141 (2)
MUSP. 272 (2)
ENG 112 (3)
MUSP 214 (2)
FREN 101 (4)
MUS 099 (0)
Semester II
MUCH 142 (2)
MUCH 131 (4)
MUSP 224 (2)
Arts and humanities (3)
MUSP 272 (2)
ITAL 101 (4)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 or 237 (2-3)
MUSP 272 (2)
MUSP 261 (1)

GERM 101 (4)
MUSP 277 (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUSP 272 (2)
MUSP 277 (1)
MUSP 261 (1)
GERM 102 (4)
MUS 099 (0)
Natural science (3)
Elective (1)
Semester V
MUSP 472 (2).
MUSP 477 (1)
MUSP 275 (2)
MUSP 305 (2)
MUSP 311 (2)
MUSP 461 (1)
MUSP 264 (1)
MUSP 370 (3)
MUCH 232 (2)
MUS 099 (0)
Semester VI
MUSP 472 (2)
MUSP 477 (1)
MUSP 461 and proticiency (1)
MUSP 312 (2)
MUSP 378 (2)
PSYC 201 (4)
MUSP 473 (1)
MUS 099 (0)
Cultural diversity (3)
Elective (1)
Semester VII
MUSP 473 (1)
MUSP 378 (2)
Arts and humanities (3)
MUSP 300 (1)
MUCH 412 (2)
EDFI 302 (3)
Natural science (3)
Semester VIII
MUSP 472 (2)
MUSP 473 (1)
MUSP 300 (1)
MUSP 495 (2)
Social science (3)
Additional general studies course (3)
Electives (4)

## Woodwind Specialist Option

Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 241-45 (major) (2)
MUSP 238-39, 288-89 (2)
MUED 140 (1)
MUSP 100 (1)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 241-45 (major) (2)
MUSP 241-45 (first minor) (2)
MUSP 238-39, 288-89 (2)
MUED 145 (1)
Arts and humanities (3)
MUS 099 (0)

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Semester Ill
    MUCH 132 (4)
    MUCH 241 (2)
    MUSP 241-45 (major) (2)
    MUSP 241-45 (first minor) (2)
    MUSP 238-39, 288-89 (2)
    MUED 146 (1)
    MUSP 261 (1)
    Natural science (3)
    MuS 099 (0)
Semester IV
    MUCH 231 (3)
    MUCH232 (2)
    MUCH242 (2)
    MUSP 2A1-45 (major) (2)
    MUSP 241-45 (first minor) (2)
    MUSP 241-45 (second minor) (2)
    MUSP 238-39, 288-89 (2)
    MUSP }100\mathrm{ (1)
    mUSP261 and proficiency (1)
    MUS 099 (0)
Semester V
    MUCH 236 or 237 (2-3)
    MUCH}318\mathrm{ (2)
    MUSP 441-45 (major) (2)
    MUSP 441-45 (first minor and half recital)
        (2)
    MUSP 4A4-45 (second minor) (2)
    MUSP }454\mathrm{ (first minor) (1)
    MUSP 300 (1)
    muSp 305 (2)
    MUSP 438-39, 488-89 (2)
    MUS 099 (0)
Semester VI
    MUCH 408 (2)
    MUSP 441-45 (major) (2)
    MUSP 441-45 (second minor) (2)
    MUSP 438-39, 488-89 (2)
    Natural science (3)
    Social science (3)
    Culural diversity (3)
    MUS 099(0)
Semester VII
    MUCH 315 or 320 (2)
    MUSP 441-45 (major) (2)
    MUSP 441-45 (second minor and half
        recital) (2)
    MUSP }454\mathrm{ (second minor) (1)
    MUSP 438-39, 488-89 (2)
    MUSP 300 (1)
    Social science (3)
    Additional general studies course (3)
Semester VIII
    MUSP 441-45 (major) (2)
    MUSP 454 (major) (2)
    MUSP 495 (2)
    MUSP 438-39, 488-89 (2)
    Elactives (6)
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## Changes which supersede the printed

 catalog can be found in the online catalog at http://www.bgsu.edu/catalog/
## Office of the Dean

Thomas L. Erekson, Dean, 204 Technology Building, 372-2438

## Office of Associate Dean

Ernest N. Savage, Associate Dean, 207
Technology Building, 372-7613

## Office of Cooperative Education

Barry D. Piersol, Director of Cooperative Education, Assistant to the Dean, 105
Technology Building, 372-7580
Office of Program Services
Naomi Lee, Coordinator, 102 Technology Building, 372-7581

## Office of Graduate Studies

Ernest N. Savage, Director, 207 Technology Building, 372-7613

## Departments

Technology Systems, Sudershan K. Jetley, Chair, 264 Technology Building, 372-2439
Visual Communication \& Technology Education, Larry O. Hatch, Chair, 260
Technology Building, 372-2437

## Goals

The foremost consideration in the College of Technology is to provide students with a quality professional education including a strong general education component. Students acquire the competencies, attitudes, and understandings to function as qualified professionals in business, industry, government, and education. The programs are based on the exciting and evolving dimensions of several specialties in industrial technology. The college's faculty accept and conscientiously contribute to the achievement of excellence in the cultural, citizenship, communication, and general education goals of the University.

The college and departmental goals and ctives, and individual program objectives augment the University's mission statement and academic program goals. They contribute to the accomplishment of University
objectives of (1) quality in instructional programs for the preparation of technologists and teachers; (2) providing for better theoretical and practical understanding of current industrial technology; (3) emphasizing the development and application of competencies such as critical thinking, problem solving, communication skills, career decision making, computation and mathematics; and (4) fostering understanding of other cultures, humanities and arts, social and behavioral sciences, and the natural sciences.

The mission of the College of Technology is to develop problem solving and leadership capabilities for professionals who seek, create, and use technological knowledge. The major goals for the College are:

1. To prepare exemplary, technically capable professionals who are problem solvers, human resource developers, and educators for leadership roles in technology.
2. To facilitate research and development in the application, innovation, transfer of, and education about, technology.
3. To influence technology policy, economic development, and the improvement of the environment.
The mission and goals are fulfilled by students and faculty in:
4. Research and development in technical processes and materials to benefit the private sector, government, and education.
5. Researching and testing ideas, methods, and procedures to improve techniques of preparing personnel. This adds to the knowledge of industrial technology and of applied instructional and learning theory.
6. Undergraduate, graduate, and continuing education programs which prepare, update, and upgrade personnel for technical management positions in the private sector and government.
7. Undergraduate, graduate, and continuing education programs which prepare, update, and upgrade personnel who serve at all levels in business and industry, and in technology education and industrial training.
8. Undergraduate and graduate general education experiences which develop basic insights into the broad aspects of the technologies of industry. These involve problem-solving and creative
processes, consideration of technological effects, and the development of skills and understanding which will allow people to adapt to or control the technological environment.
9. Responding to the needs of the enterprise system to enhance the college's own capabilities. Faculty and students share specialized knowledge and skills with appropriate individuals, organizations and agencies at the local, state and national levels.

## Special Opportunities

Special opportunities exist for students to become involved in a number of professional organizations. The following student chapters or their counterpart national or international organizations are operated by students who major in the college: Alpha Eta Rho Honorary Aerotechnology Student Organization, American Institute of Architecture Students, Bowling Green Technology Education Association, Instrument Society of America, Sigma Lambda Chi Construction National Honor Society, Society of Manufacturing Engineers, Student Construction Management Association, and Visual Communication Technology Organization.

The college is also the international headquarters for Epsilon Pi Tau, the International Honorary for Professions in Technology. Its Alpha Gamma chapter serves students and other professionals who may be invited to membership on the basis of scholarship and leadership performance. The purpose of Epsilon Pi Tau is to recognize high academic achievement.

All technology specializations in the College of Technology are fully accredited by the National Association of Industrial Technology. Students have the opportunity to become involved in the National Association of Industrial Technology as student members.

The technology education programs are accredited by the National Council for the Accreditation of Teacher Education.

The construction management and technology program is accredited by the American Council of Construction Education.

## Callege Admission

Students admitted to Bowling Green State University may register in the College of Tochnology when they have:

1. Formally declared their intent to major in the college.
2. Registered with the college's Program Services Office as a provisional member of a program or an undecided major.
3. Conferred with an adviser assigned by the College of Technology.

## Peogram Matriculation

Fuil membership in a College of Technology program will become effective when a student has:

1. Attained an overall BGSU grade point average of at least 2.25 for all courses taken prior to matriculation and a 2.5 within speofitied technology courses.
2. Completed cooperative education experience (TECH 289) for all programs except technology education.
3. Completed with a C grade or better, all courses required for matriculation as specified on program checksheets.
4. Completed any additional specific requirements and application procedures that have deen established by the programs in which the student wishes to matriculate. information on specific program matriculation requirements is avallable in the college's Program Services Office.
The matriculation steps listed above must be completed before students will be permited to register for 300/400 level courses in the College of Technology. In addition to meeting the matriculation requirements and all course and hour requirements for graduation, all courses offered in the College of Technology except for co-ops and 490, must be taken for letter grades by majors in the College of Technology.

## Dibe sracess for Academic Decisions

The College of Technology has established specific requirements for admission, program matriculation, graduation and cooperative education. Information pertaining to these requirements is available from the Program Services Office. Questions regarding these requirements, standards or appeals procedures may be directed to the Program Services Office.

Academic appeals may be initiated in the Frogram Services Office. A rationale for the appeal is required and documentation or other evidence should be attached. The
written materials constituting the appeal are then reviewed by an appeals board which serves in an advisory capacity to the dean. Examples of academic appeals include: appeals for reinstatement after being suspended or dismissed for academic reasons, appeals regarding the denial of admission to either the college or a program, and appeals to drop and/or change classes to or from S/U beyond the specified deadline. The dean of the college reserves the right to final decision.

Appeals regarding the issuance of a grade are processed through the specific instructor(s) of the course(s). Grade appeals are not processed through the college's Program Services Office, but must be processed through appropriate departments. In cases related to academic honesty or other disciplinary action, students are referred to the Student Affairs handbook.

## Advising

The College of Technology faculty and administration are committed to an excellent program to communicate with and advise students on academic matters. Faculty advisers are readily available. However, students should make appointments in a timely manner and prepare for their conferences with such items as tentative class schedules and questions as appropriate to the purpose of the meeting.

The Program Services Office is located in 102 Technology Building. The staff is available to assist students with specific requirements, curriculum developments, career options, academic appeals procedures and general advisement.

After selecting a major within the college, the student is assigned to an adviser in the major area of study. Faculty advisers' teaching and advising schedules change every semester. At the beginning of each semester, faculty advisers post their advisement schedules. The responsibility of contacting an adviser rests with the student. The Program Services Office supplements advising performed at the department level. Program revision, assistance with registration, matriculation and shifts in the demands of the marketplace require a close adviser/ student relationship.

## Intercollege Dual Degrees and Intracollege Dual Majors

A candidate for a degree from the College of Technology, who desires a second degree from a different school or college, or a dual major within the College of Technology, may take work after graduation to complete second degree requirements or qualify for
the dual major program prior to graduation.
Students desiring a dual degreo must:

1. secure permission of both deans of the colleges before the end of their junior year;
2. complete the requirements of the checksheets for both majors for the degrees sought; and
3. complete at least 20 hours minimum of credit beyond the hours required for a single degree.
Students desiring a dual major in technology must complete the requirements of both majors, a minimum of 20 hours beyond the hours for a single degree, and at least three cooperative education experiences amounting to a minimum of 12 credit hours.

## Ceneral : Rucation Requirements

All College of Technology programs are in compliance with the University general education guidelines, as stated elsewhere in this catalog. Furthermore, general education components as integral parts of each College of Technology program are listed on the following pages.

##  <br> Bachelor of Scienee in Technology

Bachelor of science in technology programs are designed for the student interested in the application of arts and sciences to the technologies of industry. Career opportunities exist in a growing area of service. Emphasis is placed on industrial control and supervision, technical processes, and personnel leadership with such employment ciassifications as: construction supervision, production management, technical sales, product design, quality assurance, technical service training, graphic coordinator, cost and systems analysis, and customer service technician. These classifications are used in all segments of our enterprise system including the automotive, construction, pollution control, communications, glass, plastics and metal industries. The
University's geographic location is such that excellent cooperation exisis with companies and government agencies which require wellprepared individuals in technology.

A unique strength of this curriculum is its flexibility. During the second year of study, the student, in cooperation with the adviser, selects courses from the appropriate technology concentration, management, marketing, the physical sciences, commun. cations and the humanities. Industrial experience is gained through the collegesponsored cooperative education program
which is required of all technology majors.
The Cooperative Education Program of $e$ College of Technology is a required program which integrates classroom academic work with practical work experience. Students alternate periods of attendance at college with periods of employment in industry, business or government. College of Technology majors are required to participate in three semester-long, paid, fulltime co-op work assignments which alternate with semesters spent on campus. As part of the cooperative education requirement, students must enroll in and attend classes as full-time students at the University's main campus during the semester immediately before commencement.

The Cooperative Education Program requires each student's employment to be directly related to his or her academic program. The program also requires that all work experiences increase in difficulty and responsibility as students progress through their college curriculum.

Based upon institutional policy, students enrolled in (Co-op) TECH 289/389/489 are involved in a full-time academic experience at BGSU.

A candidate for the degree of bachelor of science in technology must meet requirements for graduation as listed elsewhere in this catalog (General Requirements for Baccalaureate Degrees).

Complete 40 or more semester hours of credit in courses numbered 300 or above. Complete all requirements for a major including prerequisites, laboratory experiences and other requirements.

## Other Degree Option

The College of Technology, through the College of Education and Human Development, offers a bachelor of science in education for students interested in teaching in public schools, at the community college level, or in business and industry.

## Curriculum for 2+2 Transfer Students in Technology Programs <br> 105 Technology Building, 372-7581

For students who have earned an associate degree in an engineering or related technology from a regionally accredited postsecondary institution, the upper-division program (junior and senior years) is completed in one of the technology programs offered. After analysis of the student's credentials, appropriate courses are selected to best fulfill the degree requirements and meet career objectives.

Associate degree holders are required to rticipate in only two semester-long paid, rall-time co-op work assignments which alternate with semesters spent on campus.

# Advanced Technical Teaching 

This program will be available on a limited basis through the Department of Visual Communication and Technology Education. The program is designed to prepare community and technical college faculty and will fulfill the needs for upgrading faculty credentials at community colleges. The degree is also appropriate for business and industry professionals that work in management and training positions.

## Aerotechnology

264 Technology/204 Technology Annex, 3722439/2870

The aerotechnology major is designed to prepare students for responsible positions in general and commercial aviation. The program is organized around three options: aviation management and operations, aviation technical management, and professional pilot. All instruction leading toward Federal Aviation Administration (FAA) flight certification is conducted in accordance with the appropriate Federal Aviation regulations.

All students are also required to complete course work in areas of science and mathematics, general education and business. Supervised cooperative education experiences with or related to the options selected are required.

Students who have obtained an associate degree in these or a closely related field may pursue a bachelor's degree in this program by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement in the fronto of this section.

## Flight Training Policies

Once a student has enrolled at Bowling Green State University, all subsequent flight and ground training must be completed in residence at the University. Flight and ground training obtained elsewhere is not permitted without prior written authorization from the dean of the College of Technology. If permission is granted to receive flight instruction elsewhere, no academic credit is accepted or awarded by the University.

In this case, a student is required to take approved elective(s) to satisfy total credit hour requirements.

In degree programs requiring flight training, a transferring student may (at the discretion of the dean of the College of Technology) have the requirement waived for AERT 220 and 221 if all instruction was accomplished or the student graduated from an institution where a course of study was approved under Part 141 or 142 of the Federal Aviation Regulations. Students receiving such a waiver are required to take additional courses to satisfy the credit hour
requirement. To receive transfer credit for AERT 220 or 221 , a student must have taken them at a regionally accredited college or university as part of a FAR Part 141 or 142 syllabus. All other flight and ground training courses must be completed as part of the BGSU aerotechnology program. The dean of the college may make exceptions for certain qualified aviators.

Fees for the flight instruction courses are based on a minimum number of flight hours as determined by the Federal Aviation Administration. Students may take longer to reach the level of flight proficiency required by the FAA. In this case, additional fees will be charged based on the actual number of flight hours a student has received.
These rates are approved by the Board of Trustees. Flight fees are not refundable.

## Aviation Management and Operations

The aviation management and operations (AMO) program option is designed to prepare students for career positions with airports, general aviation facilities, airlines,. engineering and consulting firms, other organizations specializing in aviation, and auxiliary businesses whose primary customers are aviation-oriented and who require individuals with an aviation background.

The AMO option provides an interdisciplinary approach to management and technology systems and their application to the aviation environment. A benefit of the program is that a student can utilize the educational background in other disciplines, such as facility management or general management. The curriculum focus is on aviation, management, technical systems operation and safety.

```
First year (31 hours)
    AERT 240 (3)
    BA 203 (3)
    DESN 131 (2)
    ENG 112 (3)
    IPC 102 (3)
    MATH 128 or 130 (3-5)
    MIS 200 (3)
    STAT 200 (3)
    TECH 101 and 102 (6)
Second year (31 hours)
    TECH 289 (4)
    AERT 348 and 224 (6)
    CONS 235 (3)
    DESN 104 or ARCH 105 (3)
    MGMT 305 or 360 or AÉRO 311 (3)
    SOC 101 (3)
    General Education Core (9)
Third year ( 34 hours)
    ACCT 325 (3)
    AERT 352 and 354 (6)
    IPC 207 or 304 or 306 (3)
    JOUR 340 (3)
    TECH 389 (4)
    General Education Core (9)
    Business electives (3)
    Technology elective (3)
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Fourth year（3i hours）
AEAT 349， 490 and 456 （9）
CONS 442 （3）
TECH 302 （3）
TECH 489 （4）
MKT 300 （3）
Business elective（3）
Technology alectives（6）

## Aviation Technica

The aviation technical management（ATM） program option is designed to prepare students for aviation careers with organiza－ tions and companies that engage in the menufecture or maintenance of aviation components or which provide aviation groducts or services．

The ATM option provides an interdiscipli－ nary and practical approach to management and technology systems and their application to the aviation environment．Its intent is to futher develop or supplement an individual who has an FAA aiframe and power plant （A\＆F）license or a strong technical or vocational background．A benefit of the program is that a student can utilize the aducational background in other technology disciplines，such as manufacturing，produc－ tion or general management．The curriculum focus is on aviation，management，technical systems operation and safety．

```
Firsf year (3i hours)
    AERT 240 (3)
    BA 203 (3)
    ENG 1T2(3)
    CS 101(3)
    OESN 131(2)
    IPC 102 (3)
    WATH !28 (5)
    MFC 112(3)
    TECH 10t and 102 (6)
Second year (32 hours)
    AEAT 348 (3)
    DESN 10A or ARCH 105 (3)
    ET 240 and ET 241 (8)
    PHYS201(5)
    S00 104 (3)
    STAT 200 (3)
    TECH289 (4)
    Qeneral Education Core (3)
Third year (33 hours)
    AERT 352, and 354 (6)
    DESN243(3)
    MGMT 300 (3)
    MGMT 305 or 360 or AERO }311\mathrm{ (3)
    PHYS 202 (5)
    TECH389 (4)
    General Education Core (9)
Faurth year (31 hours)
    ACCT 325 (3)
    AEPT 349,405 and 490 (9)
    ENVH30% (3)
    IPC 207 or 304 or 306 (3)
    TECH302 (3)
    TEOH489 (4)
    Business elective (3)
    Technology elective (3)
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## Professional Pilot

The professional pilot（PP）option prepares the student for a career as a commercial pilot for the airlines，air cargo companies， corporate or business operations，or numerous general aviation positions such as agriculture，flight training，charter，air freight， and sightseeing．Flight and ground school training is accomplished in strict accordance with Federal Aviation Regulations Part 141 and other pertinent regulations．Upon successful completion of the PP option，the student will hold the following FAA certifi－ cates and ratings：Commercial Pilot－Airplane with single engine，multi engine and instrument rating；Flight instructor－Airplane single engine land and instrument rating．

## First year（32－34 hours）

AERT 220 and 221 （8）
AERT 224 and 240 （6）
CS 101 or MIS 200 （3）
ENG 112 （3）
IPC 102 （3）
MATH 128 or 130 （3－5）
TECH 101 and 102 （6）
Second year（ 32 hours）
AERT 280， 281 and 282 （9）
PHYS 201 （5）
TECH 289 （4）
GEOG 213 （3）
MATH 126 or 131 （5）
General Education Core（6）
Third year（34 hours）
AERT 320，321，349， 352 and 354 （15）
MGMT 305， 360 or AERO 311 （3）
TECH 302 （3）
TECH 389 （4）
General Education Core（6）
Technology elective（3）
Fourth year（ 31 hours）
AERT 404 and 405 （6）
AERT 406，407， 443 and 445 （4）
AERT 440 （2）
TECH 489 （4）
HED 313 （3）
General Education Core（6）
Professional Pilot electives（6）

## Architecture／ Environmental Design Studies

260 Technology Building，372－2437
The architecture／environmental design option is a pre－professional degree program that prepares students to enter the environmental design occupations or continue in higher education to pursue professional degrees in architecture，landscape architecture，urban planning，historic preservation or construc－ tion．The focus of the program is to enhance the student＇s problem solving ability and produce critical thinkers，not technicians．

Most states require that an individual intending to become an architect hold an accredited degree．There are two types of degrees that are accredited by the National Architectural Accrediting Board（NAAB）：（1） The Bachelor of Architecture（B．Arch．）， which requires a minimum of five years of study，and（2）Master of Architecture（M． Arch．），which requires a minimum of three years of study following an unrelated bachelor＇s degree or two years following a related preprofessional degree．These professional degrees are structured to educate those who aspire to registration／ licensure as architeots．To become a registered architect，a graduate of this program must either obtain a B．Arch．or M． Arch．degree at an NAAB accredited program．

An important component of this program is a cooperative education experience in a design or design－related position in industry which is supervised by College of Technol－ ogy facuity or staff．Students who have obtained an associate degree in an area of design or a closely related field may pursue a bachelor＇s degree in this program by enrolling in the curriculum $2+2$ transter students．Refer to $2+2$ trensfor statement in the front of this section．

First year（33 hours）
CONS 235 （3）
ARCH 105 （3）
DESN 131 （2）
ENG 112 （3）
GEOL 104 （4）
MATH 126 （5）
MIS 200 （3）
VCT 203 （3）
General Education Core（3）
TECH 289 （4）
Second year（ 33 hours）
General Education Core（6）
ARCH 205，236，and 250 （9）
DESN 243 （3）
ECON 200 （3）
PHYS 201 （5）
VCT 282 （3）
TECH 389 （4）
Third year（33 hours）
ARTH 440 （3）
CONS 336 （3）
ARCH 301，307，336， 337 and 401 （15）
ARCH 440 （2）
Technical elective（3）
ENG 388 （3）
TECH 489 （4）
Fourth year（27 hours）
Business electives（6）
General Education Core（3）
ARCH 450 （3）
ARCH 470 （2）
ARCH 471 （4）
TECH 302 （3）
Technical electives（6）

## Architecture/Environmental Design nd Construction Management and chnology Dual Major

This combined major will allow the graduate to function effectively in both design and construction firms. This program requires five years to complete.

First year (32 hours)
CONS 235 (3)
ARCH 105 (3)
ENG 112 (3)
DESN 131 (2)
GEOL 104 (4)
MATH 126 (5)
TECH 101 and 102 (6)
General Education Core (3)
VCT 203 (3)
Second year ( 33 hours)
ARCH 205, 236 and 250 (9)
DESN 243 (3)
ECON 202 and 203 (6)
PHYS 201 (5)
VCT 282 (3)
STAT 200 (3)
TECH 289 (4)
Third year (33 hours)
CONS 336 (3)
ARCH 301, 307, 336, 337, 401 and 440
(17)

ARTH 440 (3)
ENG 388 (3)
TECH 302 (3)
TECH 389 (4)
Fourth year (31 hours)
CONS 318, 320 and 335 (9)
ARCH 450 (3)
CONS 406 (3)
ACCT 325 (3)
LEGS 301 (3)
TECH 302 (3)
General Education Core (3)
TECH 489 (3)
Fifth year (27 hours)
CONS 435, 439, 440 and 442 (12)
ARCH 470 (2)
ARCH 471 (4)
MGMT 305 (3)
Business elective (3)
General Education Core (3)

## Other programs

Three other design specializations are available: graphic design and environmental design in the School of Art and interior design in the Department of Family and Consumer Sciences.

## Construction <br> Management and Technology <br> 4 Technology Building, 372-2439

The construction management and technology curriculum prepares personnel for construction contractors, engineering/
architectural firms, public agencies, and trade associations. The program is accredited by the American Council for Construction Education (ACCE), the accrediting agency for four-year baccalaureate degree programs in construction, construction science, construction management and construction technology.

The construction management and technology concentration requires coursework in general education, natural sciences, mathematics, business, technology, design and construction. The graduate of the construction management and technology program receives the Bachelor of Science in Technology degree and seeks a career such as a project manager, estimator, scheduler, project inspector, superintendent or material representative, to name a few.

The cooperative education program is a required program which integrates each student's employment with classroom academic work. Students also participate in the Student Construction Management Association, which is a combination of the student chapters of the Associated General Contractors (AGC), the National Association of Home Builders (NAHB) and the Ohio Contractors Association (OCA).

Students who have obtained an associate degree in this or closely related field may pursue a bachelor's degree in this technology by enrolling in the curriculum for $2+2$ transfer students. Transfer credit is allowed for associate degrees. Students must meet specific requirements for this degree outlined in this sample schedule.

First year (30-31 hours)
ENG 112 (3)
TECH 101 (3) '
ARCH 105 (3)
MATH 126 or 131 or 134 \& 135 (5-6)
DESN 131 (2)
CONS 235 (3)
TECH 102 (3)
MATH 135 (3)
PHYS 201 (5)
General Education Core (3)
Second year (32-33 hours)
ARCH 236 (3)
DESN 243 (3)
ECON 202 (3)
STAT 200 (3)
General Education Core (6)
TECH 302 (3)
ECON 203 (3)
PHYS 202 or GEOL 104 (4-5)
TECH 289 (4)
Third year (31 hours)
ACCT 325 (3)
CONS 318 and 335 (6)
ENG 388 (3)
CONS 320, and 336 (6)
LEGS 301 (3)
MGMT 305 (3)
Technology elective (3)
TECH 389 (4)
Fourth year ( 34 hours)
CONS 406, 439 and 442 (9)

Business elective (3)
Technology elective (3)
CONS 435, 440 and 470 (9)
Business elective (3)
Technology elective (3)
TECH 489 (4)

## Electronic Technology

264 Technology Building, 372-2439
Electronic technology is a comprehensive study of the diverse areas of electronics such as circuits, electronic devices (including microprocessors), computer hardware and interfacing, electric motors, instrumentation, process control, fiber optics and electronic communication systems. Emphasis is placed on the practical application of physics, mathematics and computer science to the study of electronics. An emphasis can be taken in digital electronics and computer systems, instrumentation and control or electronic communication. This knowledge is blended with a core study of manufacturing, design, business and general education to develop the whole person as well as flexibility for career responsibilities and advancement. An important component of this technology curriculum is a cooperative education program which integrates students' industrial employment with classroom academics.

Students participate in activities related to the Electric Vehicle Institute which is involved with design and testing of electric motors, electric controllers and instrumentation systems.

Students also participate in the student section of the instrument Society of America by attending technical meetings and exhibitions. They also participate in EMCWA attending and making presentations at its annual conference.

The graduates of the program receive a Bachelor of Science in Technology degree and enter careers such as systems engineer, product development engineer, electronic process engineer and, customer engineer.

Students who have obtained an associate degree in this or a closely related field may pursue a bachelor's degree in this technology by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement in the front of this section.

## First year (31 hours)

CS 101 (3)
DESN 104 (3)
ENG 112 (3)
ET 196 (3)
General Education Core (6)
MFG 112 (3)
Math requirement (10)
Second year ( 32 hours)
ET 240 and 241 (8)
General Education Core (9)
IPC 306 (3)

PHYS 201 (5)
STAT 200 (3)
TECH 289 (4)
Third year (3d hours)
Business electives (3)
ET 344, 300, and 442 (10)
ET 358 (4)
CS 205 (3)
PHYS 202 (5)
TECH 302 (3)
TECH 389 (4)
Fourth year ( 28 hours)
Business electives (6)
ET 486, 441, 443 and 453 (12)
Technology electives (6)
TECH 489 (4)

## Hindixs wial Training

Technology
260 Technology Building, 372-2437
Industrial trainer preparation is an interdisciplinary program consisting of coursework in industrial tecinology, instructional strategies, related social sciences and management.
The combination of practical/laboratory studies, applied disciplines and actual work experience (cooperative education) will enable the graduate to function confidently and effectively in the training role.

Students who have obtained an associate degree in this or a closely related field may pursue a bachelor's degree in this program by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement on page 131.

First year (29 hours)
General Education Core (3)
ENG 112 (3)
Technical Concentration (6)
1PC 102 (3)
TECH 101 and 102 (6)
MATH requirement (5)
VCT 203 (3)
Second year (32 hours)
CS 101 Or MIS 200 (3)
General Education Core (6)
Technical Concentration (12)
TE 252 (3)
PSYC 201 (4)
TECH 239 (4)
Third year (32 hours)
EDFI 302 (3)
MCMT 305 (3)
TE 352 (3)
TECH 302 (3)
TECH 389 (4)
General Education Core (6)
Technical Concentration (6)
Free electives (4)
Fourth year (31 hours)
Eusiness electives (6)
ENG 388 (3)
TE 428 (3)
EDFI 402 (3)
General Education Core (3)
TECH489 (4)
Technical Concentration (9)

## Manufacturing Technology

264 Technology Building, 372-2439

The options in the Manufacturing Technology program prepare students to be technical problem solvers in industry. Computer usage in designing, monitoring and controlling manufacturing processes, including robotics and automated work cells, is an important part of this program. An important component of this technology program and its options is the required cooperative education experience in industry which is University supervised. In addition to the technical emphasis, the program offers excellent opportunities for studies in management and science. There are several options offered under this program: applied materials science, applied quality science, industrial environment technology and physical plant and energy utilization.

Students who have obtained an associate degree in manufacturing or a closely related area may pursue a bachelor's degree in this technology by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement on page 131.

## Applied Materials Sclence Option

This option prepares students for responsible and technical positions related to engineering materials within the manufacturing industry. It provides a strong science base and applies this to engineering materials. Graduates may be employed in positions dealing with material processing, material testing, material quality control, mechanical design and materials development.

```
First year (32 hours)
    ENG 112 (3)
    PHYS 201 (5)
    CHEM 127 and 128 (5)
    General Education Core (3)
    MATH 131 (5)
    MFG 112 (3)
    CHEM 125 (5)
    TECH 101 (3)
Second year ( 33 hours)
    TECH 289 (4)
    CS 101 (3)
    PHYS 202 (5)
    General Education Core (3)
    IPC 102 (3)
    STAT 200 (3)
    MATH 232 (5)
    TECH 102 (3)
    MFG 220 (4)
Third year (32-33 hours)
    TECH 389 (4)
    Technology electives (3-4)
    General Education Core (3)
    ENG 388 (3)
    PHYS 301, 307 and 313 (7)
    MFG 235 (3)
    TECH 302 (3)
    MGMT 300 (3)
    DESN 243 (3)
```

Fourth year (29-32 hours)
TECH 489 (4)
MFG 326, 329 and 438 (9)
PHYS 411 (3)
Technology electives (3-4)
BIOL 446 (4)
MFG 490 ( $3-5$ )
General Education Core (3)

## Applied Quality Science Option

 This option draws upon a wide variety of disciplines to help prepare students to solve industrial problems related to quality of materials, process and human issues, among others. The program offers excellent opportunities for applications of theory obtained from study of management, statistics, operations research, physics and other areas.First year (33 hours)
ENG 112 (3)
ET 196 (3)
DESN 104 (3)
DESN 131 (2)
General Education Core (3)
TECH 102 (3)
MATH 128 and 131 (10)
IPC 102 (3)
MFG 112 (3)
Second year (33 hours)
DESN 231 (2)
STAT 211 (3)
MFG 235 (3)
TECH 289 (4)
DESN 204 (3)
MIS 200 (3)
PHYS 201 (5)
General Education Core (6)
MFG 220 (4)
Third year ( 33 hours)
MGMT 300 (3)
PHYS 202 (5)
STAT 212 (3)
MFG 340, 326, 327, and 329 (12)
TECH 302 (3)
General Education Core (3)
TECH 389 (4)
Fourth year (31 hours)
MGMT 441 (3)
OR 380 (3)
TECH 489 (4)
ENG 388 (3)
MFG 426, 427 and 428 (9)
STAT 414 (3)
ET 441 (3)
General Education Core (3)

## Industrial Environmental Technology Option

This option consists of studies in industrial technology, business and the sciences. The technical component concentrates on industrial pollution control applied to manufacturing and process control. Study in business emphasizes consideration of the organizational, legal and financial principles: involved. The sciences, primarily chemisity and biology, provide students with knowiedge on the chemical nature of pollutants and their effect on the ecological system.

First year ( 33 hours)
CS 101 or MIS 200 (3)
CHEM $125^{\prime \prime}(5)$
ENG 112 (3)
MFG 112 (3)
MATH 128 (5)
CHEM 127 (3)
CHEM 128 (2)
TECH 101 and 102 (6)
General Education Core (3)
Second year (34 hours)
General Education Core (3)
ECON 200 (3)
MATH 126 (5)
DESN 104 (3)
MFG 220 (4)

- BIOL 204 (5)

STAT 200 (3)
ENVH 304 (4)
TECH 289 (4)
Third year (33 hours)
DESN 404 (3)
MFG 235 (3)
MFG 329 (3)
MGMT 300 (prereq. STAT 200) (3)
MFG 326 (3)
General Education Core (3)
ENVR 421 (3)
BIOL 205 (5)
TECH 389 (4)
IPC 102 (3)
Fourth year ( $3: 2$ hours)
LEGS 301 (3)
DESN 307 (3)
ENG 388 (3)
MFG 327, 424 , and 438 (9)
ENVH 403 (3)
TECH 302 (3)
TECH 489 (4)
MGMT 305 (3)

## Manufacturing Option

This option prepares technical problem solvers for manufacturing industries. The technical component provides the student with the understanding of manufacturing materials, processes, and systems for improving productivity in the industrial environment. The student also studies business and management techniques, and achieves a solid foundation in communications, mathematics, science and the humanities. Graduates are commonly employed as manufacturing or process engineers, or technologists.

First year ( 30 hours)
CS 101 or MIS 200 (3)
DESN 131 (2)
ET 196 (3)
IPC 102 (3)
ENG 112 (3)
MFG 112 (3)
MATH 126 and 128 (10)
General Education Core (3)
rond year (33 hours)
DESN 204 (3)
DESN 231 (2)
ECON 200 (3)
General Education Core (6)

MFG 220 (4)
MFG 235 (3)
PHYS 201 (5).
STAT 200 (3)
TECH 289 (4)
Third year (31 hours)
ET 191 or ET 300 (3)
General Education Core (6)
MFG 326, 329 and 340 (9)
MGMT 300 (3)
Technology elective (3)
TECH 302 (3)
TECH 389 (4)
Fourth year (31 hours)
Business elective (3)
ENG 388 (3)
MFG 327, 424, 428 and 438 (12)
MGMT 305 (3)
TECH 323 (3)
TECH 489 (4)
Technology elective (3)

## Physical Plant and Energy

## Utilization Option

The energy utilization technologist may be employed in commercial or industrial areas and responsible for efficient, proper and economical use of the mechanical, electrical, thermal, nuclear, chemical, and radiant sources of energy, which are applied to the production, processing and transportation of goods and materials; and the heating, cooling and ventilating of physical plants.

The physical plant technologist may be employed in the following areas: plant layout and design, construction and installation of equipment, maintenance, repairs and replacement, operation of utilities, and plant and industrial engineering roles.

## First year (29 hours)

ENG 112 (3)
General Education Core (3)
MATH requirements (5)
TECH 101 and 102 (6)
IPC 102 (3)
ET 191 (3)
ARCH 105 (3)
BIOL 101 (3)
Second year ( 35 hours)
ECON 200 or 202 (3)
MIS 200 (3)
PHYS 201 (5)
CONS 235 (3)
CHEM 109, and 110 (4)
MFG 220 (4)
TECH 223 (3)
TECH 289 (4)
STAT 200 (3)
ENVS 101 (3)
Third year. (31 hours)
MGMT 300 (3)
DESN 404 (3)
CONS 337 (3)
ET 300 (3)
ENVR 421 (3)
General Education Core (6)
TECH 323 (3)
TECH 391 (3)
TECH 389 (4)

Fourth year (31 hours)
Business electives (3)
ENG 388 (3)
DESN 436 (3)
MGMT 305 (3)
ET 357 (3)
CONS 335 (3)
ENVH 307 (3)
TECH 302 (3)
TECH 454 (3)
TECH 489 (4)

## Mechanical Design <br> 260 Technology Building, 372-2437

This program prepares the student to design products, tools and machines for manufacturing processes, and to deal with the practical aspects of mechanical and manufacturing design in industry. Designers in industry serve society by creating new products and redesigning existing ones that need improvement. These designers may create simple tools, complex machines, or consumer products. Several aspects need to be considered when designing, such as economics, physics and aesthetics. Is the new product efficient? Can it be manufactured easily? Is the new product pleasing to the eye? These are all considerations that a mechanical designer must face.

The mechanical design program at Bowling Green consists of a concentration of technology, business and general education. courses. BGSU uses the latest Computer Aided Design (CAD) software, milling machines, lathes, and other industrial equipment. Classes are designed to give a well-rounded perspective of the manufacturing industry while giving one the experience of designing a given part or machine. Technical classes will include engineering graphics, materials processing, strength of materials and CAD.

An important component of this program is a cooperative education experience in a design or design-related position in industry which is supervised by College of Technology faculty or staff. Students who have obtained an associate degree in an area of design or a closely related field may pursue a bachelor's degree in this program by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement in the front of this section.

Aside from the classes, students can get involved in the Society for Manufacturing Engineers (SME) or the Student Design Association which consists of faculty and students of manufacturing and mechanical design. This is a fun way to learn more about the fieid and the people who are involved.

First year (31 hours)
MFG 112 (3)
CS 101 (3)
DESN 104 (3)
DESN 131 and 231 (4)

ET 196 (3)
ENG 112 (3)
PHYS $201 / 211$ (5)
MATH 134 (3)
TECH 289 (4)
Second year (34 hours)
ECON 202 (3)
DESN 204, 304 and 243 (9)
MFG 220 (4)
MFG 235 (3)
MATH 135 (3)
General Education Core (3)
PHYG 202/212 (5)
TECH 389 (4)
Thirc year (34 hours)
DESN 305 and 452 (6)
General Education Core (6)
TECH 223, 323 and 302 (9)
STAT211 (3)
OESN 404 (3)
MCMT 305 (3)
TECH 489 (4)
fourth year ( 30 hours)
Elective (3)
DESN 455 (3)
General Education Core (3)
MFG 329 and 326 (6)
MGMT 261 (3)
Eusiness Elective (3)
ENG 388 (3)
Elocives (6)

##  <br> Wechroblegy

260 Technology Euilding, 372-2437
The visual communication program prepares sudents in the processes used to transmit ideas and concepts through visual media. The program offers theory and practice in the computer applications of visual media, multimedta, print, video, exhibitry, and photography. Related careers require technical competencies in these areas. With help of an adviser, each student selecis an occupational option for specialization from numerous career options. The program proceeds . through a framework of analyzing and applying the many meihods of creating, reproducing and distributing visual communication materials. Students ulitimately combine concepts, theories and principles with critical and creative-technical problem solving abilities to generate solutions for visual communication problems.

By developing the ability to solve communication problems, students will be prepared for such technological production and managoment positions as graphic coordinator, video producer or editor, slectronic publisher, multi-media producer, print/videof photo sales representative, or printing/publishing plant manager. Supervised cooperative work experience provides students with "real world" experience in their area of interest.

Studenis who have obtained an associate degrea in an allied area may pursue a
bachelor's degree in visual communication
by enrolling in the curriculum for $2+2$ transier students. Refer to $2+2$ transfer statement on page 131.

First year (29-31 hours)
TECH 101 (3)
VCT 203 (3)
ENG 112 (3)
VCT 204 (3)
General Education Core (6)
MATH requirement (5-7)
DESN 104 (3)
TECH 102 (3)
Second year ( 34 hours)
MIS 200 OR CS 101 (3)
IPC 102 or 306 (3)
ARTD 211 (3)
VCT 208 and 282 (6)
General Education Core (9)
TECH 289 (4)
STAT 200 (3)
Free elective (3)
Third year ( 34 hours)
MKT 300 (3)
VCT cognate (15)
TECH 389 (4)
TECH 302 (3)
ACCT 221 (3)
General Education Core (6)
Fourth year (30 hours)
VCT cognate (12)
VCT 467 (3)
MGMT 305 (3)
TECH 489 (4)
VCT 368 (3)
ENG 388 (3)
Free elective (2)

## Bachelor of Science in Education

The College of Education and Human Development in cooperation with the College of Technology offers a program in technology education which leads to the bachelor of science in education. This program includes an option for a major and a minor.

Professional education and general education requirements are specified elsewhere in this catalog. For admittance to the Bachelor of Science in Education program the student must meet all program matriculation requirements as determined by the College of Education and Allied Profession's matriculation standards and the faculty of technology education.

## Technology Education

260 Technology Building, 372-2437
365 Education Building, 372-7372

## PApajor-industrial Technology Education

(meets special certification, kindergartentwelfth grade)

The College of Education and Human Development offers the teacher cerificatior $\rightarrow$. program through both a minor and major is industrial technology education which feads to the bachelor of science in education.

```
First year (32 hours)
    ENG 112 (3)
    IPC 102 (3)
    EDFI 202 or EDCI 202 (3)
    DESN 104 or 204 (3)
    MFG 112 (3)
    TECH 101 or MIS 200 (3)
    ET 196 (3)
    CONS 235 (3)
    General Education Core (3)
    TECH 102 (3)
    DESN 131 (2)
Second year ( 34 hours)
    PSYC 201 (4)
    VCT 203 (3)
    MATH 128 (5)
    MFG 220 (4)
    MFG 322 (3)
    TE 252 (3)
    Technology Electives (6)
    General Education Core (6)
Third year (29 hours)
    EDFI 302 (3)
    TE 462, and 352 (6)
    EDSE 311 3(2)
    TECH 323 (3)
    TECH elective (3)
    EDFI 402 (3)
    TECH 302 (3)
    General Education Core (6)
Fourth year ( 28 hours)
    TE 497 Student Teaching (10)
    EDAS 409 (3)
    EDFI 408 (meets cultural diversity req.)
    (3)
    TE 449 (3)
    TE 447 (3)
    Technology alectives (6)
```

Minor-Industrial Technology Education (meets high school certification)
( 36 hours)
This minor in technology education is restricted to teacher education majors and practicing teachers in the following areas: comprehensive science, physics, chemistry, biology, earth science, social studies, environmental science or computer science. Alternatively, students and practicing teachers from other areas may petition for admission through the technology education faculty. This minor leads to high school certification for industrial technology education.

TECH 101 or 102 or 302 (by advisement (3)

DESN electives (by advisement (6)
TE 352, 447 and 449 (9)
MFG 112 and 329 (6)
MFG 222 or 229 (3)
ET 196 (3)
CONS 235 or 306 (3)
VCT 203 (3)

## Firelands College

Changes which supersede the printed catalog can be found in the online catalog at http://www.bgsu.edu/catalog/

## Telephones:

419 433-5560
800 322-4787
Fax: 419 433-9696

## Office of the Dean

R. Darby Williams, Ph.D., dean

Jan E. Adams, Ph.D., associate dean for instructional support
W. Jeffrey Welsh, Ph.D., associate dean for instruction
Academic Departments
Applied Sciences, James M. Smith, Ph.D., chair
Humanities, O. Dale Schnetzer, Ph.D., chair
Natural and Social Sciences, John P. Pommersheim, Ph.D., chair

## Academic Program Directors

Admininstrative Office Systems, Teresa A. Marano, Ph.D.
Associate of Applied Science in Nursing, Hope M. Moon, R.N., M.S.N.
Associate of Science, John P. Pommersheim, Ph.D., chair
Associate of Technical Study, M. Peter Henning III, M.S.
Bachelor of Science in Nursing, Mary DeVos, R.N., M.S.N.

Business Management Technology, Cynthia L. Miglietti, Ph.D.

Computer Programming Technology, Ronald L. Lehr, M.S.

Criminal Justice, Timothy J. Jurkovac, Ph.D.
Electrical/Electronics Engineering Technology, Jan E. Adams, Ph.D.
Elementary Education, O. Dale Schnetzer, Ph.D.
Health Information Technology, Mona M. Burke, M.A., R.R.A.
Humanities, O. Dale Schnetzer, Ph.D.
Human Services, Christopher J. Mruk, Ph.D.
Lake Erie Regional Studies, W. Jeffrey Welsh, Ph.D.
Liberal Studies, Penny L. Nemitz, M.A.
Measurement Systems Technology, Jan E. Adams, Ph.D.
Pre-Business, Cynthia L. Miglietti, Ph.D.
iespiratory Care Technology, Rod C. Roark, M.S., R.R.T.

Secondary Education, O. Dale Schnetzer, Ph.D.

Social Science, W. Jeffrey Welsh, Ph.D.
World Class Manufacturing Technology, James M. Smith, Ph.D.

## Admissions

Arlene L. Hazlett, M.A., director
Sandra K. Yandell, student services counselor

## Bookstore

Bonnie Lindsley, B.S., sales manager
Budget and Operations
Charles C. Stocker, B.S., director
Richard A. Graham, B.S., assistant director for operations

## College Relations

Lesley G. Ruszkowski, M.A., M.B.A., director
Enrollment Services
John P. Hartung, M.A., director
Debralee Diver, M.A., coordinator of financial aid
Julie A. Freitas, student services counselor
Vicki B. Hillis, student services counselor
IDEA Center
Earl B. Lisk III, Audio Visual Specialist
Lake Erie Regional Studies
W. Jeffrey Welsh, Ph.D., director

The Learning Center
Alyson K. Meekder, M.Ed., mathematics tutor Mary Lou Stradtman, M.Ed., English tutor

## Library

William W. Currie, M.Ed., M.L.S., head librarian
Patricia L. Antonelli, M.L.S., assistant librarian
Office for Personal and Professional Development
Joseph J. Nayduciak, Ed.S., director
M. Peter Henning III, M.S., business/industry liaison
Loretta M. Peugeot, continuing education coordinator

## Student Services

Penny L. Nemitz, M.A., director
John L. Clark, M.S., coordinator, career services
Deborah E. Knigga, M.Ed., coordinator, JOB PREP and special services
Technology Support Services
Julie M. Rogers, B.L.S., coordinator
Lisa M. Colvin, B.A., network administrator

## The College

Firelands College is the regional campus and one of seven undergraduate colleges of Bowling Green State University.

Located in Huron, Ohio, near the shore of Lake Erie, Firelands is within easy commuting distance of most communities in north central Ohio. Specifically, it is located on a 216-acre site at the intersection of Ohio Route 2 and Rye Beach Road.

The association between Firelands College and BGSU is a close one and the courses and programs offered by the College are carefully coordinated to ensure a smooth transition for students who wish to begin their baccalaureate degrees at Firelands and then transfer to other colleges and universities.

Firelands offers 21 programs for students who wish to transfer to the baccalaureate (four-year) programs at BGSU or other colleges, or who plan to enter the job market in a technical or para-professional area.

In continuing to meet the variety of educational needs of area residents, a variety of junior, senior and graduate courses are offered, as well as non-credit courses, workshops and seminars.

Currently, students can complete bachelor's degrees in liberal studies, general studies in business, industrial technology and nursing at Firelands College.

Members of the faculty, more than 70 percent of whom hold the highest degrees in their fields, include two Fulbright Scholars and nationally known researchers and authors.

The small size of the campus and its classes (usually 25-30 students) promotes close interaction between students and their professors both in and out of the classroom.

A variety of scholarships, loans, grants and other kinds of financial aid are available through Bowling Green and other groups and associations in conjunction with the University.

Numerous student clubs and organizations, as well as a variety of intramural sports and an active theatre program make it possible for Firelands students to have a well-rounded college experience.

The college also serves as a cultural center for surrounding communities. The musical arts series features concerts by
students and faculty of the BGSU College of Musical Arts. Guest speakers also appear on campus throughout the year.

## 

Firelands College Library functions as an integrat part of the educational process. The collection of more than 30,000 volumes; 216 current periodical and newspaper titles and a wide variety of audiovisual materials enhances the instructional program and provides adiditional resources for use by members of the community. The collections of the University Libraries in Bowling Green may be accessed by students through BGuth which also include the Firelands hoidings. The library is also a member of OHOLink. As a result, students have ready access to scholariy materials at universities throughout Ohio.

The Library Hancibook, revised amually, contains specific information on the services of the library as well as a general introduction to the use of library research tools. Instruction in library usage is offered throughout the academic year.

## HDNementer

The interactive Distance Education and Conferencing Center is located in 326 West Bulding. Hours are 8 a.m. to 5 p.m. weekdays, with services available throughout regularly scheduled class hours.

The IDEACenter utilizes interactive distance educailon and conferencing to increase area citizens' access to university resources. Its services include teleconferences and distance education at the upperdivision and graduate level, for continuing educetion and for training programs. Area high schools, agencies and businesses can also accese the faclities of the center.

The IDEACenter also provides audiovisual presentation and media production services to faculty teaching courses listed in the college's official course schedule.

To access the center, call 2-0693 on the Firelands and Bowling Green campuses and $419-433-5037$ from all other phones.

## Adimisissions

The procedures for admission to Bowling Green State University are described in the Admissions section of this catalog. Students seeking admission to Fireiands College should follow the same procedures.

For specific information, tours or an admissions interview, contact the Firelands Office of Admissions, 901 Rye Beach Road, Huron, Ohio 44839 or call 419-433-5560 or 800-322-4787, extension 2-0607.

## Housing

A wide variety of reasonably priced housing is available throughout the Firelands area. The Firelands Admissions Office maintains a list of available housing which includes rooms, apartments, houses and motels.

Because the population in the area increases in the summer, many housing options in the local community are available ait very reasonable rates during the academic year. Students should, however, plan to provide their own transportation to and from Firelands College. For further information or a complete housing list, contact the Firelands Office of Admissions.

## Registration

The Office of Enrollment Services at Firelands is responsible for the coordination of all registration and bursar-related functions for Firelands students. Student concerns relative to academic policies, registration for classes, payment of fees and academic records should be addressed to this office or call 419-433-5560 or 800-3224787, extension 2-0651.

## Technology Support Services

Firelands College's access to large-scale computers on the main campus as well as local on-site microcomputers provides students, faculty and staff with diverse computing capabilities. Locally, various microcomputers, located in the computer science and word processing laboratories, are available for instructional use and/or program preparation.

## Student Services

Firelands College provides a variety of student services which include career development and placement, counseling, program advisement, and developmental education opportunities. The Student Services Office maintains day and evening hours to accommodate all students.

Career Development and Counseling Services provides educational, career and personal counseling services to students. A variety of printed materials can be found in the Student Services Office Career Library. The Campbell Interest Inventory and the SIGI Plus assist students in making career decisions. They are computer-administered and offer immediate feedback.

Courses entitled Career Planning (UNIV 129) and Job Search (UNIV 130) are offered each semester. Career-related interest and
values inventories are also available to students as an aid for career planning.

The College Level Examination Program (CLEP) is administered each semester by the office.

The Placement Service is responsible for providing employment counseling, assistance in resume writing and information on interviewing procedures to all students and alumni. Students should develop a placement file at the beginning of the final semester before graduation so that individual assistance can be given in planning the job search.

Disability resources are provided io assist disabled persons in attending classes and to participate in a broad range of activities. The Student Services Office acis as a liaison between rehabilitation agencies and the college. All disabled students should contact the Student Services Office before classes begin each semester.

Program advisement at Firelands College provides the opportunity to gather information about various fields of study available through Bowing Green State University. Upon admission all students are assigned a faculty or staff adviser who is a specialist in the student's area of interest. While all students are encouraged to make regular contact with their adviser, all freshmen and sophomores must meet with their advisers every semester to plan course schedules.

Although an adviser checks each student's record, upon request, the responsibility for meeting graduation requirements lies with the student and not with the adviser, the department or the dean. Thorough familiarity with the Undergraduate Catalog is essential.

Students who are undecided as to their career goals and those relurning to school after a lengthy absence, have the opportunity to discuss their interests and objectives with a career counselor in the Student Services office. EDCI 121, a course which helps students make the transition from work, home or high school to college, is offered each semester.

Advisers from the University's main campus are available at specific times each semester to provide information on four-year baccalaureate degree programs.

Cooperative education integrates classroom theory with on-the-job training, whether in business, government, industry or the nonprofit sector.

Every effort is made to place students in assignments compatible with their academic programs and career goais. Employers are responsible for assigning, supervising and evaluating work assignments and for paying students fair wages. Assignments are monitored by the College.

Cooperative education is open to students in all programs. Application should be made at least one semester prior to the anticipated assignment. Interesied students should contact the Student Services Office.

## ampus Activities

Firelands College offers students cocurricular opportunities for personal growth and development. Social, cultural and athletic programs are sponsored by the Campus Activities Office, various student organizations and academic departments of the college. An opportunity for self-government is afforded students through elected representatives or by election to office. Many academic departments and student groups provide additional opportunities for learning through lectures, seminars and activity programs. A committee composed of students and faculty advisers develops a calendar of activities and events each year.
Chartered clubs and organizations include:
Allied Health Club
Campus Fellowship
Firelands College Theatre
Fitwell Club
Intramurals Club
Minority Student Union
Model United Nations
Ski Club
Social Science Club
Society of Manufacturing Engineers
Speech Activities Organization
Student Business Club
Student Government
UCAM-Peace and Justice Center
New Waves: Firelands College Literary Magazine
Writer's Club

## Learning Center

Alyson K. Meeker, M.Ed., mathematics tutor Mary Lou Stradtman, M: Ed., English tutor The Learning Center is located on the second floor in room 230 North. Students who want to improve their learning skills and become more effective and efficient in college use the center.

Support services include:

1. Free tutoring in numerous subject areas. Study groups led by a tutor are also developed for certain classes.
2. Computer-assisted instruction and videotapes in many subject areas provide reinforcement and alternate methods of instruction.
3. Word processing for writing and printing papers.
4. Computer instructional programs to improve students' learning skills, speedreading and typing are also available. Appointments can also be arranged to assist individual students in improving their learning skills (i.e., notetaking, textbook study, test-taking). Handouts are available.

## Financial Aid and Scholarships

Debralee Divers, M.A., coordinator The Enrollment Services Office provides counseling services to all students who are interested in applying for federal, state and campus-based financial aid. A variety of printed materials are maintained by this office for student use. Additionally, the Financial Aid Office provides enrollment certification services for students who are eligible for Veterans Administration educational benefits.

## Scholarships

Numerous annual scholarships are administered by Firelands College. Applications for these scholarships are available from the Admissions Office and must be filed by May 1 to be considered for the next academic year. Special need analysis forms are not required for scholarships administered directly by Firelands College, which include:

BGSU Alumni Association
Derek E. Carney Memorial
Citizens Banking Company
James E. Cole Memorial
Caryl Crane Scholarship for the Performing Arts
Alta M. Croll Memorial
Leon and Susan Cross Book Scholarship
DeBard Family
Sally DeForest
Erie County Cablevision Inc.
Erie County Student
John F. and Doris H. Ernsthausen Memorial
Firelands Challenge Tournament
Firelands College Advisory Board
Firelands Faculty and Staff

- First Merit EST Bank

Clarissa A. Givens Memorial
Harlequins Founders'
Robert J. Harned Art Scholarship
Health Careers Unlimited
William Randolph Hearst
Holiday Challenge
Huron Rotary Club
Norman J. Jessen Memorial
Key Bank
Kiwanis Club of Sandusky Bay
Milan Chamber of Commerce
Milan Mothers Club
Mruk Family Scholarship
Mylander Scholarships
National City Bank
Ruth Frost Parker
William J. Parker Family
William J. Parker Memorial
Mary A. Printy Memorial
Sandusky Exchange Club
Sandusky Exchange Club-Dr. Henry W. Lehrer Memorial
Third and Fourth Degrees of Sandusky Knights of Columbus, Firelands Shrine Club and Singara Grotto
Sandusky Register
Lyle L. Speer Memorial

Stein Nursing and Allied Health
Student Advisory Board
Dr. Carl R. and Elizabeth Swanbeck Memorial
Robert W. Traver Memorial
Pauline L. Wallace Memorial
Margie A. Woell Memorial

## Emergency Loan Funds

The objective of the Firelands College Emergency Loan Fund Program is to assist students who, for one reason or another, find it extremely difficult or impossible to make payment for University instructional and general fees by the payment date.

## Amount of Loan

The maximum loan that may be granted is $\$ 350$. The amount of the loan is contingent upon the time of application and is determined by the person administering the loan fund. All loans of may require a co-signature.

## Student Qualifications

The emergency loan program is available to continuing Firelands College students who have at least a 2.0 (C) accumulative grade point average. Exceptions to these criteria may be considered on an individual basis. Guest students are not eligible for a loan under any circumstances.

## Repayment Deadline

All loans during any semester become due as specified in the loan agreement. Students may request an extension.

## Finance Charge

The finance charge for all loans is established by the Ohio State Aid Commission prior to the beginning of each calendar quarter.

## Late Payment

Students who fail to repay emergency loans by the date due are charged a late payment fine. Fines are assessed at a rate of $\$ .50$ per day (including Saturdays and Sundays), but will not exceed $\$ 25$. Students are granted a three-day grace period. If payment is not made during the grace period, the fine on the fourth day is $\$ 2$.

## Non-payment

Students not repaying loans by the end of the grace period (three days after the due date) will have their class registrations for that semester canceled and all records in the Office of the Registrar frozen. Also, they will be denied registration for any future semesters until the loan and penalty are repaid.

## Other Loans

Harry G. Beare Memorial Loan Fund This loan is available to Firelands College students who are graduates, or candidates for graduation, from Edison High School in Milan. The loan is based on proven financial need and is interest free. However, it is suggested that the student make a gift to the loan fund after repayment of the loan.

Third and Fourth Degrees of Sandusky Knights of Columbus, Firelands Shrine Club, and Singara Grotto Loan Fund Loen funds have been provided by these organizations since Firelands College was opened. Typically, the loans are for up to $\$ 250$ and are issued for short periods of time-emergency types of loans. Early repayment is encouraged and a small service charge is assessed.

## Actalemic Olbjectives 눈 (irctanizations

Frelands is organized as a college of Bowling Green State University. The coliege has three academic departments: applied sciences, humanities, and natural and social sciences. The departments are structured by academic discipline as follows:

[^1]Mathematics
Physics
Political Science
Psychology
Sociology
Social Work

## Pre-bacealaureate Courses

Students who are interested in completing a baccalaureate degree at Bowling Green should consult the appropriate section of this catalog for a complete program description. These students should work closely with their academic advisers at Firelands and the main campus to ensure completion of appropriate general education requirements for the degree sought.

## Associate of Arts and Associate of Science Requirements

A university education is more than the learning of skills appropriate to a career or job. The acquisition of knowledge from such areas as the humanities and the natural and social sciences contribute to the foundation of the well-educated person. Through the courses of the general education requirements, students discover their values and gain insight into the challenges of the future.

Designed to contribute to the foundation of the baccalaureate degree programs, these requirements add breadth to the major field selected by the student. The requirements are grouped into four areas: communication, humanities and arts, social sciences, and physical sciences. At least one course must have an international perspective if the student is planning on pursuing a baccalaureate degree at Bowling Green State University.

A wide variety of general education courses are available at Firelands. These courses can be used to meet the appropriate group requirements in baccalaureate and associate degree programs.

## Baccalaureate and Graduate

 CoursesAs an integral part of BGSU, Firelands College offers general education and preprofessional curricula designed to facilitate transfer to senior institutions and, through collaboration with the main campus, select baccalaureate degrees and graduate courses.

## Personal and Professional

## Development (noncredit) Courses

The Office for Personal and Professional Development offers a wide variety of lifelong learning (noncredit) courses, workshops and seminars. The chief purpose of the offerings is to provide area residents with opportunities to develop new skills or to stimulate new interests. Special workshops and seminars are also offered in many topical areas, such as management, education, computers and Total Quality Management.

A business/industry liaison works with area employers to develop and offer special training programs for employees. Lifelong
learning courses, workshops, seminars and in-service training programs may be customized for a particular firm, school, organization or interest group. inquiries relative to the offering of such specific programs should be directed to the Office for Personal and Professional Development at Firelands College.

## Lake Erie Reglonal Studies Program at Firelands Colloge

The mission of the Lake Erie Regional Studies Program is to provide a forum for multidisciplinary and specialized study of issues relating to Lake Erie and the surrounding region. This investigation can include an analysis of the natural setting, social and cultural life, recreational activities, business-economic institutions, history, and U.S.-Canadian relations.

## R= <br> Associate Degree Programs

Five associate degrees are offered by Firelands College: associate of arts; associate of applied science; associate of applied business; associate of technical study; and associate of science. A candidate for an associate degree must earn a minimum of 62 semester hours; some degrees require more than 62 credit hours. The associate of arts and associate of science programs are designed to fulfill the first two years of a baccalaureate degree, but may also serve as terminal programs for students who do not plan to complete a fouryear degree. The associate of applied business, associate of applied science and associate of technical study degrees are primarily intended to prepare students for amployment upon graduation. Although termed career education, they are also articulated with similarly oriented four-yearprograms, thus permitting a student to continue toward a baccalaureate degree in related disciplines.

Students who seek an associate degree must complete both general and specific requirements for the degree sought.

## General Requirements

A candidate for an associate degree at Firelands College must satisly the general requirements listed on page 8 of this catalog.

Students must take CS 180 aiong with ENG 110, 111 or 112 or demonstrate required skills in an approved word processing program.

No more than six credit hours of basic writing from ENG 110,111 and 112 may be applied toward graduation.

## Graduation

equirements
A candidate for a certificate or associate's degree must complete the requirements listed below and any other requirements set by the colleges for the specific degrees sought. Check appropriate sections of this catalog for additional degree requirements. The general requirements are:

1. Satisfy all University entrance requirements.
2. Earn a minimum of 30 hours for a certificate and 62 hours for an associate's degree. For an associate's degree at least 15 hours must be completed at BGSU immediately before graduation (some degrees require more than 62 hours of credit).
3. Complete the freshman English composition sequence.
4. Satisfy all course requirements for the degree as listed in the appropriate sections of this catalog.
5. A student who wishes to graduate with a certificate or associate degree must file for graduation according to the following schedule:
a. For graduation in December or May, the deadline for filing an application is the end of the second week of the semester one plans on graduating.
b. For graduation in August, the deadline for filing an application is the end of the first week of the summer session.
Students who have a grade point average of 3.5 to 3.89 are eligible to graduate "with distinction;" students with a grade point average of 3.9 to 4.0 will be eligible for graduation "with highest distinction." To be eligible for these honors, students must have completed a total of 28 credit hours, 21 of which must be letter-graded.

An application form and information may be obtained in Student Services, where completed forms are to be returned.

## Associate of Arts

Firelands College offers two years of general education courses leading to the associate of arts degree. Students who complete the associate of arts degree have reached junior status in the progression toward a baccalaureate degree.

The associate of arts degree program is designed to provide pre-baccalaureate students with a sound academic background in a number of academic disciplines. Credits earned may be transferred to four-year programs. The intent is to provide a liberal background within a two-year program. General education programs have been
leveloped in the following areas:
Criminal justice
Elementary education
Humanities

Human services
Liberal studies
Pre-business administration
Secondary education
Social science

## Associate of Arts Requirements

This degree is awarded to a student who completes one of the prescribed curricula, including the general education requirements listed below and complies with general degree requirements cited previously.

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

## Mathematics and science

Each student must complete a minimum of seven credit hours in mathematics and science.

## Social sciences

Each student must complete a minimum of 10 credit hours in courses designated social science.

## Humanities and arts

Each student must complete a minimum of 10 credit hours in courses designated fine and applied arts including at least one course in ENG literature.

## Transfer Requirements

A student who plans to pursue a baccalaureate degree should choose one course with an international perspective. This course can be taken from the social and behavioral sciences or humanities and arts. A student pursuing a baccalaureate degree should also choose one course that satisfies the cultural diversity in the United States requirement. See page 6 for lists of courses meeting these requirements.

## Electives

Each student must select a sufficient number of electives to earn a minimum of 62 hours. A student planning to pursue a baccalaureate degree in arts and sciences is encouraged to take a foreign language.

## Criminal Justice

Dr. Timothy J. Jurkovac, program director, 341 West Building
The associate degree in criminal justice is designed to provide a student with junior standing in the completion of the baccalaureate degree at Bowling Green.

The program focuses principally on administrative and theoretical aspects such as: communication processes, ethnic
relations, public administration, procedural justice, criminology, abnormal psychology, statistics, and professional ethics. It is not oriented toward technical training, but is a logical sequence for further education for someone trained in police science.

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

## Mathematics and sciences

Each student must complete three courses, including one in math and two in the natural sciences. MATH 115 is required. Students without a satisfactory score on Math
Placement Test B will take MATH 098 before MATH 115.
The student must select two science courses from astronomy, biology, chemistry, geology, physical geography or physics.
BIOL 101, PHYS 100 or 101, or CHEM 100 are recommended.

## Social and behavioral sciences

Each student must complete a minimum of 10 hours. Required in this area are PSYC 201 and SOC 101.

## Humanities and arts

Each student must complete a minimum of 10 hours. PHIL 102 and a literature elective are required. The other courses can be chosen from the list of acceptable requirements from the College of Health and Human Services.

## Professional requirements

Each student must complete a minimum of 9 hours. The required courses are CRJU 210 , CRJU 220 and CRJU 230.

## Core electives

Each student must complete five hours from the following: IPC 306, POLS 303, SOC 301 or PSYC 311 (not both), POLS 347, POLS 417, SOC 316, SOC 340, SOC 341, SOC 441, PSYC 405, CRJU 340, CRJU 395 (workshop may be taken only once), or any course listed as a major core course or core elective by the College of Health and Human Services for the baccalaureate degree in criminal justice. PSYC 405 is strongly recommended.

## Electives

Each student must select a sufficient number of electives to earn a minimum of 62 hours.

## Elementary Education

Dr. O. Dale Schnetzer, 300D West Building
This currichlum provides courses prescribed by colleges of education to students seeking certification in elementary education. These courses are those in the first two years of the program and ensure a broad background of study. in adidition to the associate of arts general requirements, students must complete the rollowing:

## Communication

Each siudent is required to acquire proficiency in witten expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Sudent Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

Mathematics and science MATH 241 and 242 and select one course from at least three (3) of the following groups: BIOL 101 OR 104; CHEM 100 or 104 or 109 and 110 ; PHYS 100 or 104; GEOL. 100 or 101 or 104 . ( 13 hours minimum)

## Social and behavioral sciences

PSVC 201 (4)
HIST 151 or 152 or 205 or 206 (3)
ECON 200 or 202 or 203 or POLS 110 or 171 (3)
soc 101
Humanties and arts
ART 101
ENG literature
Two additional courses from ART, ARTH, ENC, POPC, MUSIC, THEA, PHIL

Other requirements
EDCI/EDFI 202 (3)

## fitumanitiss

Dr. O. Dale Schnetzer, humanities chair, 300 D West Building

This degree program provides the foundation for a bachelor of arts program with concentrations in humanities. In addition to the associate of arts general requirements, students must complete the following:

## Communication

Eech student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

## Mathematics and science

Each student must complete both ( $A$ ) and ( $B$ ) below. Nine (9) hours minimum.
A. One of the following:

1. Three and one-half years of high school college preparatory mathematics.
2. Three years of high school college preparatory mathematics and CS 100 or CS 101.
3. MATH 120 and one of the following: PHIL 103 or CS 100 or 101 or 103.
4. MATH 115 or 126 or 128.
B. At least one course selected from BIOL , CHEM, GEOL, PHYS, or GEOG 125, $126,127,213$. At least one course must be approved for laboratory credit.

## Social and behavioral science

Each student must complete a minimum of 10 hours from at least two disciplines including a minimum of six hours in one discipline. Eligible disciplines include: economics, geography, history, political science, psychology, social geography and sociology.

## Humanities and arts

Each student must complete HUM 101 and HUM 200 and a minimum of 16 hours from at least three of the following disciplines: ant, humanities, literature, philosophy (except PHIL 103, when used to apply to mathematics/science requirements), theatre, film, music, popular culture and American studies. One course in literature and one course in the fine arts (art, music, theatre, film) must be included. (See the College of Arts and Sciences Group V listing of approved courses.)

## Human Services

Dr. Christopher J. Mruk, program director, 303 West Building
Dr. Tatiana W. Panas, coordinator, 300B West Building

This program prepares students for employment as paraprofessionals in social and human service agencies. It also provides a means for those currently employed in these organizations to improve their proficiencies and move toward promotion. The fwo-year degree program combines academic courses and supervised field experiences, and may be applied toward several baccalaureate programs offered by the College of Health and Human Services.

The reguiar human services program trains the student to deal with a broad range of human service issues, populations and agencies. However, the student may opt for a special gerontology emphasis which focuses on the needs and programs of the elderly. In addition to the associate of arts general requirements, students must complete the following:

Communication
Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Baseo on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation.

## Mathematics and science

A minimum of nine credit hours in mathematics and science. MATH 115 is required.
(Gerontology emphasis requires 10 credit hours, including BIOL 104 and 332.)

Social and behavioral scienees
A minimum of 22 credit hours in social and behavioral sciences. Required courses are: PSYC 201 and 240 or 303 and 405; SOC 101; SOWK 110 and 324; SOSC 289.
Gerontology emphasis requires 25 credit hours, including PSYC 240 and GERO 101.

## Humanities and arts

Ten credit hours minimum. PHIL 102, PHIL 103 or 319 ; and ENG literature are required. PHIL 319 is recommended for gerontology emphasis.

## Sora electives

Twelve credit hours from the following: IPC 203, 306; PHIL 319; POLS 110, 303; PSYC 305,311 , or SOC 202, 301, 361, 441; or sowk 227. Three credit hours required for gerontology emphasis, with BIOL 220 as an additional option.

## Field experience

During the second academic year, a 120 hour supervised field experience at a college-approved agency is required as a part of SOSC 289. SOSC 289 also includes a weekly seminar. SOWK 324 requires 30 hours as a volunteer in a supervised field experience.

## Liberal Studies

Penny L. Nemitz, program adviser, 138 North Building

This curriculum allows the undecided student to sample a variety of disciplines while developing a well-rounded background. in addition to the associate of arts general requirements, students must compiete the following:

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can ive applied toward graduation. IPC 102 is required.

## Mathematics and science

A minimum of 7 hours in at least two ciences or a science and a mathematics ombination.

## Social and behavioral sciences

A minimum of 10 hours chosen from: economics, geography, history, political science, psychology and sociology.

## Humanities and arts

Each student must complete HUM 101 and a minimum of seven hours from at least two of the following:

Art, English, music, philosophy, popular culture, theatre and American studies. (One course in English literature must be included.)

## Applied arts

Each student must complete a minimum of two hours from the following: ACCT, BA, BAT, BUSE (except 101), CRJU, CS, CST, DESN, ENVT, ET, FCS, HED, JOUR, MFG, MIS, MRT, RT, SOWK.

## Pre-Business

Dr. Cynthia L. Miglietti, program director, 320E West Building

This program provides the foundation for a bachelor's degree in business. In addition to the associate of arts general requirements, the curriculum includes business principles in ccounting, communication, economics, statistics, finance, marketing and management.

This program is ideally suited for the individual wanting to pursue a bachelor's degree in business, but who first desires an associate degree for purposes such as securing an entry level position, gaining a job promotion or refining skills in business principles.

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 and BA 203 are required.

## Mathematics and science

Each student must complete a minimum of 17 hours including STAT 211 and 212, MIS 200 and one of the following:
A. MATH 126 and a science elective ( 8 hours); or
B: MATH 131 and a science elective ( 8 hours).
Social and behavioral sciences
Each student must complete a minimum of 10 hours including PSYC 201 or SOC 101, and ECON 202 and 203. The remainder may
be chosen from geography, history, political science, psychology and sociology.

## Humanities and arts

Each student must complete a minimum of 10 hours from at least two of the following departments: art, foreign language, English, philosophy and speech. One course in ENG literature must be included.

## Other requirements

Each student must complete ACCT 221 and 222, LEGS 301, MKT 300, FIN 300 and MGMT 300.

## Secondary Education

Dr. O. Dale Schnetzer, humanities chair, 300D West Building
Students in this program have the opportunity to complete the general education requirements of colleges of education and to meet major and minor requirements in courses offered at Firelands College. In addition to the associate of arts general requirements, students must complete the following:

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

## Mathematics and science

Each student must complete a minimum of ten (10) hours, including A, B, and C:
A. Three years of high school preparatory mathematics or MATH 115, 120, 126, $128,130,131$ or 232.
B. Select one: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109/ 110, $117 /$ 118, 125, 127/128; GEOG 125; GEOL 100, 104, 105; PHYS 101, 201, 202, 211, 212.
C. Select another course, if needed, from $A$ or B or CS 100 or 101 or any other courses in ASTR, BIOL, CHEM, GEOL, PHYS.

## Social and behavioral sciences

Each student must complete a minimum of ten (10) hours, including PSYC 201 and two (2) of the following: ECON 200, 202, 203;

GEOG 121, 122, 230; HIST 151, 152, 205,
206; POLS 110, 171; SOC 101, 202, 231.

## Humanities and arts

Each student must complete a minimum of ten (10) hours, including $A, B$, and $C$.
A. Select one: ENG 150, 200, 261, 262, 264, 265, 266, 267
B. Select one: ART 101, 102; ARTH 145, 146; PHIL 101, 102, 103, 204, 212; POPC 220; THEA 141, 202.
C. Select courses from A or B or any other courses in ART, ARTH, MUSIC, PHIL, POPC, THEA.

## Other requirements

Each student must complete EDCI/EDFI 202
(3) and should consult an adviser forinformation concerning courses required in various secondary teaching fields.

## Social Science.

Dr. W. Jeffrey Welsh, program director, 329B West Building

This curriculum offers the foundation of a bachelor of arts degree program in geography, history, political science, psychology, sociology or liberal studies. In addition to the associate of arts general requirements, students must complete the following:

## Communication

Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

## Mathematics and science

Both (A) and (B) below. Nine hours minimum.

## A. One of the following:

1. Three and one-half years of high school college preparatory mathematics.
2. MATH 115 or 126 or 128 or 129 or 130 or any MATH course beyond 130 except 241 or 242.
3. MATH 120, and one the following: PHIL 103, CS 100 or 101.
4. Three years of high school mathematics and CS 100 or 101.
B. At least two courses elected from biological sciences, chemistry, geology, physics or physical geography (GEOG 125, 126, 127, 213). One course must be approved for laboratory credit.

## Social and behavioral sciences

A minimum of 20 hours from at least three of the following disciplines including an approved concentration: economics, ethnic studies, history, non-physical geography, political science, psychology and sociology. SOSC 101 will also count toward this requirement. Students should also have an area of concentration from one of these disciplines.

## Fine and applied arts

A minimum of 10 hours from at least two of the following: art, art history, film, literature, music, philosophy (except PHIL. 103 when used to apply to mathematics/science requirements), popular culture, speech and theatre. One course in literature must be

Included; a course in the fine arts (art, film music, or theatre) is highly recommended.
(See College of Arts and Sciences listings for Group V courses.)
 Associate of Applied


Two-year, career-oriented curricula are avellable leading to the associate of applied business degree. These programs prepare students for immediate employment in area communities and elsewhere, and also may be transferred to similarly oriented baccalaureate degree programs.

Usually, general education requirements are not part of the curriculum. Those general education courses that are taken are in some related general education field (such as English, speech, psychology), in appropriately related disciplines (such as mathemarics and science, physical science) and in spectic major areas (such as business management, secretariai technologies).

Applied business programs offered at Firelands include:
Administrative Office Systems
Bushess Management Technology
Computer Programming Technology

## Associen of hpplied Business

 TembiremontsThis cegree is awarded to a student who successiully completes the carser-oriented prograns listed below and the general associate degree requirements listed under Academic Policies.

## THent butimess M Mangement Technology

Cynthia L. Migliett, Ph.D., 320E West Building
Majors within this program are accounting and general business management, with a specialization possible in industrial management and retail management.

## Accomptirg

Planned program
This program prepares students for paraprofessional positions in industrial, public or govemmental accounting. It is designed to provide the graduate with theoretical and practical accounting knowledge and skills required of business personnel in today's economy. Many of the courses in the twoyear accounting program are applicable to the four-year baccalaureate degree in business.

## Fhrs year

General education
ENG 110, 111 and/or 112 (3-8)
1PC 102 (3)

## Basic courses

MIS 200 (3)
MATH 120 or 126 (5)
Core courses
ACCT 221 and 222 (6)
ACT $231^{*}$ (3)
BAT 102 (3)

## Second year

General education
ECON 202 or 203 (3)
General education electives (6)
Basic courses
STAT 211 and 212, or STAT 200 and
BUSE 101 (6)
BA 203 (3)
Core courses
ACT $241^{*}$ and 251* (6)
BAT 201 and 205 (6)
BAT 207 or FIN 200 or 300 (3)
ACT 225* (3)

* Designed only for the associate degree in accounting.


## Bookkeeping Option

This one-year program is designed for the part-time evening student. The program will prepare students for clerical positions in industrial, governmental or public accounting. All of the courses in this certificate program are applicable to the associate of applied business degree.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
Basic courses MATH 120 (5)
Core courses
ACCT 221 and 222 (6)
BAT 102 (4)
Second year
General education
BA 203 (3)
Basic courses MIS 200 (3)
Core courses ACT 231*, 241* and 251* (9)

* Designed only for the bookkeeping certificate and associate degree in accounting.


## Coneral Business Management Planned program

Business management technology (BMT) at Firelands College is a challenging two-year degree program designed for students who have an interest in managing a small business. Students enrolled in the BMT program take courses which provide them with the general management skills and knowledge necessary to become employable in a variety of positions in business and industry. Upon completion of the program, students will have earned an Associate of Applied Business Degree.

Through class discussions, case studies, computer assisted instruction and special projects students will learn how to successfullv manaae a small business. Management
theory, learning how to motivate employees, keeping accurate financial records, hining employees and promoting your business are just a few of the major topics emphasized in the program. In addition, students may earn college credit for working in a business environment for one semester.

The BMT program serves the needs of many students who are interested in:

1. beginning a career in business;
2. updating their present job skills;
3. learning new management techniques; and/or
4. advancing with their present employer. Also, the flexibility of the program allows full-time or part-time sfudents to complete the program during the day or evening. Fulltime students can complete the program in two years; however, it will take more than two years for the part-time student.

Graduates of the BMT program will have the skills and knowledge to manage and operate their own business. Those students not interested in business ownership may be employed in mid-management positions as supervisors, managers or department managers in businesses such as depariment stores, restaurants, grocery stores, banks and factories.

## Firss year

## General education

ENG 110,111 and/or 112 (3-8)
IPC 102 (3)
Basic courses
MATH 120 or MATH 126 (5)
MIS 200 (3)
Core courses
BAT 102 and 201 (6)
Technical elective (3-4)

## Second year

General education
ECON 202 or 203 (3)
General education electives (6)
Basic courses
STAT 200 and BUSE 101, or STAT 2.11 and STAT 212 (6)
BA 203 (3)
Core courses
Finance elective (3)
ACCT 221 (3)
BAT 204 or MKT 300 (3)
BAT 205 and 208 (6)
BAT 209 or MGMT 305 (3)
Technical elective (3-4)

## Retall Management Specializaticn Planned program

The retail management specialization, under the general business management technology program, prepares an individual to serve at mid-management levels in retailing organizations and to provide sales and marketing sevices appropriate to the needs of the ultimate consumer.

A sequence of courses in total quality leadership and resources management, business economics, word processing of business communications, accounting spreadsheet utilization, marketing and retail
management, psychology and professional
selling, together with an optional field
perience, provide students with a
mprehensive background in the area of retail management.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPC 102 (3)
Basic courses
MATH 120 or MATH 126 (5)
MIS 200 or BUSE 321 (3)
Core courses
BAT 102, 201, 205 and 209 (12)
ECON 202 (3)

## Second year

General education
Science elective (3)
Social/behavioral science (3-4)
Humanities elective (3)
Basic courses
STAT 200 and BUSE 101, or STAT 211 and 212 (6)
BA 203 (3)
Core courses
ACCT 221 (3)
BAT 204 and 208 (6)
BAT 280 (3)
Finance elective (3)

## Industrial Management

Specialization

## Planned Program

e industrial management specialization,
der the general business management technology program, prepares an individual for assignment in planning, organizing and controlling the manufacturing operation, including supervisory and management techniques and systems used in production.

A sequence of courses in total quality leadership and resources management, business finance and economics, production management, occupational safety and hygiene, statistical process control, word processing of business communications, accounting spreadsheet utilization and psychology provide students with specialized knowledge and practical skills in industrial management.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPC 102 (3)
Basic courses
MATH 120 or MATH 126 (5)
General education elective (3-4)
Core courses
BAT 102 and 201 (6)
BAT 209 or MGMT 305 (3)
ENVT 270 (3)
MFG 112 (3)
DESN 104 (3)
cond year
meral education
ECON 203 (3)
General education elective (3-4)

## Basic courses

STAT 200 and BUSE 101, or STAT 211 and 212 (6)
BA 203 (3)
MIS 200 (3)
Core courses
ACCT 221 (3)
BAT 203 or MGMT 300 (3)
BAT 222 and MFG 243 (6)
Finance elective (3)

## Computer Programming Technology

Ronald L. Lehr, program director 232 North Building

## Planned program

Computer programming technicians are twoyear college graduates with an associate of applied business degree. This program will prepare students for employment as microcomputer specialists, application programmers, or programmer/analysts. The emphasis of the program is the microcomputer environment. Graduates will have learned principles of computer logic and decision making, computer languages, selection and implementation of microcomputer hardware and software, use of popular microcomputer software packages (Win-dows-based word processing, spreadsheets, database). Advanced programming skills such as structured design, system implementation, basic system architecture and techniques of systems analysis. Career opportunities exist in business, industry, education, government or public service.

## First year

## General education

## ENG 110, 111 and/or 112 (3-8)

Social sciences or humanities and arts or U.S. cultural diversity area. If pursuing a baccalaureate degree, a student may want to choose a course with an international perspective. (3-5)
Basic courses
MIS 200 (3)
MATH 120 or above (excluding MATH 214, 242, 243) (5)
MATH 115 or STAT 200 or STAT 211 (3)
Computer core
CS 101 and 205 and CST 181 (9)

## Second year

General education
IPC 102 or $306^{\prime}$ (3)
Social sciences or humanities and art or
U.S. cultural diversity area. If pursuing a baccalaureate degree, a student may want to choose a course with an international perspective. (3-5)
Basic courses
Natural science elective (3-5)
Computer core
CST 232 and 261 (7)
CS 215 (3)

## Business

ACCT 221 (3)
BAT 102 or 205 (3)
Technical elective (2 hours minimum)

## Administrative Office Systems

Dr. Teresa A. Marano, program director 311D West Building

The two-year program prepares students for secretarial responsibilities in business and industrial firms, professional offices and governmental agencies. Upon successful completion of the two-year program, students receive an associate of applied business.

The program is designed to provide students with training in secretarial and information processing skills (word processing, spreadsheet, database, and desktop publishing) and with knowledge of business and communication theory to enhance their opportunities for career advancement. The program can meet the needs of both beginning and advanced secretarial students, and credits received may be applied toward a four-year baccalaureate degree in a related field.

In addition to the two-year program, oneyear certificate programs are offered in administrative support secretary, desktop publishing specialist, information processor, and medical transcriber.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPC 102 (3)
Basic courses
BUSE 101 (3)
MIS 200 (3)
Core courses
BUSE 111, 201, 204, 205, 206, 207, 210, 217 or 311 (14)

## Second year

General education
Humanities or natural sciences or U.S. cultural diversity area. If pursuing a baccalaureate degree, a student may want to choose a course with an international perspective. (5-8)
Basic courses
ECON 200/202 (3)
ACCT 220/221 (3)
LEGS 301 or BAT 102 (3)
Core courses
BA 203 (3)
BUSE 253, 304, 305, 306, 307, 335, 401(18)
BUSE 314 (2)

## Office Support Specialist

The one-year administrative support secretary option prepares students for entrylevel receptionist/secretary positions.

The program is ideal for individuals wishing to re-enter the secretarial field. The program is arranged so that credits received
in a one-year program may be transferred if a student decides to pursue a two- or fouryear degree in a related field. To receive the administrative support secretary certificate, the student must have at least a 2.0 grade point for all work attempted.

## Oneyear cermiferte

Gsneral education
ENG 110,111 and/or 112 (3-8)
IPC 102 (3)
Easic course
BUSE 101 (3)
Core courses
BA 203 (3)
BUSE 111, 201, 204, 205, 206, 210, 213, 217, 335 (16)

## 

The one-year desktop publishing specialist program prepares students to integrate basic design principles with dasktop publishing stills. Students receive training with word processing, spreadsheet, and database software and the integration of these sofware programs with desktop publishing.

The program is arranged so that credits received in a one-year program may be transtarred it a student decides to pursue a two- or four-year degree in a related field. To receive the desktop publishing specialist cortilicate, the student must have at least a 2.0 grade point tor all work attempted.

## Oneyedr certhicate

Ceneral education
ENG 110,111 and/or 112 (3-8)
IPC 102 (3)
Beasic course
BUSE 101 (3)
Core courses
DUSE 111. 204, 204, 205, 206, 207, 210, $304,305,306,307,335(20)$

## tunformanion Procossing Specialist splien

The one-year information processor option prepares students for positions working with computers. Students receive training with word processing, spreadsheet, and database software and dovelop skills in preparing documents through the use of transcription equipment.

The program is arranged so that credits received in a one-year program may be transierred if a student decides to pursue a two- or four-year degree in a related field. To receive the information processor certificate, the student must have at least a 2.0 grade point average for all work attempted.

## One-jear cartificate

General education
ENG 110, 111, and/or 112 (3-8)
IPG 102 (3)
Basic course
BUSE 101 (3)
Coro courses
BUSE $111,201,204,205,206,207,210$, $217,304,305,306,335$ (19)

## Medical Transcribing Specialist Option

The medical transcriber is responsible for transcribing medical information and reports from transcription equipment onto paper in a complete and accurate manner. Career opportunities exist in the medical record departments of hospitals, physicians' offices, private clinics and other settings.

The program consists of selected courses from both the secretarial administrative sciences program and the health information technology program, and students may continue in either program for an associate degree. To receive the medical processor certificate, the student must have at least a 2.0 grade point average for all work completed.

One-year certificate
General education
ENG 110, 111 and/or 112 (3-8)
IPC 102 (3)
Basic course
BUSE 101 (3)
Core courses
BUSE 111, 201, 204, 205, 206, 210, 304 and 335 (13)
MRT 101, 102 (5)

## Associate of Applied Science

Two-year, career-oriented curricula exist leading to the associate of applied science degree. These programs prepare students for immediate employment in area communities and elsewhere, and also may be transferred to similarly oriented baccalaureate degree programs.

General education requirements are part of the curriculum and are taken in some related general education field (such as English, speech, psychology), in appropriately related disciplines (such as mathematics and science, physical science) and in specific major areas.

Applied science programs offered at Firelands include:

Electrical/Electronics Engineering Technology
Health Information Technology
Respiratory Care Technology
World Class Manufacturing Technology

## Associate of Applied Sclence Requirements

This degree is awarded to a student who successfully completes one of the careeroriented programs listed below and the general associate degree requirements listed under Academic Policies.

## Electrical/Electronics Engineering Techmotoge

Dr. Jan E. Adams, program director 320D West Building

## Planned program

Academic preparation for this program emphasizes digital electronics and microcomputer electronics with robotics applications. Also covered are basic electricity and electronics circuits, instrumentation and measurements, power and energy, materials processing and computer-aided design. The program prepares students for positions as engineering assistants, engineering technologists, production technicians, instrument calibration and repair technicians, field service technicians, customer service representatives and other entry-level positions in electronic engineering technology. Students who complete the associate degree have also reached the halfway point in progress toward a baccalaureate degree.

## First year

General Education
ENG 110, 111 and/or 112 (3-8)
Basic Courses
MATH 120/129, 126 or 131 (5)
DESN 104 (3)
Core courses
ET 191, 240 and 249 (11)
DESN 131 (2)
MFG 112 and 340 (6)

## Second year

General education
IPC 102 (3)
Social science, humanities and arts or U.S. cultural diversity area. If pursuing a baccalaureate degree, a studeni may want to choose a course with an international perspective. ( $6-9$ )
Basic courses
CS 101 (3)/ PHYS 201 (5)
ENVT 270 or PHYS 202 (3-5)
STAT 200 (3)
Core courses
ET $241,250,290,442(12)$

## World Class <br> Manufacturping Technology

Dr. James M. Smith, program director 152 North Building

## Pianned Program

This program emphasizes three technical areas: design, industrial management and manufacturing processes.

Manufacturing courses provide an understanding of processes with hands-on emphasis on programming and operating computer-controlled machines (CNC) and robots. A sequence of drafting and design courses provide practical skills in computer. aided design and the technical knowledge to
provide specifications for manufactured products. Quality and industrial management urses emphasize the application of tistics and management techniques that maximize quality and workplace safety. Graduates are employed in business and industry and are prepared to continue for a bachelor's degree in manufacturing or mechanical design or quality.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
Elective (3)
Basic courses
MATH 128 or MATH 120 and MATH 129 (5-7)
MIS 200 or CS 101 (3)
DESN 104 (3)
Core courses
MFG 112, 222 and 340(9) "
DESN 131 (2)
ENVT 270 (3)
Second year
General education
IPC 102 (3)
Social science, humanities and arts or U.S. cultural diversity area. If pursuing a baccalaureate degree, a student may want to choose a course with an international perspective. (3-6)
Basic courses
PHYS 201 (5)
re courses
MFG 243 and 428 (6)
DESN 204 (3).
DESN 231 or MFG 225 (2-3)
ET 191 (3)
STAT 200 (3)
BAT 209 or MGMT 300 or 305

## Health Information Technology

Mona M. Burke, RRA, program director 235 North Building

## Planned program

Health information is found in many places in a variety of formats. As a health information practitioner, an Accredited Record Technician (ART) specializes in evaluating, controlling and maintaining the information contained in all types of health records. Career opportunities include positions in group practices, long-term care facilities, hospital health information management departments, attorneys' offices, health maintenance organizations, professional review organizations, ambulatory care facilities, public health agencies, mental health facilities and many others. The positions include all aspects of medical record technical level tasks: filing and retrieval, analyzing, coding, indexing, mpiling statistics, answering subpoenas, lization review, quality assessment, medical research, medical-legal correspondence, abstracting, transcribing, and compiling and presenting medical data
through the use of computerized systems.
Directed practices allow the student to apply theory learned in the classroom and technical level skills developed in the laboratory to be applied to a health information management department setting. This clinical direction takes place during the second year of study. Students may not take the responsibility or the place of "qualified" staff. However, after demonstrating proficiency, students may be permitted to perform procedures with careful supervision. Students may be employed in the clinical facility outside regular education hours provided the work is limited so it does not interfere with regular or academic responsibilities. The work must be non-compulsory, paid and subject to employee regulations.

The program has been granted accreditation status through the Commission on Accreditation of Allied Health Educational Programs, in cooperation with the Council on Accreditation of the American Health Information Management Association. This accreditation allows graduates to sit for a national examination sponsored by the American Health Information Management Association. Upon successful completion of the accreditation examination, the student receives Accredited Record Technician (ART) credentials.

The health information technology curriculum is based on written goals and standards, consistent with and responsive to the demonstrated needs and expectations of the health care community served by Firelands College. Instruction in the program is based on a curriculum which documents the objectives/competencies to be developed and the methods whereby they are achieved and evaluated. The health information curriculum shall lead students to develop the Domains, Tasks and Subtasks for Accredited Record Technicians, identified by the profession as currently encompassing the following four areas:

1. Assess institutional and patient-related information needs and departmental (i.e., medical record, quality assurance, cancer register or similar department) information, service and operational needs.
2. Design and select departmental service and operational systems.
3. Implement departmental service and operations systems, and information systems for patient-related data.
4. Evaluate departmental, operational and service systems, and information systems for patient-related data.
Due to limitations in clinical directed practice assignments as well as available laboratory facilities, enrollment in the HIT program may be limited during a given year. Prospective students are encouraged to make contact with the program director at least one year prior to planned enrollment in the program to adequately prepare for admission to the professional core of the program.

Admission standards may include but are
not limited to SAT/ACT scores, placement test scoring, current grade point averages, letters of reference and a personal interview. Standards and other steps in the application process are provided by the program director on request. All students requesting admission to the program through MRT 100 should contact the program director for a copy of this procedure approximately six months to one year before their planned admission to the program.

Students who have been academically suspended or otherwise suspended/ dismissed from the University and later reinstated must also reapply for reinstatement to the program. Reinstatement to the University does not carry with it automatic reinstatement to the program.

To be admitted to as well as continue in the professional program in health information technology, the student must meet the following matriculation standards before eligibility for directed practice or other clinical experience (as applicable) is determined:

1. Successful completion of HIT 100, 101, 102, 112, 204, and RT 101.
2. GPA of at least 2.5 or better in all HIT coursework attempted with an overall GPA of 2.0 or better.
3. Permission of instructor.

Any/all HIT students enrolled in a course which involves clinical experience, or enrolled in HIT 201 or 202 specifically; may not participate in that clinical experience if they are currently on academic or other college-related warning, probation, suspension or dismissal proceedings.

Before clinical assignments can be made, the student must have a physical exam on file with the HIT program director, show evidence of auto insurance policy, apply for liability insurance through BGSU and receive permission from the program director for clinical assignment.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
Basic courses
CS 180 (1)
BAT 209 (3)
RT 101 (5)
Core courses
HIT 100, 101, 102, 104, 112, 203, 204
(20)
*Technical Elective (1)

## Second year

General education IPC 102 (3) PSYC 201 (4)
General studies
Electives (6)
Basic courses
MIS 200 (3)
MATH 115 or STAT 200 (3)
Core courses
HIT 200, 201, 205, 210, 211, 213, 215 , 220 (17)
BAT 205

##  <br> 冝อcintiology

Rod C Roark, R.A.T., program director 209 West Bullding

Planned program
Respitatory care is an allied health specialty concemed with the treatment, management, control, dlagnostic evaluation and care of patients of all ages with deficiencies and abnomallies associated with the cardiopulmonary system. The respiratory therapist must be proficient in the delivery of medical gases, aerosol and humidity modalities, intermittent and continuous mechanical ventilailon, bronchopulmonary hygiene, cardiopulmonary resuscitation, pulmonary function assessment and airway management.

This program prepares students to function with understanding, skill and competence in the practice of respiratory care. Theory and laboratory practice are provided prior fo olinical rotations. Clinical experience is achieved in a variety of settings while under the supervision of selected clinical instructors.

Program graduates are eligible to sit for the National Board for Respiratory Care examinations to become a Registered Fsepiratory Therapist. Graduates must also selisty all requirements of the Ohio Respirasory Care Board to obtain a license to practice in the state of Ohio. Requirements to practice respiratory care in other states are dictated by individual state law.

Admission to the program is limited to the number of students which can be accommodated by the faculty and clinical sites. Following admission to the University, the student is responsible for filing a separate application with the respiratory care program dlrector. Criteria for and information about program admission is available upon roguest. Applications for admission musi be received by July 15 for consideration for the upcoming year.

Prognam acereditation
The program is fully accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP)through the Joint Review Committee for Respiratory Therapy Education (JRCRTE).
program entrance requirements Siudents intercsted in majoring in respiratory care technology must make formal application to the program. Students must meet the following criteria for consideration:

1. Be formally admitted to BGSU.
2. Be a graduate of an accredited senior high school and have attained an overall GPA of 2.0, OF, heve completed twelve (12) semester hours of collegs work with an overall GPA of 2.0 or higher.
3. Achieve placement test scores exceeding entrance into or successful completion of MATH 098, ENG 112 and EDCI 100.
4. Have completed one year of high school chemistry or its equivalent with a grade of $C$ or better within the past seven years OR have credit for CHEM 100 with a grade of C or better.
5. Complete a tour of a clinical setting where respiratory care is performed and submit an Observation Verification Form, which can be obtained from the program director.

## Program progression/completion

After gaining admittance into the program, students must continue to meet the following standards to progress in the program:

1. Maintain a cumulative GPA of 2.5 or higher.
2. Earn a grade of $C$ or better in all RT courses.
3. Successfully complete the following NBRC/AMP self assessment examinations: Entry Level Exam, Advanced Practitioner Exam (RRT Written).
4. Comply with RT Clinical Policies and Procedures.

## Admittance into clinicals

To be admitted to the clinical portion of the program, students must meet the following requirements:

1. Successful completion of all prerequisite coursework;
2. Have a completed physical examination form on file with the program;
3. Submit evidence of an auto insuranco policy;
4. Apply for liability insurance through BGSU.
5. Submit a copy of a CPR card indicating successful completion of an AHA Health Care Providers course.
6. Comply with R.T. Policies and Procedures (see RT Policy and Procedure Manual). Clinical slots may be limited during a given year. In the event that more students meet clinical admission standards than there are slots available, admission will be determined by a rank ordering based upon grade point average and program hours completed.

## Expenses for Clinical Training

The student is responsible for the following expenses incurred as a result of participation in clinical training. Prospective students may contact the program director for information on estimated costs.
i. Pre-clinical physical exam, lab work and immunizations
2. Professional liability insurance (minimum $\$ 1,000,000 / \$ 3,000,000$ coverage)
3. Textbooks and/or clinical training manuals and folders
4. Transportation to and from clinical training sites
5. Meals while at clinical sites (students generally receive any cafeteria discounts offered to employees),
6. Scrub attire, lab coats and/or uniforms
7. Stethoscope
8. BGSU/Firelands student nametag
9. NBRC/AMP Self-Assessment Examinations (Students are required to take the Entry Level, Written Advanced Practitioner and Clinical Simulation exams)
The following are generally provided at no cost to the student:

## 1. Hospital ID/nametags

2. Parking at most clinical sites

## Scholarships

Hospital-sponsored scholarships are available for deserving respiratory care students through the Firelands College Scholarship Program. Other organizations also sponsor scholarships for which students preparing for allied health careers may be eligible.

## Firsíyear

General education
ENG 112 (3)
IPC 102 or 306 (3)
Basic courses
STAT 200 (3) or MATH 115 (3) Or MATH 120 (5)
RT 101 or BIOL 331 (4) and BIOL 332 (4)
CHEM 109 and 110 (4)
ENVT 110 or BIOL 314/315 (4)
Core courses
RT 120 (3)
RT 121 (3)
RT 140 (3)
RT 151 (2)
RT 202 (3)

## Summer session

Core courses
RT 221 (4)
AT 252 (2)

## Second year

General education
PSYC 201 (4)
PHIL 342 (4)
Elective (3)
Basic courses
RT 203 (4)
Core courses
RT 222 (3)
RT 232 (3)
AT 253 (4)
RT 254 (4)
RT 290 (1-3) optional

Associate of Science
Dr. John P. Pommersheim, program director 320c West Building

Firelands College offers two years of general education courses leading to the Associate of Science degree. This degree is designed to provide a student with junior standing towards the completion of the Bachelor of Science degree in the College of Arts and Sciences at Bowling Green State University

The associate of science degree progran: is designed to provide pre-baccalaureate students with a sound academic background in a number of academic disciplines such as
the biological sciences, computer science, chemistry, geology, physical geography,
mathematics and physics/electronics.
In addition, the associate of science
degree offers the foundation to many career
opportunities, such as:
Applied mathematician
Chemist
Microbiologist
Physicist
Pre-professional
chiropractic
dental hygiene
dentistry
engineering
medicine
mortuary science
occupational therapy
optometry
pharmacy
physical therapy
veterinary medicine
Secondary school teacher
Wildlife management

## General requirements for the associate of science degree are:

Communication ( 6 hrs. minimum) Each student is required to acquire proficiency in written expression and oral communication. ENG 112 is required. Based on. English Placement Tests, ENG 110 or ENG 111 may also be required. The Office of Student Services will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPC 102 is required.

Mathernatics/Science (20 hrs. minimum) Each student must complete a minimum of 20 hours from at least two of the following disciplines: astronomy, biology, chemistry, geology, physical geography and physics. A laboratory sequence in biology, chemistry, geology or physics is required. MATH 131 (5) or higher level (except MATH 241 and 242) is required.

Social and behavioral sciences (12 hrs. minimum)
Each student must complete a minimum of 12 hours from at least three of the following disciplines: economics, physical or cultural geography, history, political science, psychology and sociology.

Arts and humanities (10 hrs. minimum) Each student must complete a minimum of 10 hours from at least two of the following disciplines: art, English, philosophy, humanities, popular culture and theatre. One course in ENG literature is required.

## Transfer requirements

Students planning on pursuing a baccalaureate degree should choose a course that satisfies the cultural diversity in the U.S. requirement and one course with an international perspective. This course can be taken from the social and behavioral
sciences or humanities and arts. See page 6 for a list of courses meeting these requirements.

## Electives

Each student must select a sufficient number of electives to earn a minimum of 62 hours. A student planning to pursue a baccalaureate degree in arts and sciences is encouraged to take a foreign language.

## Associate of Technical Study

M. Peter Henning III, program director 155 North Building

The Associate of Technical Study is designed to help students to prepare individually for specialized technical occupations. The program is a two-year curriculum which enables students to devote their particular talents and training to occupational areas not otherwise addressed by existing college programs. Specifically it is intended to afford the following potentials:

- Provide a coherent combination of existing degree programs and interdisciplinary flexible options to students.
- Provide flexibility and responsiveness to adult learning related to employment by developing close integration of degree and non-degree instruction components to maximize student progress toward recognized credentials.


## Admission into the ATS Program

Firelands College, Bowling Green State University, is an open admissions institution. However, every effort is made to assure that students are admitted to programs in which they have a reasonable chance for success. Further, we attempt to ascertain their career goals and objectives in order to provide the best match for them in terms of a career direction. Only those students who are identified as being unable to accomplish their educational goals through one of our existing programs will be advised into the Associate of Technical Study program. At that point students will be informed of available resources, faculty and staff to assist them in designing their individualized degree.

The student will work with an adviser to complete the application and develop a proposed program. The application then will be forwarded to a committee. The committee will evaluate the application and if it is acceptable the student will be requested to consult appropriate faculty members. Students unable or unwilling to meet the college degree requirements, or who have submitted a proposal which is deemed unacceptable, will be denied admission to the program.

## Program Planning

Each student entering the program will be assigned to the director of student services at Firelands College as well as to a faculty
member within the primary area of interest. The further development of the educational plan will be done jointly by the student, the director of academic services and the faculty member each semester.

Any changes in the educational plan will require the signature of both faculty member and the adviser and concurrence by the ATS Committee. Students beginning at Firelands College will be required to submit a plan of action prior to having earned 40 semester hours of credit in the college. It is explicitly understood that all of the OBOR standards for approval of the Associate of Technical Study degree will be adhered to. This will include the fact that following approval of the application, each candidate will be required to complete no less than 33 semester credit hours of course work under the supervision of the college. It is further understood that a maximum of 30 semester hours can be recognized by our college for approved college level course work completed in other public, private or proprietary post-secondary institutions, and schools conducted by business and industry, prior to the declaration of candidacy for this degree. This means that students transferring from other institutions will be required to complete a minimum of 30 semester hours at Firelands College.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPC 102 (3)
Basic courses
Computation/math elective (3-5)
Computer literacy elective (3)
Science/math/computer science elective (3-5)
Core courses
Technical electives (16)

## Second year

## General education

Social/behavioral science elective (3)
Humanities/fine arts elective (3)
If necessary, choose an additional course social and behavioral science or humanities and arts area in the international perspective/U.S. cultural diversity ${ }^{2}$ area to fulfill the 15 hours of general education.

## Basic courses

Computation/math elective or science/ math/computer science elective (6)
Core courses
Technical electives (16)

## Communication Arts Technology

The World Wide Web, digital technology and integrative communication systems are revolutionizing the communications industry. This Associate of Technical Study planned program will provide students with the knowledge and skills needed to understand and effectively apply existing and emerging
communication technologies and processes. Students can choose from three career options: arts/production, communication iechnology and business. Graduates will be able to apply technical skills, teach technical applicalions in a business setting and sell communlcation technologies.

## First year

General education
ENG 112
MATH 120
TCOM 103/JOUR 100
PC 102 or 306
PHYS
Technleal education
Cs 101
MiS 200
CST 181
CAT191
Core courses
Atrs/Production emphasis
ART 102
Communication Technology emphasis ET 240
Eusiness emphasis
BAT 102
Secort year
General education
PHYS
ENC 388
PLIL $102 / 320$
Technical educalion
VCT 203
BAT 205
CAT 251
CST 281
CAT 231
Core courses
Arts/Production emphasis
ARTO 211
VCT 368/BUSE 253NCT elective BUSE 207
Communication Technology emphasis ET 241 51245
Business emphasis
BAT 204
BAT 208
VCT elective

## Measurement Systems

## Tesurioblog

Jan E. Adams, Ph.D., program director, 320D
West Building
This Associate of Technical Study planned program provides the graduate with the theory and practice for the installation, adjusiment and calibration of electrical/ electronic devices used in monitoring ongoing industrial operations or results of research applications. Graduates of this program wil be able to provide technical assistance in the setting up and maintenance of real-time data acquisition systems.

## First year

MATH 128 or 131 (5)
ET 191 or 196 (3)
MFG 112 (3)
DESN 104 (3)
ENG 112 (3)
PHYS 201 or 211 (5)
ET 240, 241 and 249 (11)
DESN 131 (2) or MFG 222 (3)
CS 101 (3)
General studies (3)

## Second year

STAT 200 or 211 (3)
ET 250 (4)
DESN 243 (3)
ET 247 (3)
ET 290 (2)
ET 442 (3)
IPC 102 or 306 (3)
MFG 235 (3)
General studies (6)

## Nursing

Mary J. DeVos, RN, MSN
Coordinator, Nursing Programs
225 West Building
The Medical College of Ohio School of Nursing, in consortium with Bowling Green State University, offers two programs at Firelands College which lead to a bachelor of science degree in nursing.

## Bachelor of Science in Nursing

Students interested in earning this degree from Bowling Green State University can complete the first two years of this four-year program at Firelands College. The professional nursing courses are offered at the Medical College of Ohio at Toledo.

Successful completion of the preprofessional requirements is a prerequisite for admission to the professional nursing program which is limited by the avallability of clinical facilities and faculty. Admission to the professional program is competitive and based upon:
i. Completion of:

ENG 112
MATH-demonstrated competency above 095 level
CHEM 109, 110, 117, 118
BIOL 205
PSYC 201
2. A minimum accumulative grade point average of 2.5 in the preprofessional program.
3. Completion of 29 semester hours of credit.
Admission applications are available from the nursing office in December of each year.

## Suggested preprofessional program First year

CHEM 109, 110, 117, 118 (8)
MATH-demonstrated competency above 095 level
SOC 101 (3)
ENG 111 and ENG 112 (3-6)
BIOL 205 (5)
PSYC 201 (4)
NURS 100 (i)
Humanities elective (3)

## Second year

PHIL 342 or 102 (3)
BIOL 314, 315, 331 and 332 (12)
EDFI 490 or PSYC 240 (3)
F\&N 207 or 307 (3)
Literature (3)
PSYC 270, SOC 369 or MATH 115 (3)
PSYC 405 (3)
The above is a suggested program that may be modified according to individual needs and capabilities. The School of Nursing recommends academic advisement as the student progresses.

Transfer requirements
Students planning on pursuing a baccalaureate degree should choose a course with an international perspective, taken from the social and behavioral sciences or humanities and arts.

## Bachelor ar \$cience mim Nursing for the registered murse

The School of Nursing also offers an opportunity for graduates of associate degree and diploma programs to earn a. baccalaureate degree with a major in nursing. This alternate track for the RN student provides for flexibility and an individualized approach for the nurse who is already practicing.

## Admission Requirements

Criteria for seeking admission to the major:

1. minimum of 29 semester hours of college credit including prerequisite courses in chemistry and biology or equivalents with minimum GPA of 2.5
2. successful completion of selected National League ior Nursing Examinations or substitute
3. current license to practice in the state of Ohio
4. completion of general college requirements
5. professional liability/malpractice insurance
6. graduation from an NLN accredited school

There are 28 hours in the nursing major. Typically students take the 28 hours parttime spread out over two years.

An accelerated plan is possible; however, prior approval must be obtained through the nursing adviser.

The nursing courses are offered at Firelands College.

## Associate of Applied

## Science in Nursing

Hope M. Moon, R.N., M.S.N., coordinator, 201B West Building
Lorain County Community College/Firelands
College cooperative arrangement
Lorain County Community College brings its National League for Nursing accredited associate degree nursing program to the campus of Firelands College. This program offers the citizens of Erie, Huron, Ottawa and Sandusky counties the opportunity to obtain Registered Nurse status from a stateassisted college. All support courses may be taken at Firelands College and will transfer to Lorain County Community College. The nursing courses are LCCC courses that are offered on the Firelands campus. All students are enrolled as BGSU students for support courses and as LCCC students for nursing courses. Clinical work is done at Fisher-Titus Hospital in Norwalk and at Firelands Community Hospital in Sandusky. The associate of applied science in nursing degree is earned from Lorain County Community College.

# ${ }^{\circ}$ Course Descriptions 

A $\Delta$ preceding a course number indicates that the course is offered both at Firelands and on the main campus.
A $\dagger$ preceding a course number indicates that the course is offered only at Firelands.
A \| preceding a course number indicates that the course may be used to fulfill a general education requirement.
The Arabic number in parentheses following the title of the course indicates the number of semester hours of credit.
Courses numbered from 100 to 199 are ordinarily for freshmen or sophomores.
Courses numbered from 200 to $\mathbf{2 9 9}$ are for sophomores, juniors and seniors and are not ordinarily open to freshmen.
Courses numbered from 300 to 499 are ordinarily open to juniors and seniors but under exceptional circuumstances may be taken by a freshman or sophomore upon the recommendation of his or her adviser and with the written approval of the instructor of the course or the chair of the department concerned.

## Accounting (ACCT)

The availability of summer classes and electives is subject to demand.

## $\triangle A C C T$ 221. Accounting and Business

Concepts. I (3) Fall, Spring, Summer.
Concepts and issues of organizational reporting are introduced within the context of financial and managerial accounting, systems, taxation, and auditing and are illustrated through the use of examples involving international and domestic businesses, non-profit, and government organizations. The course is designed to enhance group dynamics, communications skills, use of electronic media, and inquiries into ethics and values within the accounting environment. Prerequisite: sophomore standing or consent of the department.
$\triangle A C C T$ 222. Accounting and Business Concepts II (3) Fall, Spring, Summer. ACCT 221 continued. Prerequisite: ACCT 221.

ССT 321. Intermediate Financial ccounting I (3) Fall, Spring, Summer. Development and application of financial accounting concepts and generally accepted accounting principles. Preparation of
financial statements and accounting for changes in accounting principles. Emphasis on valuation and cost allocation methods for assets and related effects on income statements. Prerequisite: admission to upper-level accounting classes or consent of department.

## ACCT 322. Intermediate Financial

Accounting II (3) Fall, Spring, Summer. ACCT 321 continued with emphasis on longterm liabilities, pensions, leases, stockholder's equity, income tax allocation, accounting for inflation and the statement of changes in financial position. Prerequisite: grade of C or better in ACCT 321.
$\triangle A C C T$ 325. Accounting Concepts for Non-business Students (3) Fall, Spring, Summer. Accounting concepts and procedures and their contribution to administrative processes. Enterprise analysis, relevant data, its uses and limitations. Not applicable to pre-professional core requirements in the College of Business. No credit allowed toward BSBA degree. Prerequisite: junior standing.

ACCT 331. Cost Accounting (3) Fall, Spring, Summer. Cost determination and cost accounting systems. Cost analysis using regression methods. Job order, process, standard and variable cost systems. Accounting for spoilage, service departments and joint products. Prerequisite: admission to upper-level accounting classes and STAT 212 , or consent of department.

ACCT 332. Intermediate Managerial Accounting (3) Fall, Spring, Summer. Accounting's relationship to planning and control function. Budgeting, corporate planning models, cost-volume-profit analysis, relevant data, capital budgeting, data for operations research models, behavioral considerations, enriched variance systems, evaluation of performance and transier. pricing. Prerequisite: grade of C or better in ACCT 331.

ACCT 341. Introduction to Federal Taxation (3) Fall, Spring, Summer. History, assumptions, objectives of federal tax. system. Determination of an entity's taxable and nontaxable incomes, capital gains and losses, deductions and exemptions, and
special provisions. Reporting requirements and determination of tax liability. Introduction to federal tax research methodology.
Prerequisite: grades of C or better in ACCT 221 and 222, or C or better in ACCT 325. No credit if previous credit earned for ACCT 441.

ACCT 360. Accounting Information
Systems (3) Fall; Spring, Summer . General systems concepts and theory. The collection and processing of accounting information. Internal control aspects of accounting systems. Systems life cycle in an accounting framework. The interface of accounting systems and computer technology. Prerequisite: Admission to upper level accounting classes, MIS 200, and C or better in Acct 321, or consent of Department.

ACCT 442. Advanced Federal Taxation (3) Spring. Determination of taxable income and reporting requirements unique to corporations, partnerships and Subchapter S corporations. Application of federal tax laws to special problems of corporations including stock redemptions, capital structure, liquidation and corporate accumulation. Overview of federal taxation of gifts, estates and trusts. Prerequisite: grade of $C$ or better in ACCT 341.

ACCT 451. Auditing I (3) Fall, Spring, Summer. Auditing principles and procedures for independent verification of financial records and reviews of operations as üsed by internal auditors and public accountants. Nature of audit evidence, evaluation of internal controls, statistical sampling, computer auditing. Prerequisite: grade of C or better in ACCT 360.

ACCT 489. Internship Seminar (1-3) Fall. To be completed at first opportunity following suitable internship experience. Work experience to be preceded by at least 70 hours of academic credit and advance approval by program coordinator. No credit for students with other internship credit in College of Business Administration. Graded S/U.

ACCT 491. Studies in Accounting (1-3) To be arranged. Investigation in depth of selected areas or contemporary problems. May be offered individually as well as in classes depending on student needs and
nature of material. Prerequisite: approval of department.

## Accounting Technology (ACT)

TACt 2as. Electronic Eookkeeping (3). Use of electronic bookkeeping software including general ledger, accounts payable, accounts receivable, invoicing, payroll, purchase orders, inventory, job cost and fixed assets. Computerized accounting using a commercial general ledger package such as Peachtree Complete III.
that 231 . Financial Accounting (3) Fall or spring. Theory and application of generally accepted accounting principles as pronounced by the Financial Accounting Standerds Board (FASB) and the Securities Exchange Commission (SEC). Designed for the associate of applied business accounting program at Firelands. Prequisite: ACCT 221.
tACT 244. Cost Accounting (3) Fall or spring. Theory and application of job-ordercost systems. process cost systems and siandard cost systems. Designed for the asscciate of applied business accounting program at Firelands. Prerequisite: ACCT 222.

FACT 351 . Federal Income Tax (3) Fall or spring. Theory and application of federal income taxes as applied to the individual, sole proprietorship, partnership and corporation. Designed for the associate of applied business accourting program at Firelands.

## Aerospace Studies (AERO)

These courses are for Air Force ROTC. Successful completion of these courses can lead to a commission as an officer in the United States Air Force.

AERC Iti. Aif Force Organization (2) Fall. Organization of the United States Air Force. Focus on missions involving airlift forces, strategic forces, tactical forces as well as overseas forces. Development and employment of weapons systems and logistic support functions. Leadership laboratory activities.

AEHO 142 Air Force Organization (2) Spring. Organization of the United States Air Force. Focus on U.S. Defense policies, military balance between U.S. and eastern European forces as well as capabilities of Army, Navy and Reserve/Guard forces. Officership/Professionalism and Introduction to fight. Leadership laboratory activities.

AERO 211. Air Force History (2) Fall. Development of air power from the first lighter-than-air vehicles through to the establishment of the Department of the Air Force as an independent military force. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities.

AERO 212. Air Force History (2) Spring. Development of air power since the establishment of the independent Air Force to the present. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities.

AERO 311. Air Force Management (3) Fall. Integrated management course emphasizing individual as a leader in the Air Force. Human behavior, individual and in groups, historical development of management thought, discussion of classical leadership theory; oral and written communication, military writing, and briefing formats. Leadership laboratory activities. Prerequisite: departmental approval.

## AERO 312. Air Force Management (3)

 Spring. AERO 311 continued. Air Force leadership, planning, organizing, coordinating, directing and controlling functions of management with emphasis on Air Force application, concept of command and staff, junior officer as administrative leader, Air Force personnel system, management of change, managerial strategy in changing environment. Leadership laboratory activities. Prerequisite: departmental approval.AERO 411. American National Security (3) Fall. Role of the President, the Congress and National Security Councit in national security policy making; American defense strategy; alliances; regional security; arms control. Leadership Laboratory activities. Prerequisite: departmental approval.

AERO 412. American National Security (3) Spring. Air Force officer as part of national security forces; military law; laws of armed confict; the military profession; transition to military life; relations with civilian community. Leadership Laboratory activities. Prerequisite: departmental approval.

AERO 491. Air Force Issues (1-3) On demand. In-depth study of selected topics. Offered to individuals in lecture, seminar or independent study depending on student needs and nature of the material. May be repeated twice for up to 6 hours. Contact hours 1 to 3 hour/week. No special fees. Departmental permission required.

## Aerotechnology (AERT)

AERT 099. Flight Evaluation (0) On Demand. Student flight competency evaluation. Prerequisite: Consent of instructor. Lab Fee.
$\triangle A E R T$ 220. Private Pilot Ground School (4) Fall, Spring, Summer. Aerodynamics, aircraft systems, charts, airports, communication procedures, meteorology, regulations, aviation publications, flight computer, medical facts, radio navigation and cross country flight planning. FAA Private PilotAirplane written exam must be passed to receive course credit. Prerequisite: None. Lab fee for FAA written exam.

AERT 221. Private Pilot Flight Instruction
(4) Fall, Spring, Summer. To achieve the necessary flight hours and airmanship competencies required to earn an FAA Private Pilot-Airplane certificate. To receive credit for this course the FAA Private Pilot Airplane certificate must be obtained. This course includes an arranged evening lecture one hour per week. Prerequisite: AERT 220 or concurrent enrollment with prior consent. Lab fee.

## AERT 224. Air Traffic Control \& the

 National Airspace System (3) Fall. A study of the nation's air traffic control system with emphasis on basic air traffic control procedures; the role of centers, approach control, towers, and Flight Service Stations; communications, navigation procedures, radar operations, and facilities. Covers problems encountered in implementing the system, airspace allocation, safety considerations and new developments. Prerequisite: None. Lab fee.AERT 240. Air Transportation (3) Fall, Spring, Summer. History, regulation and administration of air transportation system. Emphasis on air carrier, air taxi, corporate and general aviation. Prerequisite: None. Lab fee.

AERT 280. Instrument Ground School (3) Fall, Spring. (Formeriy AERT 402). Instrument flight planning, meteorology, approach procedures, approach chart interpretation, and instrument flight communications. FAA Instrument-Airplane written exam must be passed to receive course credit. Prerequisites: AERT 220 and AERT 224 or prior consent. Lab fee for FAA written exam.

AERT 281. Basic Instrument Flight Instruction (3) Fall, Spring, Summer. (Formerly AERT 345). First course in a sequence offering approximately half of the solo cross country flight and dual basic instrument flight instruction required for the FAR Part 61 instrument-Airplane rating or FAR Part 141 Commercial Pilot-Airplane
certificate with Instrument-Airplane rating. Prerequisite: AERT 280 or concurrent rollment with prior consent. Lab fee.

AERT 282. Advanced Instrument Flight Instruction (3) Fall, Spring, Summer. (Formerly AERT 403). Second course in a sequence offering additional solo cross country flight and dual advanced instrument flight instruction required for the FAR Part 61 Instrument-Airplane rating or FAR Part 141 Commercial Pilot-Airplane certificate with Instrument-Airplane rating: Prerequisite: AERT 281. Lab fee.

AERT 320. Commercial Ground School (3) Spring. (Formerly AERT 344). Aerodynamics, aircraft systems, commercial pilot operations, weight and balance, and complex aircraft operation. FAA Commercial Pilot-Airplane written exam must be passed to receive course credit. Prerequisite: AERT 220 or prior consent. Lab fee for FAA written exam.

AERT 321. Commercial Flight Instruction (3) Fall, Spring, Summer. (Formerly AERT 346). Aerodynamics, aircraft systems, commercial pilot operations, weight and balance, and complex aircraft operations. FAA Commercial Pilot-Airplane certificate must be obtained to receive course credit. Prerequisite: AERT 281 and 320 or prior consent. Lab fee.

ERT 348. Airport Operations (3) Spring. rrent practices in the operation, maintenance, management and safety of air carrier airports including certification, security, emergency operations and fuel handling. Focus on FAR Parts 107 and 139. Reviews organization and operation of major airport facilities. Prerequisite: None. Lab fee.

AERT 349. Aviation Law (3) Spring. A survey of significant aviation legal cases. Includes airport and passenger liability, tariffs, Worker's Compensation, manufacturers and repairers liability, and national/ international aviation legislation and regulation. Prerequisite: None. Lab fee.

AERT 352. Aviation Safety (3) Spring. Presentation and analysis of factors and procedures relating to aviation safety; techniques for accident prevention, development of safety programs, procedures used in accident investigation, the human factor (physiological and psychological), the effect of weather. Prerequisite: GEOG 213 or prior consent. Lab fee.

AERT 354. Aviation Management (3) Fall. An introduction to management and operations in the aviation service industry. The various aspects and issues of small airports, fixed base operators and general iation are discussed with a focus on urrent practices and procedures. Prerequisite: MGMT 305 or 360 or AERO 311. Lab fee.

AERT 404. Advanced Aerodynamics \& Aircraft Performance (3) Fall. Advanced flight theories including airfoil shape, drag, velocity, lift and thrust, stability and control; advanced principles of performance including capabilities, limitations, design criteria, weight and balance charts, comparative analysis of aircraft, and certification of aircraft. Prerequisites: AERT 320 or prior consent. Lab fee.

AERT 405. Advanced Aircraft Systems (3) Spring. In depth discussion of electrical, mechanical and hydraulic systems on aircraft, design and performance standards, capabilities and limitations, conformance to FAA specification. Prerequisites: AERT 320 or prior consent. Lab fee.

AERT 406. Multiengine Ground School (1) Fall, Spring, and Summer on demand. (Formerly AERT 350). Theory of multiengine airplane operation including the ground instruction necessary for preparation for the FAA multiengine rating. Covers transition to multiengine aircraft, multiengine aircraft systems, operational considerations, and emergency procedures. Prerequisite: AERT 320. Lab fee.

AERT 407. Multiengine Flight Instruction (1) Fall, Spring, Summer. Flight instruction in preparation for the FAA multiengine rating. Covers transition to multiengine aircraft and all normal, abnormal and emergency operating procedures. Prerequisites: FAA Commercial Pilot-Airplane certificate with Instrument-Airplane rating, AERT 406 (may be taken concurrently), or prior consent. Lab fee.

AERT 440. Aviation instructor Ground School (2) Spring. (Formerly AERT 401). Learning theory in an aviation setting, instructor responsibility, lesson planning, and advanced aviation problems. To receive credit for this course FAA Fundamentals of Instructing and either Basic Ground Instructor or Flight Instructor-Airplane written exam must be passed. Prerequisite: AERT. 320. Lab fee for FAA written exam.

AERT 443. Flight Instructor-Airplane (1) Fall, Spring, Summer. Flight instruction preparing the student for FAA Flight instructor-Airplane certification. The course includes comprehensive coverage of flight maneuvers necessary for instructing private and commercial students. Prerequisites: AERT 440 and FAA Commercial PilotAirplane certificate. Lab fee.

AERT 445. Flight Instructor-Instrument (1) Fall, Spring, Summer. Covers ground and flight instruction necessary to complete requirements for a flight instructor- instrument rating. The course includes presentation of methodology used in teaching instrument flight. Prerequisites: Instrument rating and an FAA Flight Instructor-Airplane rating. Lab fee.

## AERT 447. Flight Instructor-Multiengine

(1) On demand. Principles and methodology of teaching multiengine flight. The course includes ground and flight instruction required to prepare for the FAA Flight Instructor-Airplane Multiengine rating. Prerequisites: FAA Flight Instructor-Airplane \& Instrument ratings, AERT 406 and 407, or prior consent. Lab fee.

AERT 456. Airport Planning \& Design (3) On demand. A study of the principles and practices of airport master planning and system planning. Reviews processes and procedures pertaining to planning of airport facilities. Fundamental principles of the airport layout plan and design criteria are covered. Evaluation is made of passenger and cargo terminal layout, ground access, land use planning and space requirements. Prerequisites: DESN 104 or ARCH 105 and DESN 131. Lab fee.

AERT 482. Flight Proficiency (1-3) On Demand. Provides a specialized dual flight instruction course permitting the student and flight instructor to work on mutually agreed areas of proficiency. Prerequisite: consent of instructor. Lab fee.

## AERT 490. Problems in Aerotechnology

 (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in aerotechnology. May be repeated. Prerequisite: consent of College. Materials fee. Graded S/U.
## American Culture Studies (ACS)

П $\triangle A C S$ 200. Introdúction to American Culture Studies (3) Fall, Spring, Summer. Regional, ethnic and economic aspects of American national experience as reflected in verbal, visual and material artifacts. Culture theory and models used to examine selected topics and problems. Required of all American culture studies majors.

TACS 230. Issues in American Civilization (3) Fall, Spring. Characteristically American themes, issues or problems reflecting relationships among ideas, values, traditions, events and personalities. Subject matter designated in schedule of classes; may be repeated once if topics differ.

## $\triangle A C S$ 240. Historical Perspectives on

 American Culture (3) Fall, Spring. Interdisciplinary study of a theme, issue or problem as it relates to historical development of American culture. Designed for non-majors; meets requirement for Group IV.T $\triangle A C S$ 250. Cultural Pluralism in the United States (3) Fall, Spring, Summer. Interdisciplinary exploration of race, ethnicity, class, gender, and sexual orientation in the

United States, emphasizing imaginative expressive forms, such as fiction, poetry, fiim, and the visual arts.
qACS 300. Interpretations of American Culture (3) Fall, Spring. Such theories as frontier thesis, melting pot, cultural pluralism, regionalism, and technocracy and their imaginative expression. Prerequisite: junior standing or consent of instructor. May be repeated if subject differs.

ACS 338. American Environmental History
(3) Spring. Three centuries of changing

American attitudes and actions toward natural environment, rise of conservation movement and development of ecological perspective. Prerequisite ENG 112. Credit allowed for only one of HIST 338, ACS 338.

## A6S 400. The Literature of American

 Culture Studies (3) On demand. Interdisciplinary approach to study of American culture. Required of American culture studies majors, but of interest to students who focus on American culture, society, institutions or economics in their particular disciplines. May be repeated once if topics differ. Prerequisite: senior or permission of instructor.ACS 490. Tutorial in American Culture Stucies (1-3) Fall, Spring. Independent study in special interdisciplinary subject not covered by existing courses. Prerequisite: junior standing; proposal, signed by proposed tutor, must be submitted for approval by undergraduate adviser in American culture studies prior to semester in which tutorial begins.

## Apparel, Merchandising and Interior Design (AMID)

AMID 101. Clothing Design and Construction (3) Fall, Spring. Aesthetic principles of design and analysis of clothing construction methods. Evaluation of basic techniques and their application to construction of garments. Consumer buying of clothing analyzed. Lab fee.

AMID 103. Textiles (3) Fall, Spring. Fiber, yam and fabric structures; finishes; color and design. Selection and care of fabrics for personal and household uses. Lab fee.

AMID 116. Introduction to Interior Design (3) Fall. Overview of the interior design profession; examination of the design process with emphasis on creative problem solving and development of competencies in space planning and presentations.

AMID 117. Interior Design I (3) Fall, Spring. Color drawing techniques used in the simulation of materials in interior and exterior renderings. Experiments with various media,
their uses and limitations as applicable to visual presentations by designers, architects, renderers and illustrators. Two one-hour lectures, one two-hour studio. Lab fee.

AMID 202. Designing with Flat Pattern (3) Fall, Spring. Apparel design techniques using basic flat pattern methods. Create patterns for apparel in various styles of bodices, necklines, collars, sleeves and skirts. Development of original designs and production of the designs in musin and fashion fabric. Prerequisites: AMID 101 and 103. Lab fee.

AMID 204. Introduction to the Fashion Industry (3) Spring. Fashion design and terminology; organization of fashion industry and career opportunities in fashion. Prerequisites: AMID 101 and 103 or consent of instructor.

AMID 219. Interior Design II (3) Fall, Spring. Programming, conceptualization and problem solving for residential and nonresidential environments. Historic preservafion and special population projects also included. Prerequisites: AMID 116, 117. Six studio hours. Lab fee.

AMID 303. Contemporary Interiors (3) Fall, Spring. Design elements, principles and color theory used to create the human environment. Finish and material selection for furnishings and other surface treatments. Lab fee.

AMID 313. Textile Analysis (3) Fall, Spring. Economic, political and cultural forces related to production and use of historic and modern textiles; emphasis on recent technical developments and consumer textiles. Prerequisite: AMID 103. Lab fee.

AMID 319. Interior Design III (3) Fall. Small residential design with emphasis on space planning, furniture selection and layout in children and special populations projects. Prerequisites: AMID 219 and 303. Lab fee.

AMID 329. Interior Design IV (3) Spring. Large residential projects incorporating kitchen and bath detailing and visual presentation. Complete design concept and presentation with special attention to low income, energy conservation and specialized construction details. Prerequisite: AMID 319. Six studio hours. Lab fee.

AMID 333. Specifications, Codes and Special Needs (2) Spring. Specification writing for interior finishes and furniture. Accessing local code information, fire safety and organizations that test product safety.

AMID 340. Computers for Apparel Design (3) Spring. Both a conceptual approach and a laboratory experience are presented in understanding technology in the apparel industry. Problem-solving and computer
procedures for such tasks as textiles and apparel designing, pattern-making, pattern grading and digitizing. Prerequisite: AMID 202. Lab fee.

## AMID 345. Computers and Interior Design

(3) Fall, Spring. Microcomputer applications for the professional practice of interior design; includes computer aided design, spread sheets, specifications and estimations. Prerequisites: CS 100 and AMID 249. Lab fee.

AMID 401. History of Costume (3) Fall. Development of western costume from Egyptian times to present; emphasis on relation of modern costumo to earlier forms of dress. Lab fee.

AMID 402. Fashion Merchandising (3) Fall. Planning, selection and marketing of fashion merchandise, including identification of a target customer, building a fashion image, financial planning, assortments and unit control, fashion promotion and trend merchandising. Prerequisite: AMID 204 or consent of instructor. Lab fee.

AMID 403. The Politics of Clothing and Appearance (3) Spring. Theories and concepts regarding the power of clothing and appearance for individuals and groups from an interdisciplinary perspective. Prorequisite: SOC 202 or PSYC 201.

AMID 404. Tailoring (3) On demand. Specialized techniques of professional tailoring used in construction of a suit or coat. Analysis of quality in ready-to-wear tailored garments. Prerequisite: AMID 202 or consent of instructor. Lab fee.

AMID 406. Housing the Family (3) Spring. Selecting, financing and adapting housing for families with varying lifestyles and needs. Energy efficiency, govemment role in housing, renting and owning options, and psychological needs emphasized. Lab tee.

AMID 412. Advanced Apparel Design (3) Spring. Creative expression and application of principles of apparel design through the media of flat pattern and draping. Development of original design from sketch to finished garment. Prerequisite: AMID 202. Lab fee.

AMID 414. Experimental Clothing Construction (3) Fall. Experimental approach to factors influencing construction of apparel. Prerequisite: AMID 202 or consent of instructor. Lab fee.

AMID 417. Interior Design V (3) Fall. Small non-residential design which incorporates programming, conceptualization, problem solving and evaluation for offices, retail and other small institutions. Prerequisites: AMID 329. Lab fee.

AMID 418. History of Interiors.(3) Fall. uropean and American furniture from 14th rough 20th centuries with corresponding interiors; wall, window and floor treatments and decorative arts. Prerequisite: AMID 303 or consent of instructor.

AMID 419. Interior Design VI (3) Spring. Large nonresidential design incorporating building systems, custom cabinetry and open office systems in historic preservation and adaptive reuse projects. Prerequisites: AMID 333, 417. Six studio hours. Lab fee.

AMID 423. Professional Practice in Interior Design (2) Spring. Ethics and business procedures for interior designers. Estimating, scheduling, budgeting and contract writing for installation of project. Preparation of resumes and portfolios for the profession.

AMID 451 Fashion Illustration (3) Fall. Basic fashion figure rendering (adult and child); rendering using various media; garment construction details; portrayal of texture, color and pattern in fabrics. Prerequisite: ART 101 or 102. Lab fee.

AMID 452. International Trade in Textiles and Apparel (3) Fall. Theories, concepts, and problems relating to the trade and consumption of textiles and clothing products
prldwide. Prerequisites: AMID 204; ECON
2 or equivalent. Lab fee.
AMID 456. Historic Costume and Textile Collections Management (3) Spring. Role and responsibilities of historic costume and textile curator. Policies and procedures for proper administration and care of valuable clothing and textile collections and related material culture. Prerequisites: AMID 401, AMID 458, or consent of instructor. Lab fee.

## AMID 458. History of Twentieth-Century

 Fashion (3) Spring. Relationship between social-cultural forces and fashion, changing styles in men's and women's dress, and individuals who make and promote fashion. Fee.AMID 499. FIT Visiting Student (12-21) Fall, Spring, Summer. Visiting student studying at Fashion Institute of Technology in New York City. May be repeated. Prerequisites: Senior standing and consent of fashion merchandising program director. Graded S/. U.

## Applied Mathematics and Statistics (AMS)

MS 100. Developmental Mathematics Fall, Spring, Summer. Review of basic mathematics such as equations, inequalities, exponents and radicals, logarithms, polynominal functions, graphs and applications. Graded S/U.

## Applied Statistics (STAT)**

The availability of summer classes and electives is subject to demand.
$\Delta$ STAT 200. Using Statistics (3) Fall, Spring. Descriptive statistics, probability distributions, estimation, hypothesis testing, regression, contingency tables. Interpretation and misinterpretation of statistical techniques. Does not count toward graduation credit for students receiving BSBA:
$\triangle$ STAT 211. Elementary Statistical Methods I (3) Fall, Spring. Elementary probability, random variables, probability distributions, sampling, descriptive statistics, sampling distributions, estimation. Prerequisite: Credit for MATH 126 or MATH 131 or C or better in MATH 134.

## $\Delta$ STAT 212. Elementary Statistical

 Methods II (3) Fall, Spring. Estimation, hypothesis testing, regression, correlation, analysis of variance and contingency tables. Prerequisite: STAT 211.STAT 300. Introduction to Regression and Design (3) Fall, Spring. Regression analysis, analysis of variance, topics in design of experiments. Prerequisite: STAT 212 or consent of instructor.

STAT 312. Topics in Applied Statistics (3) Selected topics from time series, sample design, decision theory, nonprarmetrics or' factor analysis. Prerequisite: STAT 212.

STAT 402. Regression Analysis (3) Fall. Linear, nonlinear and multiple regression and correlation analysis. Prerequisite: MATH 441 or consent of instructor.

STAT 406. Sample Design (3) Spring. Sampling as a tool of scientific inference in research and management. Planning surveys; sample size, stratified, systematic and cluster sampling; sources of error in surveys. Prerequisite: MATH 441 or consent of instructor.

STAT 408. Experimental Design (3) Spring. Constructing statistical designs and analyzing resulting data; basic experimental design and analysis of variance. Prerequisite: MATH 441 or consent of instructor.

## STAT 412. Applied Nonparametric

 Statistics (3). Nonparametric approach to testing hypotheses; contingency tables, goodness of fit, procedures based on ranks. Prerequisite: MATH 441 or consent of instructor.STAT 414. Statistical Quality Control (3). Statistical process control; Shewhart control charts (variables and attributes); acceptance
sampling (single; double, and sequential); Dodge-Romig Tables. Prerequisite: STAT 212 or MATH 441 or consent of instructor.

STAT 416. Time Series Analysis (3). Stochastic stationary and nonstationary models; use in foreçasting seasonal and noseasonal discrete time series; fitting models to time series data. Prerequisite: MATH 441 or consent of instructor.

STAT 491. Studies in Statistics (1-3). On demand. Investigation of selected areas or contemporary problems. May be offered individually and in classes depending on student needs and nature of material.

* See also mathematics and statistics (MATH)


## Arabic (ARAB)

The following courses employ the selfinstructional approach, utilizing tapes, text, native tutor and outside examiner.

ARAB 101. Beginning Arabic I (4) Fall. Introduction to modern standard Arabic. Four class periods and practice with tapes each week.

ARAB 102. Beginning Arabic II (4) Spring. ARAB 101 continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 101 or equivalent.

TARAB 201. Intermediate Arabic I (4) Fall. ARAB 101-102 continued. Conversation, writing, reading, grammar. Four class periods and practice with tapes each week. Prerequisite: ARAB 102 or equivalent.

7ARAB 202. Intermediate Arabic II (4) Spring. ARAB 201 continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 201 or equivalent.

## Architecture/ Environmental Design Studies (ARCH)

ARCH 105. Design Representation I (3) Fall, Spring, Summer. Fundamental freehand and machine assisted drawing principles necessary to the investigation, visualization and presentation of design ideas. Drafting methods and techniques including the principles of orthographic projection, paraline and perspective drawing. One hour of lecture and four hours laboratory. Lab fee.
$\triangle A R C H$ 132. Computer-Aided Design for Architecture (2) On demand. Intermediate computer-aided design. Focus of the course is on the application of CAD to architectural drafting. Prerequisite: DESN 131 or instructor's permission.

AARCH 205. Design Representation Il (3) Fall. ARCH 105 continued. Freehand and machine assisted drawing principles necessary to the investigation, visualization and presentation of design ideas. Paraline and perspective drawings methods, shade and shadow, rendition of value and context, sketching and architectural presentation techniques. One hour of lecture and four hours laboratory. Prerequisite: ARCH 105 or permission of instructor. Lab fee.

## ARCH 236. Mechanical and Electrical

 Building Systems (3) Fall, Summer on demand. Mechanical and electrical building systerns including review of scientific principles used in system design. Topics include equipment description and selection, system types, system components and basic design. Prerequisite: ARCH 105 or permission of instructor.ARCH 250. Architectural Design 1 (3) Spring. Introduction to architecture/environmental design problem solving. Topics include anthropometrics, human-environment interaction, principles of form, style, order, proportion, scale and balance; concepts of programming and diagramming. One hour of lecture and four hours laboratory. Prerequisite: ARCH 205 or permission of instructor. Lab fee.

ARCH 30 . Architectural Design il (3) Spring. Second course in architectural design sequence; focus on the design of moderately complex buildings. Building programming and adjacency analysis; relationship between a building and the site One hour of lecture and four hours of laboraiory. Prerequisite: ARCH 250, ARCH 307 or permission of instructor. Lab fee.

ARCH 307. Land Planning and Develop. ment (3) Fall. Technical aspects of site planning and land development. Topics include theories of site design, economic considerations for development, governmental regulation, the effect of environmental forces and human activity in site design, principles of grading, drainage and utility distribution. One hour of lecture and four hours laboratory. Prerequisites: ARCH 105 and junior standing. I.ab fee.

ARGH 336. Architeciural Materials and Systems (3) Fall. Building systems approach to undersianding architectural elements of bulldings. Topics include fire protection, thermal and moisture protection, coatings, doors and windows, curtain walls, ceiling systerns. Two hours lecture and two hours laboratory. Prerequisites: ARCH 236 and junior standing. lab foe.

ARCH 337. Mechanical and Electrical Building Systems If (3) Spring. A laboratory course investigating applications of mechanical ard electrical building systems. Analysis of existing systems, system design, system
modeling and report writing. Topics include water and sanitary waste systems, electrical distribution systems, HVAC systems and lighting design. One hour of lecture and four hours of laboratory. Prerequisite: ARCH 236 or permission of instructor. Lab fee.

ARCH 401. Historic Preservation (3) Fall on demand. Review of history of building styles, research methods, preparation of historic building inventory forms, principles of restoration and renovation, and architectural design methods for historic environments. One hour lecture and four hours laboratory. Prerequisites: ARCH 250 and junior standing or permission of instructor. Lab fee.
$\triangle A R C H$ 405. Design Representation III (3) Spring, on demand. Production of architectural working drawings. Students prepare working drawings for a commercial building. Topics include elements of working drawings, methods of producing documents, scheduling and budgeting work. Four hours lecture and laboratory. Prerequisites: ARCH 105, 236, 336, and junior standing, or permission of instructor. Lab fee.

ARCH 436. Planning and Design of industrial Facilities (3) On demand. Planning, estimating, design and modeling of industrial facilities with consideration of management, personnel, production, aesthetics and environment. Four hours lecture and laboratory. Prerequisite: ARCH 301. Lab fee.

ARCH 440. Architectural History and Theory Seminar (2) Spring. Seminar and panel discussion sessions on topics in architectural history and theory. Prerequisite: junior standing or permission of instructor.

ARCH 441. Building Systems Technology Seminar (3) Fall, on demand. Capstone course in building systems technology sequence. Student-led discussion on topics related to human performance and building systems. Three hours of seminar. Prerequisite: ARCH 336 or consent of instructor.

ARCH 450. Architectural Design III (3) Fall. Third course in the architectural design sequence with focus on design of large complex buildings. Emphasis on design of multiple circulation patterns and multiple uses within a single building or complex of buildings. One hour of lecture and four hours of laboratory. Prerequisite: ARCH 301. Lab fee.

ARCH 470. Senior Project | (2) Fall, and spring. First half of the capstone course in the architecture/environmental design laboratory sequence. Emphasis on developing a student-selected design problem that integrates previous coursework in design problem solving and building systems lechnology. Three hours of lecture and laboratory. Prerequisite: ARCH 336 and ARCH 450, and senior standing. Lab fee.

ARCH 471. Senior Project II (4) Fall, and spring. Second half of the capstone course i the architecture/environmental design laboratory sequence. Emphasis on developing a design solution to a student selecied design problem that integrates previous coursework in design problem solving and building systems technology. Six hours of lecture and laboratory. Prerequisite: ARCH 470. Lab fee.

## ARCH 490. Problems in Architecture/

 Environmental Design Studies ( $i-3$ ) On demand. For advanced students wanting to conduct intensive study of selected problems in design technology. Prerequisite: junior standing and consent of adviser. May be repeated. Maierials fee. Graded S/U.
## Art (ART)

TIDART 10f. Introduction to Art (3) Fall, Spring. Historical and aesthetic components of art with laboratory experiences with basic elements of creative expression, Non-majors only. Two hours studio, two hours lecture. Lab fee.
$\triangle A R T$ 102. Two-Dimensional Foundations (3) Fall, Spring. Introduction to principles of art through a variety of concepts and media used in creative two-dimensional form organization. Required of art majors and minors. Can be taken with ART 103 or ART 112. Lab fee.
$\triangle A R T$ 103. Drawing Foundations (3) Fall, Spring. Development of drawing skills through observation of natura! objects to aid expressive draftsmanship and pictorial accuracy. Required of art majors and minors. Can be taken with ART 102 or ART 112. Lab fee.
$\triangle A R T$ 112. Three-Dimensional Foundations (3) Fall, Spring. Creative principles of art in three-dimensional form emphasizing aesthetics, utilitarian concepts and tools in experimental studio experiences. Required of art majors and minors. Can be taken with ART 102 or 103. Lab fee.
$\triangle A R T$ 205. Figure Drawing (3) Fall, Spring. Principles and practices of creative and structural figure drawing; development of concepts and techniques for competent graphic expression related to drawing human forms. Six studio hours. Prerequisite: ART 103. Lab fee.
$\triangle A R T$ 206. Figure Drawing Il (3) Fall, Spring. Further work on visual comprehension in figure drawing to improve perceptual judgment; move to a more personal and selective level of stylistic interpretation. Si . studio hours. Prereguisite: ART 205. Lab fee.

ART 246. Stained Glass I (3) Fall, Spring. reative use of glass in two- and threenensional compositions using the Traditional hand cut, copper foil and leading techniques. Six studio hours. Prerequisite: ART 102, Lab fee.

ART 256. Glassblowing I (3) Fall, Spring. Freehand-blown glass formation; personal creative use of glass as an artistic medium for expression. Six studio hours. Lab fee.

ART 261. Sculpture I (3) Fall, Spring. Creative concepts, arrangements and techniques of three-dimensional sculptural forms. Six studio hours. Prerequisite: ART 112. Lab fee.

ART 263. Ceramics I (3) Fall, Spring. Clay as creative medium for functional forms. Handbuilding and wheel techniques; simple sculpture; glazing and firing; survey of clays, pottery types, kilns, pyrometry. Six studio hours. Prerequisite: ART 102, ART 112. Lab fee.

ART 267. Stained Glass Compositions (3) Fall, Spring. Techniques involved with creative two-and three-dimensional arrangements; emphasis on individual studio development. Six studio hours. Lab fee.

AART 277. Printmaking I (3) Fall, Spring. sic techniques for woodcuts, silk screen, iglio or lithography. Six studio hours. Prerequisite: ART 103. Lab fee.

ART 305. Intermediate Drawing (3) Fall, Spring. Advanced experimentation using the figure in drawing composition with a graphic medium. Six studio hours. May be repeated to six hours. Prerequisite: ART 206. Lab fee.

ART 315. Glassworking (3) Fall, Spring. Free handblown glass formation; personal creative use of glass as an artistic medium for expression. Six studio hours. Lab fee.
$\triangle A R T$ 320. Enameling on Metal (3) Fall, Spring. Enameling techniques on copper; after initial 6 hours credit earned, choice of copper or jewelry techniques. Six studio hours. May be repeated to 9 credit hours. Prerequisite: ART 101 or ART 102, or consent of instructor. Lab fee.

ART 321. Beginning Jewelry Design and Metalsmithing (3) Fall, Spring. Foundation techniques and creative processes including design, fabrication, casting, and surface treatments. Six studio hours. Prerequisite: ART 101 or ART 102, or consent of instructor. Lab fee.
322. Jewelry Design (3) Fall, Spring. trifugal casting of silver, gold, tombac, ss and bronze jewelry and related objects, using wax and plastic models. Six studio hours. Prerequisite: ART 321. Lab fee.

ART 325. Fine Art Photography I (3) Fall, Spring. Photography as a fine art. Use of camera for creative expression: introduction to history and critical awareness. Black and white lab work. Six studio hours. Prerequisites: ART 102 or consent of instructor. Lab fee.

ART 326. Fine Art Photography II (3) Fall, Spring. Introduction to view camera techniques, development of critical awareness of contemporary creative photography, personal imagery and perception. Six studio hours. Prerequisite: ART 325. Lab fee.

ART 346. Stained Glass II (3) Fall, Spring. Advanced study of stained glass techniques with introduction of kiln formed glass processes. Six studio hours. Prerequisite: ART 246. Lab fee.

ART 356. Glassblowing II (3) Fall, Spring. Freehand-blown glass formation; personal creative use of glass as an artistic medium for expression. Intermediate level. Studio equipment construction. Six studio hours. Prerequisite: ART 256. Lab fee.

ART 361. Sculpture II (3) Fall, Spring. Three-dimensional development in techniques such as: casting, assembling, fabricating, manipulating and forming metal; plastic, plaster, etc.; welding with oxygen/ acetylene, arc and MIG; and carving wood and stone. Six studio hours. May be repeated to six hours. Prerequisite: ART 261 or consent of instructor. Lab fee.

ART 363. Ceramics II (3) Fall, Spring. Development of throwing techniques, design concepts, surface decoration and sculptural forms. Laboratory development of simple glazes. Kiln stacking and firing. Six studio hours. May be repeated to six hours. Prerequisite: ART 263. Lab fee.

ART 365. Weaving (3) Fall, Spring.
Techniques of weaving on a 4 -harness loom. Emphasis on materials and creative interpretation of fiber forms. Six studio hours. Lab fee.

ART 366. Fiber/Fabric Techniques (3) Fall, Spring. Focus on basic direct application techniques enabling student to effect images and textures on fabric and fiber. Traditional and contemporary methods used to develop surface texture. Technical understanding and creative use of media are stressed. Six studio hours. Lab fee.
$\triangle$ ART 371. Watercolor Painting I (3) Fall, Spring. Introductory experimentation with painting techniques on paper; employment of the figure, still life and landscape as initial references. Six studio hours. Prerequisite: ART 103. Lab fee.
$\triangle$ ART 372. Watercolor Painting II (3) Fall, Spring. Choice of specific compositional problems exploring the possibilities of design and expression in watercolor techniques; creation of foundational surfaces, mixed media and works in series. Six studio hours. May be repeated to six hours. Prerequisite: ART 371. Lab fee.
$\triangle$ ART 373. Oil/Acrylic Painting I (3) Fall, Spring. Exploration of painting techniques from traditional and contemporary using oil. and acrylic paint as a medium emphasizing individual artistic response. Six studio hours. Prerequisite: ART 103. Lab fee.
$\Delta A R T$ 374. Oil/Acrylic Painting II (3) Fall, Spring. Opportunity to experiment with varying media and techniques and to use fundamentals learned in introductory course. Six studio hours. May be repeated to six. hours. Prerequisite: ART 373. Lab fee.

ART 376. Glass Casting (3) Fall, Spring. Formation of creative works using glass casting techniques. Studio equipment construction. Six studio hours. Prerequisite: ART 356. Lab fee.
$\triangle$ ART 377. Printmaking II (3) Fall, Spring. Development of additional techniques as related to woodcut, silk screen, intaglio or lithography. Six studio hours. May be repeated to six hours. Prerequisite: ART 277. Lab Fee.

ART 390. Introduction to Computer Art (3) Fall, Spring. Methods of producing original computer art, software and appropriate hardware. Prerequisites: ART 102, 103 and 112, or consent of instructor. Lab fee.

ART 391. Computer Art II (3) Fall, Spring: Intermediate animation using computers, video equipment, software and languages in creation of original works of. art. May be repeated to six hours. Prerequisite: ART 390 or consent of instructor. Lab fee.

ART 392. Applications of Computer Art (3) Fall, Spring. Computer art in specific disciplines such as imaging, multimedia, etc. May be repeated to nine hours. Prerequisite: ART 390 or consent of instructor. Lab fee.

पART 395. Workshop on Current Topics in Art (1-4). Select semesters. Short-term workshop in studio or art education with content and emphasis as directed by needs and interests. Prerequisite: as announced for each workshop.

ART 405. Advanced Drawing (3) Fall, Spring. Conceptual imagery in drawings as completed visual statements; not exclusively concerned with the human figure. Six studio hours. May be repeated to six hours.
Prerequisite: ART 305. Lab fee.

ART 421. Advanced Jewelry Design (3)
Fall, Spring. Advanced problems in jewelry design, smithing and forging. Six studio hours. May be repeated to six credit hours. Prerequisite: ART 321 and 322. Lab fee.

ART 423. Jewelry Enameling (3) Fall, Spring. Specialized course for students wishing to combine champleve, cloisonne and plique-a-jour enameling techniques with jewelry. Six studio hours. Prerequisite: ART 320 and 421. Lab fee.

ART 425. Advanced Problems in Fine Art Photography (3) Fall, Spring. Advanced level assignments in creative photography; development of personal direction; emphasis on cominunicative potential of resulting images. Six studio hours. May be repeated to six hours. Prerequisite: ART 325. Lab fee.

## ART 426. BFA Thesis Project in Fine Art

 Photography (3) Fall, Spring. Semester-long project emphasizing personal development of philosophy and style in creative photography. Six studio hours. May be repeated to six credit hours. Prerequisite: ART 425. Lab fee.ART 456. Giassblowing III (3) Fall, Spring. Free hand-blown glass formation; personal creative use of glass as an artistic medium for expression. Advanced level. Studio equipment construction. Six studio hours. Prerequisite: ART 356. Lab fee.

ART 464. Sculpture ill (3) Fall, Spring. Advanced sculptural techniques and introduction to environmental and architectural scaling. Six studio hours. May be repeated to nine credit hours. Prerequisite: ART 361. Lab fee.

ART 463. Ceramics ill (3) Fall, Spring. Throwing of duplicate forms and functional ware. Glaze development through unity molecular formula. Triaxial glaze blending at various iemperatures, continuation of ceramic sculptural forms. Individual projects determined upon consultation with instructor. Six studio hours. May be repeated to six hours. Prerequisitie: ART 363. Lab fee.

ART 465. Adeanced Weaving (3) Fall, Spring. Conceptual and functional work leading to development of personal direction in tapestry, multiple harness, lkat, rug or pattern weaving. Six studio hours. May be repeated to six hours. Prerequisite: ART 365 or consent of instructor. Lab fee.

## ART 466. Surface Design/Silkscreen

 Techniques (3) Spring. Approaches to surface design leading to development of understanding of motifs, repeats and expanding pattern. Experiments with silkscreen printing, registration techniques and fiber reactive dyes. Various registration rechniques will be explored which will allow set-up and yardage to develop. Lab fee.ART 467. Advanced Glass Working (3)
Fall, Spring. Creative use of glass processes formulating a personal aesthetic. Focus on personal glass studio development. Six studio hours. Prerequisites: ART 246, 356 and 376. Lab fee.
$\triangle A R T$ 470. Independent Studies in Studio (1-3). Supervised individual problems in selected studio research for students who have shown proficiency and marked degree of independence in other studio coursework. May be repeated. Prerequisite: consent of instructor.

ART 471. Watercolor Painting III (3) Fall, Spring. Individual development in watercolor medium emphasizing personal style and presentation. Students are encouraged to find self-direction and motivation in consultation with instructor. Six studio hours. May be repeated to six hours. Prerequisite: ART 372. Lab fee.

ART 473. Oil/Acrylic Painting III (3) Fall, Spring. For advanced student to pursue personal style and to concentrate on elements most important to them. Emphasis placed on individuality and arranged critiques. Six studio hours. May be repeated to six hours. Prerequisite: ART 374. Lab fee.

ART 477. Printmaking III (3) Fall, Spring. Specialized advanced techniques in woodcuts, silk screen, intaglio or lithography. Six studio hours. May be repeated to six hours. Prerequisite: ART 377. Lab fee.

ART 490. Problems Computer Art (3) Fall, Spring. The computer and contemporary technology (i.e., video, imaging, multimedia, etc.) in the creation of art forms. May be repeated to six hours. Prerequisites: ART 390, 391, 392 or consent of instructor. Lab fee.

ART 491. Advanced Computer Art (3) Fall, Spring. The creation of ant through computer simulation, animation, and virtual space. May be repeated to six hours. Prerequisites: ART 390, 391, 392, (knowledge of a computer language is recommended), or consent of the instructor. Lab fee.
$\triangle A R T$ 495. Special Topics in Art (1-3). Innovative and intensive group studies in selected studio research. Prerequisites announced for each offering. May be repeated.

ART 499. Senior Studio Seminar (3) Fall or Spring. Capstone experience for graduating studio majors emphasizing portfolio preparation, career goals and objectives and participation in the BFA Senior Thesis Exhibition. Six studio hours. Prerequisite: Senior standing and advanced level in specialization. Lab fee.

## Art Design (ARTD)

$\triangle$ ARTD 211. Introduction to Graphic Design (3) Fall, Spring. Exploration and application of design principles, layout and typography; tools, techniques and terminology of the discipline. Six studio hours. Prerequisite: ART 102. Lab tee.

ARTD 212. Typography (3) Fall, Spring. Historical survey and formal study of typographic design; the aesthetics of letterform design, practical applications, and computer-generated typography. Six studio hours. Prerequisite: ARTD 211. Lab fee.

ARTD 311. Intermediate Graphic Design
(3) Fall, Spring. Continued exploration in graphic design with an emphasis on typography and editorial and publication design. Six studio hours. Prerequisite: ARTD 212 or consent of instructor. Lab fee.

ARTD 312. Advertising Design (3) Fall, Spring. Translating words and ideas into visual realities of mass communication; magazines, newspapers, billboards, directmail and TV. Use of felt markers, storyboards and videotape. Six studio hours. Prerequisite: ARTD 311. Lab fee.

ARTD 319. History of Design (3) Fall, Spring. Slide survey of design movements influencing western culture from 1850 to present.

ARTD 411. Advanced Graphic Design (3) Fall, Spring. Concentrated study and advanced-level problems allow seniors to expand and refine their abilities in graphic design. Six studio hours. Prerequisite: ARTD 312. Lab fee.

ARTD 412. Packaging and Promotion Design (3) Fall, Spring. The package as attractive, informative product vehicle, and its relationship to consumer purchase. Promotional and collateral advertising of product and package. Six studio hours. Prerequisite: ARTD 312. Lab fee.

ARTD 413. Corporate identity Design (3) Fall, Spring. Professional presentation of corporate identity program for existing or fictitious company. Development and application of trademark and/or logotype based on compiled in-depth research. Six studio hours. Prerequisite: ARTD 412. Lab fee.

ARTD 414. Senior Design Seminar (3) Fall, Spring. Preparation for entrance into the profession. Emphasizes job-related skills and practices. Each student prepares a portfolic. and designs and prints a personal resume Prerequisite: ARTD 412. Lab fee.

ARTD 470. Independent Studies in Design (1-3). Supervised individual problems in belected design research for students who have shown proficiency and marked degree of independence in other design coursework. May be repeated. Prerequisite: consent of instructor.

ARTD 489. Design Internship (3-15) Fall, Spring, Summer. Studio experience in chosen area design firm. Credit approved upon submission of portfolio and written description of experience in consultation with firm; elective hours only. Prerequisites: 15 hours of design, consent of design staff.

ARTD.495. Special Topics in Design (1-3). Innovative and intensive group studies in selected design research. Prerequisites announced for each offering. May be repeated.

## Art Education (ARTE)

ARTE 252. Foundations of Art Education
(3) Fall; Spring on demand. Lecture, fieldbased experiences and clinical exploration of child art development, historical and contemporary approaches to art education and art curricula. Prerequisite: sophomore standing.

ARTE 343. Art in the Elementary Schools (3) Fall, Spring, Summer. Professional methods in a discipline-centered approach to art education with focus on child art development, curriculum planning and clinical experiences in art production, art history, art criticism and aesthetics. Prerequisite: Junior standing. C/F hrs.: 30. Lab fee.

ARTE 352. Planning and Implementing Instruction in the Visual Arts I (3) Fall; Spring on demand. Approaches to curriculum development, organization, materials and teaching methods and behaviors for effective art instruction. Practicum experience allows students to apply this knowledge in a supervised learning environment. Prerequisites: ARTE 252; junior standing. C/F hrs.: 40. Lab fee.

ARTE 382. Art for Special Needs Children (3) Fall, Spring. Art teaching methods and media adaptations for exceptional populations in both regular and alternative education settings. Child art development, approaches to curriculum planning, studio experiences and a field-based practicum. Prerequisite: Junior standing. C/F hrs.: 40. Lab fee.

ARTE 407. Visual Arts Teaching Practicum (3) Fall, Spring. Clinical teaching experience School of Art Saturday Art Program for hildren. Prerequisites: ARTE 252 and 352. Permission of instructor. C/F hrs.: 70. Lab fee.

ARTE 452. Planning and Implementing Instruction in the Visual Arts II (3) Fall; Spring on demand. Units of instruction, classroom management, evaluation of teaching and learning, instructional resources, methods for teaching K-12 art curricula. Clinical experiences partially relate to developing lessons in art criticism and aesthetics for a field-based practicum with secondary students. Prerequisites: ARTE 252 and 352 . C/F hrs.: 20. Lab fee.

## ARTE 470. Independent Studies in Art

 Education (1-3). Supervised individual problems in selected art education research for students who have shown proficiency and marked degree of independence in other art education coursework. May be repeated. Prerequisite: consent of instructor.ARTE 492. Student Teaching (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

ARTE 495. Special Topics in Art Education (1-3). Workshop topics and intensive group studies relative to special needs of visual arts teachers.

ARTE 497. Student Teaching (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program Required of students in secondary school or special certification program. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs.: 300 . May be repeated. Graded S/U.

## Art History (ARTH)

7] $\Delta$ ARTH 145. Western Art I (3) Fall, Spring. Ancient and Medieval art.

T/DARTH 146. Western Art II (3) Fall, Spring. Art from Renaissance to present. May be taken before ARTH 145.

ARTH 440. Modern Architecture (3) Alternate years. Architecture of 19 th and 20th centuries in Europe and America.

ARTH 441. American Art to the Civil War (3). Painting, sculpture and architecture of colonial era and United States to 1860; interrelationship between visual arts and significant issues in American culture.

ARTH 442. American Art Since the Civil War (3). Painting, sculpture, architecture and photography of United States from 1860 to present. Special attention to artists and developments prior to World War II frequently overlooked in surveys of modern art.

ARTH 445. Preclassical Art (3) Alternate years. Art and archaeology of preclassical Aegean world to the end of the Bronze Age; the Minoan and Mycenaean civilizations.

ARTH 446. Greek Art (3) Alternate years. Art of Greece from the Dark Ages through the Hellenistic period: emphasis on vasepainting, sculpture, and architecture.

ARTH 447. Art of Etruria and Rome (3) Alternate years. Etruscan and Roman sculpture, architecture, and painting from the 8 th century B.C. to the 5 th century A.D.

ARTH 448. Early Christian and Byzantine Art (3) Alternate years. Christian art to the medievalization of the Roman empire in the west and Byzantine art to the fall of Constantinople in 1453.

ARTH 449. Medieval Art (3). Alternate years. Art and architecture from medievalization of Roman Empire through High Gothic period.

ARTH 451. Art of the Italian Renaissance (3) Alternate years. Painting, sculpture and architecture of Italy during the Renaissance, from the late 13th century through the 16th century, and Mannerism.

ARTH 453. Northern Renaissance Art (3) Alternate years. Painting, sculpture and graphic arts of Flanders, France, Germany, England and Spain during the 15th and 16 th centuries.

ARTH 454. Baroque and Rococo Art (3) Alternate years. The painting, sculpture and architecture of Italy, Spain, France and the Low Countries in the 17 th and 18 th centuries.

ARTH 455. Art of the 19th Century (3). Painting and sculpture in the 19th century in Europe from neoclassicism through postimpressionism.

ARTH 456. Art of the Early 20th Century (3) Fall Alternate years. Major movements in painting and sculpture in Europe and America from Fauvism to World War II; theoretical bases as well as formal innovations.

ARTH 457. Art of the Later 20th Century (3) Spring. Alternate years. Major movements in painting and sculpture in Europe and America from World War II to the present; traditional art forms as well as the more radical recent developments.

ARTH 458. Art of India and S.E. Asia (3). Art and architecture in India and S.E. Asia from the earliest times to present.

ARTH 459. Art of China and Japan (3). Art and architecture of China and Japan from earliest cultures to present.

ARTH 450. Women and the Visual Arts (3)
Altenate years. Historical survey of the role of women in the fine arts, in their capacities as antisis, critics, matrons (patrons), and audiences, from antiquity to the present. Emphasis on examining issues relevant to the contemporary situation in the arts and society.

ARTH 470. Independent Studies in Art History (1-3). Supervised individual problems in selected art history research for students who have shown proficiency and marked degree of independence in other art history coursework. May be repeated.
Prerequisite: consent of instructor.

## APTH 495. Special Topics in Art History

 ( $1-\tilde{3}$ ). Innovative and intensive group studies in selected ant historical research. Prerequisites amounced for each offering. May be repoated.
## Art Therapy (ARTT)

ArTh 230. introduction to Art Therapy (3) Fall. Introductory exposure to the theories, practices and literature of the profession. Lab and lecture. Bequired for entry into the Art Thearpy Program. Prerequisites: ART 102 or AiPT to3 and PSYC 201 or consent of instructor Lab fee.

AnT 330. Art Therapy Methods and Theories (3) Fall. Investigation of theoretical and practical applications of art therapy methods with specific populations. Exposure to the implementation of various treatment models within the field, the therapeutic uses of art materials, and development of communication skills for processing art work. Required volunteer work. Prerequisite: ARTT 230 (FSYC 403 recommended). Lab fee.

## ARTT 331. An Therapy Methods and

 Theories if (3) Spring. Increased exposure to art therapy in both theory and practice emphasizing the role of the art therapist, discussion of the art therapy treatment process, and ways to faciitate group and individual work, Lab, lecture, and required volunteer work. Frerequisite: ARTT 330 (FSYC 405 recommended). Lab fee.ARTT 431. Art Therapy Process, Studio Methods and Techniques (3) Spring. Hands-on investigation of art studio processes and procedures with emphasis on adaptations of projects for specific client populations; development of the student's own creative/visualizing process. Prerequisites: APTT 930 and 331 or permission of instructor Leab oee.

APTT 4ra. independent Studies in Art Therepy (1-3). Supervised individual studies in art therapy research for students who have shown proficiency and high degree of
independence in other art therapy coursework. May be repeated. Prerequisite: consent of instructor.

ARTT 488. Art Therapy Practicum (10-12) Fall, Spring. Supervised 320-or 350 -hour art therapy practicum in a specific agency. Required weekly seminar. Prerequisite: all program requirements must be fulfilled before enrolling. Those students electing to enroll for 12 hours must meet specific additional course requirements. Graded $\mathrm{S} / \mathrm{U}$.

## ARTT 495. Special Topics in Art Therapy

( $1-3$ ). Innovative and intensive group studies in selected subject areas. Prerequisites announced for each offering. May be repeated.

## Arts and Sciences (A\&S)

A\&S 100. Seminar in Arts and Sciences (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.

A\&S 200. Seminar in Arts and Sciences (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.
$\triangle A \& S$ 210. Introduction to Aesthetic Perception (3) Spring. Initial course of the fine arts specialization for elementary education majors, but open to all interested in the nature of aesthetic inquiry through experiences in specific arts events, discussion and reflection with faculty from different disciplines.

ๆ|AA\&S 250. Great Ideas (3) Fall, Spring. interdisciplinary seminar on some of the motivating ideas of Western culture: JudeoChristian heritage, Greek humanism, science, democracy, feminism, etc. Emphasis on reading of primary texts and class discussion. Prerequisite: ENG 112.

A\&S 300. Seminar in Arts and Sciences (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.
$\triangle A \& S$ 395. Workshop on Current Topics in Arts and Sciences ( $1-4$ ) On demand. Workshop on current topics and issues within arts and sciences. May be repeated if topics differ, upon approval of program adviser.

A\&S 400. Seminar in Arts and Sciences
(1-4) On demand. Interdisciplinary studies in arts and sciences area of study focusing on new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.

A\&S 410. Making Aesthetic Judigments (3) Fall. Capstone seminar for elementary education major completing the fine arts specialization, but open to all. Students will demonstrate and reflect upon the development of their aesthetic perception gained through other courses and apply if primarily in teaching situations. Prerequisite: A\&S 210.

## A\&S 460. Arts Professional Credit

Program (1-15) Fall, Spring, Summer. For students enrolled in the Arts-professional Curriculum who have completed 92 hours and are currently enrolled at a professional school. May be repeated up to 30 hours. Graded S/U only.
$\triangle A \& S 470$. independent Study (1-4) On demand. Supenvised individual study to meet student's need for special exploration in areas not covered by regular courses. Specific proposal and permission of adviser and College of Ar's and Sciences required prior to enrollment. May be repeated to a maximum of six hours.

A\&S 489. internship (1-12) On demand. Applied experience for students in arts and sciences programs. Specific proposal and permission of undergraduate adviser as well as College of Arts and Sciences required prior to enrollment. Maximum internship credit is 12 hours. Guidelines available in College of Arts and Sciences office. Graded $\mathrm{S} / \mathrm{U}$.

## Astronomy (ASTR)

१|AASTR 201. Modern Astronomy (3) Fail, Spring, Summer. Recent astronomical discoveries, space travel among planets, birth and death of stars, supernovas, pulsars, black holes, x-ray stars, radio galaxies, quasars, extra-galactic phenomena, and origin of universe; some observational work.
§ $\triangle$ ASTR 212. The Solar System (3) Fall, Summer. Planetary, solar and space science. The moon, solar interior and atmosphere, solar/terrestrial relations, planetary structure and atmospheres, comets, asteroids, meteoroids, space exploration, origin of solar system.

ASTR 270. Independent Study (1-3) On demand. Introduction to research in physics and astronomy; projects chosen in consultation with adviser. May include iibrary and laboratory work. For lower division students only. Prerequisite: consent of instructor.

ASTR 305. Life in the Universe (3) Spring. Niternate years. Possibilities for life on other flanets and other star systems, methods for communicating with other intelligent life, movemert of human life into space.

ASTR 307. Understanding the Cosmos (3) Spring. Alternate years. The universe as a whole, gravity, black holes, structure of space; other galaxies and the universal redshift, clusters of galaxies and other largescale structure; big bang and steady-state models; the three degree background radiation; first moments of creation.

ASTR 309. Observational Astronomy (2) Fall. Alternate odd years. Instrumentation and techniques used in making astronomical observations. Includes operation of an astronomical telescope, working knowledge of celestial coordinates, obtaining photographic images of astronomical objects and digital images with data reduction. One hour lecture and two hours laboratory. Open only to majors or minors in physics or astronomy. Lab fee.

ASTR 321. Recent Progress in Astronomy (2) Fall. Alternate years. Pulsar dynamics, gravitational collapse and black holes, galaxies, large-scale structure in the universe, active galaxies and quasars, osmology. Two lecture-recitations. Prerequite: PHYS 212; or PHYS 202 and MATH 32. Not open to students with credit for PHYS 321.

ASTR 403. Stellar Structure and Evolution (3) Spring. Alternate years. Basic data, stellar interiors, theoretical models; advanced evolutionary states; red giants, white dwarfs, neutron stars, supernovas, black holes. Prerequisites: PHYS 301 and consent of instructor. Not open to student with credit for PHYS 403.

ASTR 470. Independent Study in Astronomy (1-3). On demand. Introduction to research in astronomy; projects chosen in consultation with adviser, may include library and laboratory work. Prerequisite: consent of instructor.

## Biological Sciences (BIOL)

TABIOL 101. Environment of Life (3) Fall, Spring, Summer. Basic ecology and current environmental problems of air, water and land pollution; human reproduction and population dynámics. Two one-hour lectures and one two-hour laboratory. Not accepted toward biology major or minor. Lab fee.

2OL 104. Introduction to Biology (4) Faill, Spring, Summer. Basic concepts: the cell, metabolism, genetics, reproduction, development, evolution, ecology. Three one-
hour lectures, one two-hour laboratory. Not accepted toward biology major or minor. Lab fee.

BIOL 108. Life.in the Sea (3) Fall. Shore and ocean environments, variety and adaptations of marine life. Observations of marine organisms in marine laboratory. Three one-hour lectures. High school biology recommended. Not accepted toward biology major or minor.

T $\triangle$ BIOL 204. Concepts in Biology I (5) Fall, Spring, Summer on demand. Introduction to ecological and evolutionary biology, Mendelian and population genetics, and the major groups of plants, animals and microbes. Three one-hour lectures, one three-hour lab and one two-hour recitation. Field trips required. Lab fee.

T/ABIOL 205. Concepts in Biology II (5) Fall, Spring, Summer on demand. Introduction to molecular and cellular biology, physiology and organ systems. Three onehour lectures, one three-hour lab and one one-hour recitation. Lab fee.
$\dagger$ BIOL 291. Local Flora and Fauna (3) Summer and on demand. Identification, ecology and natural history of a variety of organisms, both macro and micro, in northern lake counties. Five hours of lab and lecture. Not applicable for arts and sciences biology major credit. Prerequisite: Any introductory BIOL course.

BIOL 295. Oceanus (3) Spring. Telecourse emphasizing oceanographic and biological aspects of the ocean environment and human impact on the oceans. Thirty televised programs, 82 -hour biweekly campus meetings with instructor. High school biology recommended. Not accepted toward biology major or minor.

BIOL 301. Field Biology of the Vertebrates (3) Fall. Evolution, systematics, physiology, ecology and identification of vertebrates. Required field trips emphasize collection techniques and quantitative sampling. Two one-hour lectures and one three-hour laboratory. May occasionally have early A.M. Labs. Prerequisite: BIOL 204 or 205. Lab fee. Credit not given for both BIOL 301 and 491.

BIOL 310. Biology of Aging (2) Fall. Biological aspects of normal aging at the cellular, tissue and organismal levels. Two one-hour lectures. Prerequisites: BIOL 104 or BIOL 204 and 332 or BIOL 411, or consent of instructor.

BIOL 313. Microbiology (4) Fall, Spring, Summer on demand. Methods of isolation, culture and identification; physiological, genetic and applied aspects of microorganisms. Two one-hour lectures, two two-hour laboratories. Prerequisites: BIOL. 204 and 205 and one year of chemistry. Lab fee.

## $\triangle B I O L$ 314. Microbiology for Health

 Professionals (3) Fall. Microbiological and epidemiological principles as the basis of practice for nursing, dietetics, physical therapy and other health professions. Three one-hour lectures. No credit for microbiology or biology majors or minors. Prerequisites: BIOL 104 or 205 and CHEM 117/118 or $127 /$ 128 or 137/138; or consent of instructor.$\triangle$ BIOL 315. Microbiology Laboratory for Health Professionals (1) Fall. Methods for detection, growth and identification of microorganisms. One three-hour laboratory. No credit for microbiology or biology majors or minors. Prerequisite or corequisite: BIOL 314. Lab fee.

BIOL 325. Applied Ecology of Urban Pests (3) Fall. Biology, ecology, and control of urban insects and vertebrate pests; ecosystem manipulation techniques; environmental effects and physiological actions of pesticides. Two one-hour lectures and one twohour lab. Prerequisite: BIOL 204 and 205 or permission of instructor. Lab fee.
$\triangle \mathrm{BIOL}$ 331. Human Anatomy and Physiology I (4) Fall, Spring, Summer. Anatomical and physiological aspects of cells and tissues and the integumentary, skeletal, muscular and nervous systems. Three onehour lectures and one two-hour laboratory. Prerequisite: BIOL 104 or 205. Lab fee.
$\triangle \mathrm{BIOL}$ 332. Human Anatomy and Physiology II (4) Fall, Spring, Summer. Anatomical and physiological aspects of circulation, respiration, digestion, excretion, endocrinology and reproduction. Three one-hour lectures and one two-hour laboratory. Prerequisite: BIOL 104 or BIOL 205 or consent of instructor. Lab fee.

BIOL 343. General Botany (4) Spring. Structure, evolution, ecology and physiology of plants and their economic importance. Three hours of lecture and one two-hour lab. Prerequisite: BIOL 204 or consent of instructor. Lab fee.

BIOL 350. General Genetics (3) Fall, Spring. Theoretical and applied aspects of inheritance. Molecular, chromosomal and population levels of heredity in both prokaryotes and eukaryotes. Three one-hour lectures. Prerequisites: BIOL 204 and 205 or consent of instructor.

BIOL 352. Laboratory in Genetics (1) Fall, Spring. Materials, methods and terminology of genetics through experiments, problems and demonstrations. One three-hour laboratory. Prerequisite or corequisite: BIOL 350. Lab fee.

BIOL 354. Population and Community Ecology (3) Spring. Concepts of modern ecology. Fundamental ecological principles, life history patterns, structure and growth of populations, competition, predation,
succession, applied ecology and biodiversity. Three hours lecture. Prerequisites: BIOL 204 and 205 and MATH 131 or equivalent.

BIOL 370 . Introduction to Inland Marine Resesrch (2) Fall. Theories and techniques for designing inland closed ecosystems for scientiflc research; basic concepts in marine ecology. One hour of lecture/discussion and three hours of lab arranged. Prerequisites: BIOL 204 and CHEM 125.

ABIOL 400 . Special Topics in Biology (1-5) Fall, Spring, Summer. Selected topics or sublect areas in life sciences. Prerequisite: consent of instructor; maximum of two entollments, each with different topic but only six hours may be applied toward major in blology. Lab fee may be required.

BIOL 401 . Introduction to Biological Fosearch ( $1-4$ ) Fall, Spring, Summer. For advanced student who has shown proficiency and marked degree of independence in work. Individual registration. Prerequisite: four semesters of biology and consent of instructor. Miay be repeated once, but only four hours may be applied toward major in biology. Lab iee. May be taken S/U for major credit.

BIOL 302. Honors Thesis (3) Fall, Spring, Summer. For sudents in the departmental honors program only. The thesis describes the student's independent research, previousty conducted as BIOL 401 H . An approved public presentation of the research is required.

8104, 403 Bioiogical Experience at Stone bat (1-5) Summer. Selected topics in biology offered at Stone Lab (OSU) during summer. May be repeated with different topics. Prorequisites: sophomore standing, BIOL 204 and 205 and permission of biology adviser.

BIOL 404. Human Genetics (3) Spring, Altenate years. Essential principles of modern genetics with special emphasis on humans. Methods of human genetic analysis; screening and counseling; genetic aspects of publle health; genetics and cancer. Two onehour lectures and one two-hour laboratory. Prerequisites: BIOL 204 and 350, or pemission of insiructor.

BIOL 405. General Parasitology (4) Fall. Ecological, morphological, taxonomic, and other biological aspects of parasites. Three - one-hour lectures and one two-hour thopratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.

E10L 406. Arthrepod Vectors and Para* sites (e) Spring. Biology and identification of disease-carrying, toxic and parasitic arthropods. Two one-hour lectures and one Wo hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.

BIOL 407. Cell Biology (4) Fall. Structure and physiology of cells, integrating the dynamics of cellular structures with metabolic functions and control. Two one-hour lectures and one four-hour laboratory. Prerequisites: BIOL 204, 205 and two years of chemistry or consent of instructor. Lab fee.

BIOL 408. Molecular Biology (3) Fall. Function and structural relationship of genes and gene products, with emphasis on the applications of molecular biology to the diverse fields of biological research. Three one-hour lectures. Prerequisite: BIOL 350 or permission of instructor; CHEM 306 recommended.

BIOL 411. Animal Physiology (4) Spring. General and comparative animal physiology with emphasis on vertebrate systems. Two one-hour lectures, one three-hour laboratory and one one-hour recitation. Prerequisites: BIOL 204 and 205 or consent of instructor; organic chemistry and BIOL 407 recommended Lab fee.

BIOL 412. Field Experience (1-6) On demand. Intensive field study involving quantitative population and community sampling and analysis. Independent projects expected. Requires off-campus travel. Field conditions may be rigorous and/or primitive. May be repeated, but only 4 hours count toward biology major.

BIOL 413. Vascular Plant Structure (4)
Spring. Comparative structure and evolutionary trends of the principal tissues of vascular plants. Three one-hour lectures, one twohour laboratory. Prerequisite: BIOL 204 or 343 or consent of instructor. Lab fee.

BIOL 414. Plant Systematics (4) Fall, alternate odd years. Principles of plant classification, evolutionary relationships and processes of plant evolution. Construction and use of keys, identification of local flora, use of classical and molecular techniques in plant evolutionary studies. Three hours of lecture and one two-hour laboratory. Prerequisite: BIOL 204 or consent of instructor. BIOL 343 recommended. Lab fee.

BIOL 417. Plant Physiology (4) Spring. Plant growth and development, transpori, photosynthesis, mineral nutrition, plant hormones and photoperiodism. Three onehour lectures, one two-hour laboratory and additional laboratory by arrangement. Prerequisites: ten hours of biology; one year of chemistry and BIOL 407 strongly recommended. Lab fee.

BIOL 420. Animal Behavior (4) Spring. Genetics, physiology, development and evolution of behavior from an ecological perspective. Three one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.

BIOL 421. Molecular Biotechnology (3) Spring. Overview of techniques of recombinant DNA that form the basic elements of biotechnology and its far-reaching applicafions in medicine and industry. Three hous of lecture. Prerequisite: Four semesters of biology or consent of instructor. BIOL 313 oi 350 recommended.

BIOL 422. Plant Ecology (4) Fall. Altemate (even) years. Physical and biological factors influencing the distribution and abundance of plant populations and communities. Three one-hour lectures and one three-hour laboratory. One weekend field trip required. Prerequisites: BIOL 204 and 205. Recommended: BIOL 343, 354 or 451. Lab íee.

BIOL 424. Algology (4) Fall. Altemate (odd) years. Taxonomy, ecology and morphology of the algae; emphasis on fresh-water algae. One two-hour lecture and two two-hour laboratories. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 425. Limnology (3) Fall. Physical, chemical and biological aspects of aquatic habitats. One two-hour lecture and one three-hour lab, and one weekend tield trip to upper Great Lakes. Prerequisites: BIOL 204 and 205. Lab fee and field trip fee.

BIOL 426. Pathogenic Microblology (4) Spring. Morphologic, physiologic, serologic characteristics of pathogenic microorganisms; their epidemiology; and the hosiparasite interrelations resulting in infectious disease. Two one-hour lectures and two twohour laboratories. Prerequisites: BIOL 313 ; BIOL 439 recommended. Lab fee.

BIOL 427. Invertebrate Zoology (4) Fall. Classification, biology and physiology of invertebrates. Three one-hour lectures and one two-hour laboratory. Prerequisite: one course in biology or consent of instructor. Lab fee.

BIOL 431. Developmental Biology (3) Fall. Overview of animal development (primarily embryogenesis) integrating classical morphological studies and current celluiar and molecular findings. Three one-hour lectures. Prerequisites: BIOL 204 and 205 or consent of instructor.

## BIOL 431L. Developmental Biology

 Laboratory (2) Fall. Early embryogenesis analyzed using current molecular and cell biological techniques (e.g. DNA and/or RNA blots, embryo analysis including DNA and antibody staining). One three-hour laboratory and one one-hour lecture/laboratory.Prerequisite or corequisite: BIOL 431 or consent of instructor. Lab fee.

BIOL 435. Entomology (4) Fall. Biology of isects: structure, physiology, ecology, ystematics, evolution and importance to man. Two one-hour lectures and two twohour laboratories or equivalent in field trips. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 438. Endocrinology (4) Spring. Physiological, metabolic actions of selected endocrine secretions with emphasis on mammals. Three one-hour lectures and one three-hour laboratory. Prerequisites: BIOL 411 and organic chemistry or consent of instructor; biochemistry recommended. Lab fee.

BIOL 439. Immunobiology (3) Fall. Study of the immune system. Analysis of the molecules, cells and processes involved in host defense against infection. Three onehour lectures. Prerequisites: BIOL 204 and 205. BIOL 350 and biochemistry recommended. Lab fee.

BIOL 440. Neurobiology (3) Fall. Cellular, molecular and developmental aspects of the nervous system and the molecular basis for the neural involvement in the functions of the mind. Three one-hour lectures. Prerequisite: BIOL $331 / 332$ or consent of instructor.

BIOL 441. Chemical Ecology (3) Fall. The evolution and ecology of chemical signalling the recognition of food, mates, hosts and Jathogens. Three one-hour lectures. Prerequisites: Organic chemistry, BIOL 204 and 205.

BIOL 442. Plasmid Biology (3) Fall. Mechanisms of plasmid replication, copy number control and compatibility. Methods used to isolate and purify plasmid DNA. Procedures used to transfer plasmids to new hosts. Prerequisite: BIOL 313 or consent of instructor.

BIOL 443. Microbial Physiology (3) Spring. Chemical composition, nutrition, growth, metabolism and regulation in microbial cells. Three hours of lecture. Prerequisites: BIOL 313 and CHEM 308 or consent of instructor.

BIOL 444. Microbial Physiology Laboratory (2) Spring. Growth, nutrition, biochemical, metabolic and regulatory activities of microorganisms. Prerequisite or corequisite: BIOL 443 or consent of instructor. Two twohour laboratories. Lab fee.

BIOL 446. Scanning Electron Microscopy (4) Spring. Theory and practice of scanning electron microscopy applicable to structural/ compositional research. Critical point drying, sample coating techniques, backscattered electron detection, energy-dispersive $x$-ray
licroanalysis and computational analysis of Jata. Two one-hour lectures and two threehour laboratories. Prerequisites: PHYS 202 or 212 and CHEM 306 or 341. Lab fee.

BIOL 447. Microbial Genetics (3) Fall. Molecular biology and genetic phenomena of bacteria and bacteriophage; mutagenesis and recombination. Three one-hour lectures. Prerequisite: four semesters of biology and consent of instructor. BIOL 350 and biochemistry recommended.

BIOL 449. Epidemiology (3) Spring. Distribution and determinants of health and disease in humans. Methods of studying those factors that influence change in the determinants of disease. Three one-hour lectures. Prerequisites: Junior standing and completion of two biology courses or consent of instructor. Cross-listed as ENVH 449.

BIOL 451. Evolution (3) Spring. Evidence for evolution. Modern evolutionary theory; modes of selection, speciation, complex adaptations, micro-evolutionary trends. Two one-hour lectures and one two-hour discussion. Prerequisite: BIOL 350.

BIOL 470. Readings in Biological Sciences (1) Fall, Spring, Summer. Independent readings on topics of current or specialized interest in biology. Not more than two hours may be applied to major or minor requirements. Prerequisite: consent of instructor. May be taken S/U for major credit.

BIOL 472. Ichthyology (3) Fall. Alternate years. Life histories, systematics, physiology, ecology, evolution and biogeography of major groups of freshwater and marine fishes. Two one-hour lectures and one threehour laboratory. Saturday and/or weekend field trips required. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 473. Mammalogy (3) Fall. Alternate years. Identification, natural history, evolution, zoogeography, ecology, physiology, behavior, with emphasis on Ohio mammals. Two one-hour lectures and one three-hour laboratory; one weekend field trip. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 474. Marine Biology (4) Spring. Biological and oceanographic analysis of marine environment: ecology, populations, laboratory techniques. Three hours of lecture and three hours of laboratory. Prerequisites: CHEM 125 and BIOL 427. Lab fee.

BIOL 475. Marine Biology Field Trip (1) Spring. Field trip to marine environment and research station with collection and study of living marine fauna and flora, oceanographic analysis of environments, study on sea-going vessel using trawl and dredge; discussions of marine research by taboratory staff; tour of fishery station. Prerequisites: BIOL 204 and 205. Transportation fee required.

BIOL 476. Herpetology (3) Fall. Alternate years. Amphibian and reptile identification, habits, distribution, behavior. Two one-hour lectures and one three-hour laboratory or
equivalent fieid work, all-day field trip. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 477. Ornithology (3) Spring. Structure, physiology, behavior, ecology and evolution of birds; identification in field and laboratory. Two one-hour lectures and one three-hour laboratory or equivalent field work, all-day or weekend field trip. Prerequisite: seven hours of biology. Lab fee.

BIOL 478. Parasites of Marine Animals (6) Summer. Study of parasites of marine animals. Prerequisite: sixteen hours of biology including parasitology. Taught at Gulf Coast Research Laboratory.

BIOL 479. Marine Microbiology (5) Summer. Role of microorganisms in the ecology of oceans and estuaries. Prerequisites: general microbiology or bacteriology and consent of instructor. Taught at Gulf Coast Research Laboratory.

BIOL 480. Problems in Comparative Histology of Marine Organisms (1-6) Summer. Histological preparation for light and electron microscopy studies of marine organisms including structural changes during life cycles and histopathology of diseased tissues. Prerequisites and credits to be set by instructor and Registrar at Gulf Coast Research Laboratory.

BIOL 481. Marine Botany (4) Summer. Survey based upon local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. Prerequisites: BIOL 204 and 205 or consent of instructor. Taught at Gulf Coast Research Laboratory.

BIOL 482. Introduction to Marine Zoology (5) Summer. Introduction to marine environment with emphasis on local fauna. Weekly boat trips are made to collect specimens for faboratory study. Prerequisites: BIOL 204 and 205. Taught at Gulf Coast Research Laboratory.

BIOL 484. Marine Invertebrate Zoology (6) Summer. Anatomy, life history, distribution and phylogenetic relationships of free-living marine invertebrates with emphasis on fauna of the Carolinian region. Laboratory and field work included. Prerequisites: sixteen semester hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

BIOL 485. Marine Vertebrate Zoology and Ichthyology (6) Summer. Marine Chordata, including lower groups and mammals and birds with emphasis on fishes. Prerequsites: sixteen semester hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

BIOL 487. Special Problems in Marine Stience (1-6) Summer. Supervised research on specific problems in all areas of marine sclence. Prerequisites and credits to be set by problem director and registrar at Gulf Ccast Research Laboratory.

BIOL 498. Topics in Marine Science (3-6) Summer. Varicus marine courses such as marine scology, salt marsh ecology, marine fisheries management, aquaculture and others offered when taught by the Gulf Coast Research Laboratory staff, May be repeated for different tited topics as approved by the departmental marine science coordinator.

2IOL 489. Blology Internship (1-3) Fall, Spring, Summer, For biological sciences majors in cooperative education program. Writhen report required. May be repeated with permission. Only three hours can apply soward biology major or minor. Prerequisite: consent of the departmental adviser. Graded 9 M .

EHOL 490. Seminar (1) Fall, Spring, Summer. Review of fiterature to acquaint student with research techniques and important work in various fields of biology. May be repeated, but only two hours may be appled toward a biology major. Prerequisite: ten hours of biology.
3104.49 . Biology of Vertebrates (4) Fall. Vertabratt adaptation: ecology, biogeography, behevior and physiology of selected verterbrate groups with emphasis on Ohio fama. Credit not given for both BIOL 301 and 491. Three one-hour lectures and threehour laboratory. All day Saturday and/or weekend field trips required. Lab fee. Frerequisites: BIOL. 204 and 205.

## Bughess Administration (BA)

The availability of summer classes and elacives is subjeci to demand.

EA 102. Introduction te Business (3) Fall, Sping. Miarket competition and change, nature and central role of management, our business environment. No credit allowed toward BSBA degree.

- 4 2 203. Writen Communications for Euchess (3) Fall, Spring, Summer. Principles of effective communication in writug business messages such as letters, momos and reports. Emphasis on written communication skills and word processing applications on the personal computer for use in business and public organizations. Prerequisite: ENG 112. Lab fee.

BA 300. Executive Seminar (2) Fall, Spring. Exposure to current issues in business administration via guest lecturers who are visiting executives-in-residence. Students have opportunity to examine a variety of career choices in business and current issues in business management. Graded S/ $U$ U.

BA 310. Introduction to Hospitality Management (3) Fall. First course in hospitality management curriculum. Scope, structure and economic principles of service management. Operations management considerations for hotels, restaurants and institutional food service. Uniform systern of accounts and key operating ratios. Prerequisite: ACCT 221.

BA 325. Organization and Structure of Health Care Services industry (3) Fall. Broad dimensions and areas of health care services organizations, internal administrative processes; perspectives on comprehensive health planning and policy administration; environmental linkages to community health services agencies.
$\triangle B A$ 390. Introduction to Multinational Business (3) Fall, Spring. Environment encountered by U.S. enterprises engaged in businesses abroad; business practices and policies for foreign operations; international organizations. Prerequisite: ECON 200, or ECON 202 and ECON 203.

BA 395. Workshop on Current Topics in Business Administration (1-3) On demand. Selected topics in business administration. May be repeated if topics differ.

BA 396. Workshop on Current Topics in Business Administration (3) On demand. Selected topics in business administration. May be repeated if topics differ. No credit allowed toward BSBA degree.

BA 405. Business Policy and Strategy (3) Fall, Spring, Summer. Capstone course integrating functional areas of business. Strategic management planning process: decision making under uncertainty; external environment; internal strengths and weaknesses of the organization and its competitors; global competition; social responsibility; corporate culture; and values and ethics. Case analysis and simulations. Prerequisites: senior standing; credit for FIN 300, MGMT 300, MGMT 360, MKT 300, and OR 380 and admission to the BSBA program. (May NOT be taken concurrently with any of the prerequisites.)

BA 420. Health Care Case Problems (3) Spring. Principles of management in the health care organization are explored in depth through the use of case studies. Students have the opportunity to develop a
clear understanding of the differences between management in for-profithon-profit health services organizations versus other organizational models. Emphasis is provided concerning reimbursement, the roies of various health professions and the changes currently taking place in health care management. Prerequisite: BA 325 .

BA 429. Health Cave Internship (6) Fall, Spring, Summer. Specific internship in one of following areas of administration: hospital, nursing home, governmental health agency, voluntary health agency, health research project administration; and mental hospital administration; minimum of 20 credits of elective studies aimed at preparing for internship selected with advice and consent of adviser. Graded S/U.

BA 440. Management of international Operations (2). Accounting, finance, marketing, management and operational policies; practices and strategies appropriate for foreign operations. Selected case studies for special problems. Prerequisite: BA $3 \ominus 0$.

BA 474. Seminar in Entrepreneurshlp (3). Economic models of entrepreneurship including fiscal, regulatory and taxation issues. Product-market strategies, new business ventures, existing firm organization structures and capital acquisition. Prerequisites: MKT 300, FIN 300 and MGMT 300 anc senior status, or permission of insiructor.

BA 480. Hospitality Management Seminar (3) Spring. Integration of previous coursework in business administration with hospitality management. Unit operating concerns, corporate policy and strategy. Prerequisites: Admission to the BSBA program and 800 hours of approved practicum.

BA 489. Business internship (1-3). No credit for students with other internship creait in the College of Business Administration. Program must be approved in advance by college internship director Work experience must be completed within last year prior to graduation. Graded S/U.

BA 491. Studies in Business Administration (1-3) On demand. In-depth study of selected areas. Offered to individual student on lecture basis or in seminar depending on student needs and nature of material. May be repeated to six hours.

BA 492. Studies in International Business Administration ( $1-3$ ) On demand. Independent study on subjects related to international business not otherwise offered in curriculum. Reading, report and research assignments. May be ropeated to six hours.

BA 495H. Reading for Honors in Business dministration (1-3) Fall, Spring, Summer. upervised, independent program of reading and study. Prerequisites: 3.0 accumulative GPA and consent of department.

## Business Education (BUSE)

The availability of summer classes and electives is subject to demand.
$\triangle B U S E$ 101. Business Mathematics (3)
Fall, Spring. Mathematics of finance, merchandising, and business ownership. Consumer application of business mathematics to banking, credit, interest, insurance, home ownership, wages, social security, and income taxes.
$\triangle B U S E$ 111. Keyboarding (3) Fall, Spring. Touch operation of alphanumeric and symbol keys with emphasis on keyboarding accuracy for microcomputers, word processors, and computer terminals. Four class periods. Lab fee. Students with two semesters of high school typewriting or keyboarding will not receive credit toward graduation. Those students should enroll in BUSE 210.
$\dagger$ BUSE 201. Introduction to Windows Applications (1) Fall, Spring. Introduction to lindows operating environment technology and fundamental operations. Topics include working with program manger, file manager and control panel and using various applications in accessories group. Prerequisite: BUSE 111 or one semester of high school keyboarding or equivalent or permission of instructor. Lab fee.

## $\triangle B U S E$ 204. Introduction to Word

 Processing Applications (1) Fall, Spring. Introduction to word processing terminology and fundamental applications such as creating, editing, saving, and printing business documents on IBM-compatible systems. Prerequisite: BUSE 111 or one semester of high school keyboarding or equivalent. Lab fee.$\triangle B U S E$ 205. Introduction to Database
Applications (1) Fall, Spring. Introduction to database terminology and fundamental applications such as creating database structures, appending, editing, deleting, and manipulating records to generate business reports on IBM-compatible systems.
Prerequisite: BUSE 111 or one semester of high school keyboarding or equivalent. Lab fee. No credit allowed toward BSBA degree.
$\triangle$ BUSE 206. Introduction to Spreadsheet tpplications (1) Fall, Spring. Spreadsheet hanagement applications including creating and manipulating data on IBM-compatible systems. Topics such as formulas, formatting, printing and WYSIWYG enhancements. Emphasis on using spreadsheets in the
decision-making process. Prerequisites: BUSE 111 or one semester of high school keyboarding or equivalent. Lab fee. No credit allowed toward BSBA degree.

## ABUSE 207. Introduction to Desktop

 Publishing Applications (1) Fall, Spring. Introduction to the concepts of desktop publishing and applications on IBMcompatible systems. Prerequisite: BUSE 204 or equivalent. Lab fee.
## ABUSE 210. Advanced Typewriting (3)

 Spring. Formatting problems and projects; office production standards. Prerequisite: two semesters of high school typewriting or BUSE 111. Lab fee.
## $\dagger$ BUSE 213. Beginning Shorthand/

 Notetaking (3) Fall. Alphabetic shorthand system. Introduction to theory, transcription and speed development, and personal use applications. Four class periods. Prerequisite: BUSE 204 or knowledge of word processing for the IBM-compatible computer. Students with one year of shorthand may take either BUSE 213 or BUSE 311 with instructorís approval. Lab fee. Offered only at Firelands College.$\dagger$ BUSE 217. Integrated Office Applications (3) Fall, Spring. Development of word processing, database and spreadsheet skills through integrated activities of a simulation. Review of English mechanics, proofreading skills and document set-up. Fours hours lecture/lab. Prerequisites: BUSE 201, 204, 205, 206 and ENG 112 placement. Offered only at Firelands College.
$\triangle B U S E$ 240. Business Problems of the Consumer (3) Spring. Relationship of business practices to consumer activities. Developing consumer competencies in insurance, credit, savings, investments, housing, and estate planning. Basic economic principles underlying consumer decision making.
$\dagger$ BUSE 253. Desktop Publising Design (3) Fall, Spring. Development of the concepts and applications of document composition through the integrated activities of a simulation. Graphic design techniques, typographic design, principles of page and document layout. Four hours lecture/lab. Prerequisites: BUSE 201, 207 and 307. Lab fee.

## ABUSE 304. Word/Information Processing

 Applications (3) Fall, Spring. Advanced application techniques such as developing macros, creating graphics, designing mail merge, and generating reports on IBMcompatible systems. Prerequisite: BUSE 204 or equivalent. Lab fee.$\triangle B U S E$ 305. Advanced Database Applications (1) Fall, Spring. Advanced database functions such as generating reports,
building relationships between databases, creating custom formats and merging database fields with word processing documents on IBM-compatible systems. Prerequisite: BUSE 205 or equivalent or MIS 200. Lab fee.

## $\triangle B U S E$ 306. Advanced Spreadshęet

 Applications (1) Fall, Spring. Advanced spreadsheet management applications on IBM-compatible systems. Topics such as graphs, database management, macros, vertical lookup and data tables, financial functions, and WYSIWYG enhancements. Emphasis on using spreadsheets in the decision-making process. Prerequisite: BUSE 206 or equivalent or MIS 200. Lab fee.ABUSE 307. Advanced Desktop Publishing Applications (1) Fall, Spring. Advanced concepts of desktop publishing PageMaker on the IBM-compatible computer. Emphasis is on creating brochures, booklets, and using. advanced graphics. Prerequisite: BUSE 207 or equivalent. Lab fee.
$\triangle B U S E$ 311. Dictation and Transcription
(3) On demand. Dictation at speeds of 80 wpm; emphasis on rapid, accurate transcription. Open to students with a background in any shorthand/notetaking system. Three class periods and one hour lab. Prerequisite: BUSE 213 or equivalent. Lab fee.
$\triangle B U S E$ 314. Internship in Business Education (1-2) Fall, Spring. Supervised experience in local offices or businesses. Sixty clock hours of work required for each hour of college credit. May be repeated up to three hours. No more than one hour of credit may be granted for work in any one office or business. No credit for students with other internship credit in the College of Business Administration. Graded S/U.
$\triangle$ BUSE 321. Computer Data Processing (3) Fall. Computer concepts utilizing BASIC programming language on personal computers with hands-on experience.
$\dagger$ BUSE 335. Office and Records Management Systems (3) Fall, Spring. Procedures for control of information and business records. Analysis of office systems, work activities, and automation for improvement of office operations.

BUSE 352. Basic Business in Secondary Schools (2) Fall. Principles, objectives, and methods of teaching basic business subjects; resource unit development. C/F hrs: 32.

BUSE 354. Accounting and Data Processing in Secondary Schools (2) Fall. Principles, objectives, and methods of teaching accounting and data processing; review of the accounting cycle. C/F hrs: 26.

RUSE 356. Shorthand and Secretarial Practice in Seconciary Schools (1) On demand. Principles, objectives, and methods of teaching shorthand, iranscription, and secretarial practice. C/F hrs: 30.

Buse 358. Keyboarding and Clerical Practice in Secondary Schools (1) Fall. Principles, objectives, and methods of teaching keyboarding and clerical practice. C/F hre: 30.

EUSE 364. Marketing Education in Secondary Schools (3) Fall. Principles, objectives, and methods of teaching vocational and relative subject matier in markeling education.

ABUSE 401. Office Administration (3) On demand. Intensive study of procedures, skills, knowledges and technologies basic to ofice administration positions; refinement of office management operations, office simulations, and advanced word/information processing applications using microcomputers. Prerequisites: BUSE 210, 304, 305, 306 or permission of instructor. Lab fee.

## EUSE 444. Consumer Economics in the

 Schools (3) On demand. Need for consumer economics. Organization and integration of consumer economics in school programs. Consumer and business background information.BUSE 455. Administrative Management (3) Fall, Spring, Principles and practices of managing office personnel and operations. Selecting, developing, motivating, and appraising office employees. Office layout and design, work measurement, and work stendards.

BUSE 464. Development of Instructional部ateriais in Marketing Education (2) Fall. Methods of developing teaching materials in marketing education.

BUSE 462, Coordination in Cooperative marketing Education (2) Spring. Coordination in high school, post-high school, and adult education programs for marketing education. C/f hrs: 14.

BUSE 663. Community Planning in Adult Vocational Education (3) Fall. Identification of adult needs, procedures for organizing and promoting adult programs in vocational educetion, selecting and training adult leaders, and financing adult programs.

BUSE 465. Development and Administration of Vocational Education (3) Spring. Vocational education as sponsored by federal, state, and local legislation.

BUSE 468. Vocational Business and Orfice Education (4) Spring. Program construction, organization, improvement, implementation, evaluation, and development of program guides for both intensive
and cooperative vocational business education. C/F hrs: 28.

BUSE 470. Studies in Business and Marketing Education (1-4) Fall, Spring. Offered on individual, seminar, or lecture basis. Treatment of selected areas in depth depending on student needs and nature of material. May be repeated up to four hours. Prerequisite: consent of instructor. Graded S/ U.
$\triangle B U S E$ 486. Workshop in Business and Marketing Education (1-3) Summer. Areas of current interest to teachers in business, marketing and vocational education. Possible areas include: applied academics, employability, entrepreneurship, desktop publishing, cooperative education, and postsecondary education.

BUSE 497. Student Teaching (1-10) Fall. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $\$ 5$ per credit hour, Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## Business Management Technology (BAT)

$\dagger$ BAT 100. Introduction to Real Estate (2) Spring, Summer. Foundation for further study and partial preparation for securing a salesperson's license. Contracts, financing, deed, title, escrow, closing estats, civil rights ethics, license law, leases, brokerage, total investment decision, appraisal fundamentals and commercial-investment properties.
†BAT 101. Real Estate Law (2) Fall, Spring, Summer. Basic legal framework for subject of real estate. The legal system, estates in land, contracts for the sale of land, deeds, agency relationship, regulations covering brokers and salespersons, evidence of title, mortgages and other liens, civil rights, landiord-tenant, public control of land use, organized forms of multiple ownership, wills and estates.
$\dagger$ BAT 102. Introduction to Business
Technology (3) Fall, spring. Business technical process including structure of business and functions of marketing, production, finance, personnel, technical processes of control, and responsibilities of business.
†BAT 201. Human Resource Management
(3) Fall. Basic concepts, principles and functions of management and personnel administration. Acquisition, development, utilization and maintenance of an effective work force; recruitment and selection, testing, interviewing, counseling, developing and compensating employees.
$\dagger$ Bat 203. Production Hanagement (3) Spring. Analyze operations of the firm. Fundamentals of production, design of production systems, operations, coordination and control of production activity, major analytical tools for management. Three hours lecture. Prerequisite or corequisite: STAT 200 or 211.
$\dagger$ BAT 204. Marketing (3) Fall. Introduction of organization, management and practice of marketing by business firms. Two hours lecture, three hours field study.
$\dagger$ BAT 205. Total Quality Leadership (3) Introduction to "Managing for Qualliy," team building, graphical problem solving, how to use teams to improve quality, and continuing improvement techniques that optimize Just-in-Time production methods.
$\dagger$ BAT 207. Business Finance (3) Spring. Funds allocation and acquisition process of the firm, financial planning, capital budgeting, capital structure, longterm and shortterm financing. Two hours lecture, three hours field study.
tBAT 208. Advertising (3) Fall, Spring. Design, layout, production and placement of advertising, historical and cultural precedents of modern advertising. Prerequisite: MKT 204 or MKT 300 or permission of instructor.
$\dagger$ BAT 209. Management and Supervision (3) Fall, Spring. Principles of supervision and management techniques. Planning supervisory activities, motivating employees, delegation, leadership behavior, time management, managing performance, performance appraisal and management relations. Three hours lecture.
$\dagger$ BAT 210. Principles of Banking (2) Fall, Spring. Fundamentals of banking functions; language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping and bank loans and investments.
†BAT 211. Money and Banking (3) Fall, Spring. Basic monetary theory and policy, emphasis on function of the banking system in the economy; structure of commercial banking system, creation of bank deposis, Federal Reserve policy and operations. Treasury money market operations, the pricing of money and international financing problems.
$\dagger$ BAT 212. Installment Credit (2) Fall, Spring. Basic knowiedge of installment credit and its administration; emphasis on establishing credit, obtaining credit information, and loan servicing and administration; inventory ioans, rate structure and advertsing.
$\dagger$ BAT 213. Real Estate Finance (3) Fall, Spring. Home mortgage investment by
savings and commercial banks; channeling money into mortgages, home mortgage dings, special purpose mortgages and the administration of mortgage accounts.
†BAT 214. Banking Law (2) Fall, Spring. Consumer protection, real property, personal property and sales, the uniform commercial code, negotiable instruments and bank collections, and secured financing.
$\dagger$ BAT 215. Real Estate Appraisal (2) Fall, Spring, Summer. Three basic techniques of appraising-market comparison, cost of replacement and income capitalization. The appraising process, understanding value, basic valuation principles, general market analysis, sites and improvements analysis, market data approach, income approach, and reconciliation and the final value estimate. Prerequisites: BAT 100 and BAT 101 or permission of instructor.
$\dagger$ BAT 216. Real Estate Finance (2) Fall, Spring, Summer. Instruments of real estate finance such as mortgages, lien and title theories, leases and land contracts. Other topics including mortgage payment patterns, single family properties, mortgage market, major lenders, government and real estate, and special topics. Prerequisites: BAT 100 and BAT 102 or permission of instructor.

AT 217. Real Estate Brokerage (2) pring alternate years. Operation of a brokerage business. Includes the opportunity to expand knowledge of broker-client relationship, office management, selection of sales personnel, training salespersons, and a policy and procedure manual for the brokerage office. Prerequisites: BAT 100 and BAT 101 or permission of instructor.
†BAT 218. Special Topics in Real Estate (2) Spring alternate years. A sample property case study is covered. Other subjects include single family housing design and construction, residential land development, condominiums and cooperatives, farm, rural, commercial and industrial real estate, federal taxation of real estate, and federal, state and local regulatory controls. Prerequisite: BAT $100,101,215,216$ or permission of instructor.
$\dagger$ BAT 250. Marketing Research (2) Summer. Secondary information sources and technique alternatives, sampling, response and interpretive problems. Computer analysis introduced. Prerequisite: BAT 204 or consent of instructor.
†BAT 280. Retail Management (3) Fall, Spring. Introduction to the principles and practices of retail management using a anagerial approach. Topics emphasized miclude strategic planning, store operation, promotional strategy and computer applications.
$\dagger$ BAT 290. Studies in Business (1-3) Fall, Spring, Summer. Business study projects, seminars and other forums in the fields of marketing, personnnel, management, human relations, production, finance, computer science, law or economics. Prerequisites: sophomore standing and appropriate prior course work
$\dagger$ ВAT 291. Field Experience (1-3) Fall, Spring, Summer. Ten weeks of work in an appropriate business field to be decided in consultation with student's adviser. Prerequisite: permission of work supervisor and adviser.

## Canadian Studies (CAST)

7 $\triangle$ CAST 201. Introduction to Canadian Studies (3) Fall. Multidisciplinary review of Canadian development. Comparisions with the United States. Canada's history, geography, government and political system, population and social policy, economy and foreign trade, literature, art and popular culture. Prerequisite: sophomore standing.

CAST 305. Canadian Film (3) Spring. Canadian feature films from 1939 to the present seeks to determine a Canadian national identity, taking into consideration English and French Canadian social, political and cultural issues. The course explores Canadian film styles in relation to American and European models. Extra fee.

## Chemistry (CHEM)

No credit for two courses in any one of the following groups: CHEM $100,109,125,135$; CHEM 117, 127, 137; CHEM 117, 306, 341; CHEM 117, 308, 445; CHEM 321, 454; CHEM 352, 405.

П $\triangle C H E M$ 100. Introduction to Chemistry
(3) Fall, Spring, Summer. Examination of basic chemical concepts and role of chemistry in modern society. For students not majoring in sciences. Not counted toward chemistry major or minor. Can be taken concurrently with CHEM 110.
\# $\triangle$ CHEM 109. Elementary Chemistry (3) Fall, Spring, Summer. General chemistry and introduction to organic chemistry. Not accepted toward chemistry major or minor. Three lectures. Corequisite: CHEM 110. Prerequisites: two years of high school science and high school algebra or its equivalent.

TICHEM 110. Elementary Chemistry Laboratory (1) Fall, Spring, Summer. Exploration of fundamental chemical principles and their application to the solution of environmental, health and economic problems. Not accepted toward chemistry major or minor. Corequisite: CHEM 100 or 109. Lab fee.

7 $\triangle$ CHEM 117. Elementary Organic and Biochemistry (3) Spring, Summer. CHEM 109 continued. Not accepted toward chemistry major or minor. Prerequisites: CHEM 109 and 110 or CHEM 125 and 199. Corequisite: CHEM 118.

7 $\triangle$ CHEM 118. Elementary Organic and Biochemistry Laboratory (1) Spring, Summer. Not accepted toward chemistry major or minor. One three-hour laboratory. Corequisite: CHEM 117. Lab fee.

7 $\triangle$ CHEM 125. General Chemistry (5) Fall, Spring, Summer. Chemistry sequence for students majoring in sciences, the liberal arts or in premedical programs. Three lectures, one recitation, one three-hour laboratory. Prerequisites: high school chemistry, algebra and geometry, or CHEM 109 and 110. (Credit for graduation for CHEM 109 and 110 or CHEM 125, but not both.) Lab fee.
\$ $\triangle$ CHEM 127. General Chemistry (4) Fall, Spring, Summer. CHEM 125 continued. Three lectures, one recitation. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 128, or CHEM 138 with consent of instructor.

T| $\triangle$ CHEM 128. General Chemistry Laboratory (1) Fall, Spring, Summer. One threehour laboratory. Includes some qualitative analysis. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 127 or CHEM 137. Lab fee.

ПCHEM 135. General Chemistry (5) Fall. General chemistry sequence for wellprepared students. Three lectures, one recitation, one three-hour laboratory. Prerequisites: high school chemistry and consent of instructor. Corequisite: MATH 130 or MATH 131. Lab fee.

7CHEM 137. General Chemistry (4) Spring. CHEM 135 continued. Four lectures. Prerequisites: C or better in CHEM 135, or B or better in CHEM 125 and consent of instructor. Corequisite: CHEM 138 or 128.

ПCHEM 138. General Chemistry Laboratory (1) Spring. One three-hour laboratory. Emphasis on quantitative procedures. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 137, or CHEM 127 with consent of instructor. Lab fee.

CHEM 199. Introduction to Elementary Organic Chemistry (1) Fall, Spring. Not accepted toward chemistry major or minor. Provides a link between the CHEM 125-127128 sequence and CHEM 117-118; concurrent with the last one-third of CHEM 109. Three lectures, one three-hour laboratory. Prerequisites or co-requisites: CHEM 125 and consent of department.

CHEM 201: Quantitative Chemical Amalysis (3) Fall. Theory and practice of quantitative analytical procedures, volumetric and gravimetric methods. Two lectures, one three-hour laboratory. Prerequisite: C or beter in CHEM 127 and 128. Lab fee.
gHEM 30s. Organic Chemistry (4) Fall, Spring, Summer. For students who do not require full-year course. Includes carbohydrates and amino acids. Not accepted toward chemistry major. Three lectures, one threehom laboraiory. Prerequisites: CHEM 127 and 128 or CHEM 137 and 138. Lab tee.

CHER 308. Basic Biochemistry (3) Spring, Sumner. Stowture, chemical, physical and metabolic properties of bioorganic molecules. For students whose program does not tequire fll-year course. Prerequisites: CHEM 127 and 128 or CHEM 137 and 138 and CHEM 342 or C or better in CHEM 306; BIOL 104 and CHEM 201 recommended.

Ghe ${ }^{\text {M }}$ 309. Elemonary Biochemistry Babotatory (1) Spring, Summer. Basic biochemical techniques. One three-hour laboratory. Prerequisite or corequisite: CHEM 308 or CHEM 445, Lab fee.

CHEM 313 . Special Topics in Chemistry (1-3) Fall, Spring, Summer. Specific topics of current interest in chemistry. Not applicable - toward minimum 32 -hour major or 20 -hour minor. May be repeated with different topics.

## DHEM 321. Suryey of Instrumental

Analysis (3) Spring. Elementary instrumenial methods of analysis. Primarily for biology and med-tech majors. Two lectures, three hours of laboratory. Prerequisites: CHEM 137 and 138 or CHEM 201 and either PHYS 212 or PHYS 202. Lab fee.

CHEM 341. Organic Chemistry (5) Fall, Summer. Siructure and reactivity of organic substances. Four lectures, one three-hour leboratory. Prercquisites: CHEM 127 and 128 or CHENi 137 and 138. Lab fee.

Cutem 342. Orgenic Chemistry (5) Spring, Sunmer. CHEM 341 continued. Three lectures, two three-hour laboratories. Prerequisite: C or better in CHEM 341. Lab fee,

CHEM 352. Physical Chemistry (3) Spring.
For sucenis whose program does not require full-ysar course. Prerequisites: CHEM 127-128 and CHEM 201 or CHEM 137-138. MATH 130. Prerequisite or corequisite: PHYS 202 or PHYS 212.

CHEM 335. Workshop on Current Tapics (1-3) Imensive course on selected topics. May be repeated if topics differ. Does not apply toward first 20 hours of minor or first 32 hours of major.

CHEM 402. Numerical Methods in Chemistry (1) Spring. Use of computers and numerical methods in chemistry; survey of computer graphics and microcomputerbased instrumentation in chemical research. Prerequisite or corequisite: CHEM 405.

CHEM 405. Physical Chemistry (4) Fail. Thermodynamics and quantum chemistry. Prerequisites: CHEM 137-138 or CHEM 127. 128 and CHEM 201. MATH 232 and either PHYS 212 or PHYS 202.

CHEM 406. Physical Chemistry (4) Spring. CHEM 405 continued. Electrochemistry, kinetics, spectroscopy and molecular structure. Prerequisite: CHEM 405.

CHEM 407. Integrated Analytical and Physical Laboratory (2) Fall. Principles of measurement; spectral, chromatographic and electroanalytical techniques; thermodynamic and kinetic measurements; computerized data acquisition. Two three-hour laboratories. Prerequisite or corequisite: CHEM 405. Lab fee.

## CHEM 408. Integrated Analytical and

Physical Laboratory (2) Spring. CHEM 407 continued. Prerequisite: CHEM 407; prerequisite or corequisite: CHEM 406. Lab fee.

CHEM 413. Special Problems (1-3) Fall, Spring, Summer. Independent study and research. Three to nine hours of laboratory, one half-hour conference each week. Not applicable toward minimum requirements of major or minor. Prerequisites: consent of instructor, 20 hours of CHEM or consent of department, 2.5 minimum overall GPA. May be repeated, but no more than six hours credit may be applied toward degree.

CHEM 416. Bioinorganic Chemistry (3) Spring odd years. Role of inorganic chemistry in biological processes. Biological role of metal ions, structure and function of metalloproteins, electron-transfer reactions and medicinal applications of metal complexes. Prerequisites: CHEM 406 and 463.

CHEM 442. Organic Reaction Mechanisms (3) Fall. Fundamentals of organic reaction mechanisms and methods for their elucidation. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.

CHEM 445. General Biochemistry (3) Fall. Structure, function, chemical and physical properties of biological molecules and assemblies. Prerequisites: CHEM 342 and either CHEM 352 or CHEM 406, or permission of instructor. BIOL 205 is strongly recommended.

CHEM 446. Biochemistry Laboratory (1)
Fall. Experimental techniques in biochemistry. Three-hour laboratory. Prerequisite or corequisite: CHEM 445. Lab fee.

CHEM 447. General Biochemisiry (3) Spring. Metabolism, energetics and regulation of biological molecules and assemblies. Prerequisite: CHEM 445.

CHEM 449. Advanced Biochemistry Laboratory (2) Spring. Research techniques in biochemistry. Two three-hour laboratories. Prerequisite: CHEM 446 or permission of instructor. Lab fee.

CHER 453. Environmental Chemistry (2) Fall even years. Sources, reactions, transport and fates of chemical species in water, soll and air environments. Prerequisites: CHEM 127-128 and CHEM 201 or CHEM 137-138; CHEM 306 or 342 , CHEM 405 or 352 and PHYS 202.

CHEM 454. Instrumental mehods of Analysis (3) Spring. Theory of instrumental methods of analysis including electroanalytical, spectroscopic and chromatographic methods. Prerequisite: CHEM 407 or consent of instructor.

CHEM 463. Advanced Inorganic Chemistry (4) Fall. Chemical bonding, stereochemistry, acid-base chemistry, periodicity, nonmetal and transition metal chemistry, organometalic and bioinorganic chemistry. Prerequisite: CHEM 342 or 406.

CHEM 466. Spectroscopic Methods in Organic Chemistry (2) Spring. Organic structure determination by spectroscopic techniques, with emphasis on infrared, ultraviotet and nuclear magnetic resonance spectroscopy, and mass spectrometry. Also includes a brief introduction to related spectroscopic methods. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.

CHEM 483. Advanced Topics in Chemistry (1-3) Fall, Spring, Summer. Rigorous study of specific topics of current interest. Not applicable toward minimum 32 -hour major or 20 -hour minor. May be repeated with different topics. Prerequisite: CHEM 342 or consent of instructor.

## Chinese (CHIN)

THCHIN 401. Beginning Chinese 1 (4) Fall. Introduction to Mandarin Chinese, the official standard language of Mainland China and Taiwan. Development of the four skills: listening, speaking, reading and writing. Four class pertods and laboratory practice each week.

CHIN 102. Beginning Chinese II (4) Spring. CHIN 101 continued. Four class periods and laboratory practice each week. Prerequisite: CHIN 101 or equivalent.

CHIN 201 . Intermediate Chinese ! (4) Fall, CHIN 102 continued. Grammar and character writing review; continued develop-
ment of the four skills. Four class periods nd laboratory practice weekly. Prerequisite: HIN 102 or equivalent.

ๆCHIN 202. Intermediate Chinese ll (4) Spring. CHIN 201 continued. Four class periods and laboratory practice weekly. Prerequisite: CHIN 201 or equivalent.

CHIN 300. Selected Topics in Chinese Language and Culture (2-6) On demand. Topic chosen from language, culture or literature to meet curriculum needs and student requests both on campus and in a study abroad setting. May be repeated with different topics up to 12 hours. Prerequisite: consent of instructor.

CHIN 480. Selected Topics in Chinese (13) On demand. Topics chosen from Chinese literature, culture or thought to meet curriculum needs and student requests. May be repeated to six hours with different topics.

CHIN 491. Studies in Chinese (1-3) On demand. Independent reading for the advanced student. Prerequisites: arrangement with the instructor and consent of department chair prior to registration.

## Classical Civilization <br> CLCV)

|CLCV 241. Great Greek Minds (3) Fall. Masterpieces of Greek literature in English translation: Homer, Sappho, Pindar, Aeschylus, Sophocles, Euripides, Aristophanes, Herodotus, Thucydides, Plato, Aristotle. Introduction to history, art, customs and beliefs. No Greek required. No credit for both CLCV 241 and 485. No credit for both LAT 141 and CLCV 241.

ПCLCV 242. Great Roman Minds (3) Spring. Masterpieces of Latin literature in English translation: Lucretius, Cicero, Catullus, Vergil, Horace, Livy, Ovid, Petronius, Tacitus, Juvenal, Martial. An introduction to history, art, customs and beliefs. No Latin required. No credit for both CLCV 242 and 486. No credit for both LAT 142 and CLCV 242.

CLCV 245. Word Power from Greek and Latin Roots (3) Spring. Terms and concepts derived from Greek and Latin occurring in English; designed for premedical, predental, prelaw, language, sciences majors. No credit for both LAT 145 and CLCV 245.

CLCV 380. Classical Mythology (3) Spring. Study in English of Greek and Roman myths; historical meanings and influence on life, Niterature and art. No Latin required. No sredit for both LAT 480 and CLCV 380.

CLCV 381. Roman Life (3) Fall. Study in English of Roman daily life and popular culture as clescribed in literature and attested
in history, art and archeology. No Latin required. No credit for both LAT 481 and CLCV 381.

CLCV 388. Topics in Classical Civilization (1-3) Fall, Spring or Summer. Exploration in English of Greek or Roman literature or culture. May be repeated with different topics up to 12 credits.

CLCV 485. Greek Civilization (3) Fall. Study of the literature, art, history, customs and beliefs of the ancient Greeks in English translation. For classical civilization majors or minors and students wanting to fulfill humanities requirement. No credit for both CLCV 241 and 485. No credit for both LAT 485 and CLCV 485.

CLCV 486. Roman Civilization (3) Spring. Literature, art, history, customs and beliefs of the ancient Romans in English translation. For classical civilization majors or minors and students wanting to fulfill humanities requirement. No credit for both CLCV 242 and 486. No credit for both LAT 486 and CLCV 486.

## Communciation Arts Technology (CAT)

tCAT 191. Principles of Communciation Arts Technology (3) History and application of communciation arts technology; emphasis on interdisciplinary nature of CAT. Defining CATs, networks and telephony, design issues in multimedia development, practical application in business, government, industry. General emphasis on written work and thinking skills. Prerequisite/corequisite: ENG 112 or permission of instructor.
+CAT 251. Voice and Video Systems (3) Technical overview of voice and video systems. Technical introduction to telephones, telephony and telecommunication systems, local and long distance technologies, computer telephony integration, video standards and delivery systems, applications in business and industry. Prerequisite: CAT 191.
†CAT 291. Communication Arts Technology Integrative Seminar (3) Capstone experience for associate degree in CAT. Directed field research; emphasis on vocational exploration and relations between field experience and coursework. Prerequisite: CAT major.

## Communication Disorders (CDIS)

$\triangle$ CDIS 223. Introduction to Communication Disorders (3) Fall, Spring, Summer. Normal speech and language development, description and etiology of various communi-
cation disorders, e.g., articulation, voice, stuttering, etc.

CDIS 224. Phonetics (3) Fall, Spring. Sounds of spoken English, their production and recognition. Applications to techniques in speech pathology and habilitations of the hearing handicapped. Prerequisite: CDIS 223 or 471 or concurrent with CDIS 223.

CDIS 225. Language Acquistion and Development (2) Fall, Spring. Language acquisition theories, developmental processes, and characteristics of syntax, semantics, morphology and pragmatics in preschool children. Prerequisites: CDIS 223, 224 and ENG 380 . ENG 380 may be taken concurrently with CDIS 225.

CDIS 301. Anatomy and Physiology of the Speech Mechanism (4) Fall, Spring. Anatomical and physiological principles of the speech mechanism, including central and peripheral nervous systems. Prerequisites: CDIS 223, 224, ( 225 required for CDIS majors only) and BIOL 104, or 205; CDIS or HH major.

CDIS 302. Introduction to Hearing Science and Acoustics (3) Fall; Spring. Physics of sound, decibel notation, anatomical and physiological principles of the hearing mechanism, and basic concepts in psychoacoustics. Prerequisites: CDIS 223, 224 and PHYS 101 or 201, BIOL 101, 104, or 205 and Junior standing.

CDIS 311. Articulation Development and Disorders (3) Fall, Spring. Development, diagnosis and therapeutic techniques for problems of articulation. Prerequisite: CDIS 225, 301 and CDIS major or permission of instructor.

## CDIS 351. Language Assessment and

 Remediation (3) Fall, Spring. Overview of language disorders, principles and techniques of language evaluation and treatment. Prerequisites: CDIS 225 and ENG 380; CDIS major or permission of instructor.
## CDIS 361. Introduction to Diagnostic

 Audiology (3) Fali, Spring. Audiometric puretone testing methods, immittance testing procedures, otologic pathologies, and associated hearing problems. Prerequisite: CDIS 302 and CDIS major or permission of instructor.CDIS 401. Clinical Methods in Communication Disorders (4) Fall, Spring. Introduction to clinical setting; student will be involved in planning, observing, and assisting in therapy. Three lectures, two observation periods per week. Prerequisites: CDIS 311, 351, and CDIS major or consent of instructor.
cDis 424. Practicum in Communication Dleorders (3) Fall, Spring, Summer. Supervised dinical experience with children and adults. Prerequisites: CDIS 401, CDIS major, CPA in major of 2.7, nothing less than Cin major and 25 observation hours.

## CDIS 451 Language Principles and

 Practices for the Special Education Protesslonal (4) Spring. Introduction to language patterns of normal children related to the acquisition of pragmatics, syntax and semantics. Relationship of these patterns to assessment and remediation procedures and strategies in aypical populations.CDIS 47\% Introduction to Communication Disorders for the Classroom Teacher (3) Fall, Spring, Summer. Identification, etiologies and characteristics of communication disorders. Suggestions for classroom management of communication disorders. Not open to sludent with credit for CDIS 223.
cous 490 . Independent Study in Communicaton Disorders (i-3) Fall, Spring, Summer. For students who wish to do intensive study in communication disorders independentiy, or in conjunction with courses tegularly offered. May be repeated. Prerequisite: consent of instructor and department chair.

## Cemputer science (CS)

Acs 100. Computer Gasics (3) Fall, Spring, Summer. Computer technology and related social issues. Hardware, software, applications in diverse areas. Problems concerning computerized services, data banks, governmental controls. Problem solving using sotware packages (such as hypertext, spreadsheets, word processing, database, presentafion graphics, etc.). Credit not allowed for both CS 100 and MIS 200. Credit not applicable toward major or minor in computer science. Prerequisite: one year of high school algebra or MATH 095.

ACS 10:. Imtroduction to Programming (3) Fall, Sping, Summer, Algorithms. Programming languags features: expressions, assignments, functions with parameters, conditions, loops, arrays. Several programming assignments required. Does not apply to the computer science major or minor. Prerequistie: two years of high school algebra or MATH 095.

ACS 100. Introductory Topics (1-3). Introduction to the use of a programming language or other computer soltware. Can be repeated to three hours if topics differ. Credit not applicable io major or minor in computer science.

SSib1, mtroductory Topics (1-3). fitroduction to the use of a programming language or other computer software. Can
be repeated to three hours if topics differ. Credit not applicable to major or minor in computer science. Graded S/U.

CS 200. Introductory COBOL Programming (3). Fall, Spring. Introduction to programming concepts using the COBOL programming language. Introduction to Unix. Does not apply to major or minor in computer science. For students in the College of Business Administration only. Credit not allowed for both CS 200 and CS 360 . Not open to students with credit for CS 101. No prerequisite.
$\Delta C S$ 205. Advanced Programming Concepts I (3) Fall, Spring, Summer. Structured programming in $\mathrm{C}_{++}$. Basic language features including control structures, strings, arrays, records, and files. Introduction to pointer usage, procedures, functions and data representation. Credit not allowed for both CS 205 and 373. Prerequisite: CS 101 or CS 200 or a satisfactory score on the departmental placement test.

## ACS 215. Advanced Programming

 Concepts II (3) Fall, Spring. Advanced programming in $\mathrm{C}_{++}$. Introduction to objectoriented programming techniques including classes and iterators. Elementary data structures including lists, stacks and queues. Dynamic storage allocation concepts. interactive debugging techniques and use of recursion. Credit not allowed for both CS 215 and CS 374. Prerequisite: CS 205.CS 217. Computer Organization (3) Fall, Spring. Organization of digital computer hardware. Combinational and sequential circuits. Assembly language concepts. ALU, CPU, and control unit design. Projects will be implemented on a circuit simulator. Prerequisite: CS 205.

CS 280. Intermediate Topics (1-3). introduction to use of a programming language or other computer software. For students who already know how to program. Can be repeated to three hours if topics differ. Credit not applicable to major or minor in computer science. Prerequisite: CS 101 or equivaient.

CS 313. Elementary Mathematical Logic (3). Fali. Propositional and predicate logic; nature of mathematical proof; applications to mathematics and computer science. Not open to students with credit for MATH 313. Prerequisite: MATH 222 or consent of instructor.

CS 324. Usability Engineering (3) Spring. User interface design and human-computer interaction. Understanding the user. Design and prototyping of highly usable interfaces. Design notations, dialog styles, screen layouts, and usability testing. Event-driven programming language for rapid prototyping. Prerequisite: CS 215.

CS 325. Systems Programming (3) Spring. Sysiems programming using $\mathrm{C}+$ t. Ciass facilities and design using templates and iterators. Interrupts and using functions as parameters. Design methodology. Elementary parsing and language translation. Large programming project required. Preprocessors, link editors and source code control facilities. Prerequisites: CS 215 and CS 217.

CS 327. Operating Systems and Metwotks (3) Fall. Design of multiprocessing operating systems, proces scheduling and synchronizations. Device drivers and communication hardware. Networks and their topologies. Communication protocois and client/server environments with implication for operating system services and user programs.
Prerequisites: CS 215 and CS 217.
CS 335. Software Components and Data Structures (3) Fall. Specification, implementation, encapsulation, adaptation, use and reuse of advanced data structures and related control abstractions. Criteria for analysis and selection of software components for use in applications. Prerequisite: CS 325.
$\triangle C S$ 360. COBOL Programming (3) Fali, Spring, Summer. COBOL programming language and techniques for use; report generation; table handling; sorting; sequential and random-access data files; debuggings techniques; COBOL standards. Credit not allowed for both CS 200 and CS 360. Prerequisite: Grade of C or better in CS 101 or equivalent.

CS 371. Introduction to Unix (1) Fall, Summer. The Unix operating system; utilities; file siructure; pipes; filters; shell programming. Prerequisite: CS 101 or CS 200.

CS 373. introduction to $\mathrm{C}++$ (1) Summer. Programming techniques for $\mathrm{C}++$; data structures; operatiors and expressions; functions. Credit not allowed for both CS 205 and CS 373. Does not apply to the computer science major or minor. Prerequisite: CS 101 or equivalent.

CS 374. Advanced C++ (1) Summer. Objectoriented programming; Classes and abstract data types; templates; overloading; inheritance. Credit not allowed for both CS 215 and CS 374. Does not apply to the computer science major or minor. Prerequisite: CS 205 or CS 373.

CS 380. Special Topics in Computer Science ( $1-3$ ). Detailed study of a particular computer system or programming language which is not covered elsewhere in the curriculum. May be repeated if topics differ. Prerequisite: CS 205. (Additional prerequisites, if any, will be announced.)

CS 390. Practicum in Computer Science (1-6). For students working in internship or op programs. Written report required. oes not apply to major or minor in computer science. May be repeated to three hours. Students working through the co-op office may eam up to six hours of credit. Prerequisite: consent of department. Graded S/U.

CS 408. Advanced Operating Systems (3) Spring. Structure of operating systems. Physical input-output, buffering, interrupt processing. Memory, processor, device, information management; resource management interdependencies. Job and processor scheduling. Prerequisite: CS 327.

CS 409. Language Design and Implementation (3) Fall. Fundamental concepts of languages. Processors, data, operations, sequence control, data control, storage management, syntax, translation. Prerequisite: CS 325 .

CS 410. Formal Language Theory (3) Fall odd years. Various types of languages (context-sensitive, context-free, regular). Discussion of recognition devices such as pushdown automata, linear bounded automata and Turing Machines. Some topics of current interest. Prerequisite: MATH 222 or MATH 322.

S 420. Artificial Inteligence Methods (3) ummer odd years. Intermediate AI programming with application to representative problems requiring searching, reasoning, planning, matching, deciding, parsing, seeing and learning. Prerequisite: elementary knowledge of LISP.

CS 425. Computer Graphics (3) Spring every year; Summer even years. Graphic 1-O devices; 2-dimensional and 3 -dimensional display techniques; display processors; clipping and windowing; hidden-line removal; data structures for graphics. Prerequisites: CS 215 and one of MATH 222, 322, 332.

CS 428. Microprocesser Systems (3) Fall.
Architecture of microprocessors and microcomputers; 1/O and data transmission techniques; addressing techniques, interrupt handling. Detailed study of a specific microcomputer system. Prerequisites: CS 325 and CS 327.

## CS 429. Data Communication and

Networks (3) Spring. Data communication concepts; network topologies; transmission media; network access control; communication protocols; network architecture; LANs, MANs, and WANs; internetworking. Prerequisite: CS 327.
440. Optimization Techniques (3) Fall en years. Linear programming, game theory, PERT, network analysis; duality theory and sensitivity analysis; applications. Computer programs written to implement
several techniques. Prerequisites: CS 101 and either MATH 222 or MATH 322.

CS 442. Techniques of Simulation (3) Spring. Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisites: CS 215 and MATH 247.

CS 451. Numerical Analysis (3) Fall. Study of numerical methods for interpolation and approximation, integration and differentiation, solution of non-linear equations and systems of linear and non-linear equations. Prerequisites: CS 101 and MATH 332. Not open to students with credit for MATH 451.

CS 452. Numerical Analysis (3) Spring. Numerical methods for the algebraic eigenvalue problem, solutions of ordinary differential equations; topics from approximation theory, numerical solution of partial differential equations, optimization techniques and sparse matrix computations. Prerequisites: CS 451 and MATH 337. Not open to students with credit for MATH 452.

CS 462. Database Management Systems (3) Fall. Semantic models for conceptual and logical design of databases. Detailed study of relational systems: design, dependency and normal forms. Use of interactive and embedded query language. Principles of microcomputer DBMS, database recovery and object-oriented systems. Prerequisite: CS 215.

CS 464. Software Development (3) Fall. Indepth study of all aspects of software development process: user requirements, specifications, design, coding, testing, maintenance, documentation, management. Use of CASE tools for analysis and design. Prerequisite: CS 324.

CS 480. Seminar in Computer Applications (1-3). Prerequisite: consent of instructor. May be repeated up to six hours.
$\Delta C S$ 490. Independent Project (1-3). Readings and/or computer implementations in area of interest to individual student. Does not apply to major or minor in computer science. May be repeated up to six hours. Graded S/U.

## Computer Science Technology (CST)

tCST 181. Network and Internet Principles (3). Computer networking terminology and technology overview. Hardware and software components, communications transmission and protocols, history and uses of the internet. Activities include accessing shared resources and using internet services (email, telnet, ftp, WWW). Prerequisite: CS 100 or 101 or MIS 200 or permission of instructor.
$\dagger$ CST.232. Systems and Procedures (4). Continued study of design and application of data processing systems in business. Cost controls, operations research and integrated management information system. Prerequisite: CST 261 or permission of instructor.
tCST 261. Microcomputer Database Systems (3). Database principles using package in current, general use on microcomputers. Actual application of software capabilities in realistic situations. Prerequisite: CS 101 or permission of instructor.
†CST 275. Microcomputer Systems (3). Microcomputer hardware and software selection and installation. Software selection and implementation, including networking and communications software. Microcomputer issues. Prerequisite: CS 101 or permission of instructor.
$\dagger$ CST 281. Network and Internet Implementation (3). Installation and configuration of microcomputer network and internet servers and services. Networking hardware, software, protocols, functions. Two hours lecture, two hours lab weekly. Prerequisites: CST 181 and CS 101 or permission of instructor.
tCST 290. Experimental Studies in Computer Science (1-3). Fall, Spring. Contemporary computer topics, particularly software as it applies to microcomputer applications. Classroom and CAI materials used for instruction.
†CST 291. Student Intern Program (2) Fall, Spring, Summer. Ten weeks of paid field work in data processing applications under supervision of governmental, industrial or private business concern. Prerequisite: permission of instructor.

## Construction <br> Management and Technology (CONS)

(All CONS courses are offered during evenings and summer on a five-year rotating plan.)

CONS 101. Topics in Construction (2) Fall. Introduction to career objectives in a seminar setting with construction professionals. Introduces team building, professional practices, current issues in construction through readings and discussions of construction trade journals. Two hours lecture.
$\triangle$ CONS 235. Introduction to Construction (3) Fall, Spring. Basic concepts of construction management and technology, including office organization, building construction techniques, surveying, building materials,
plan reading and estimating. One and onehail hours iecture, three hours laboratory. Lab teo.

COHS 306. Residential Construction (3) Spring. Fesidential and light commercial construction, including principles of project organization, market and site analyses, cost estimating, scheduling, financial management, construction techniques, contracting, and marketing. One and one-half hour leclure, three hours laboratory. Prerequisites: CONS 235 and DESN 105. Lab fee.

CONS 318. Construction Surveying (3) Fall. Detailed study of surveying, including fleld work, with equipment such as transit, level and tape. Emphasis on closure. One and ono-half hours of lecture and three hours of laboratory. Prerequisites: CONS 235 and MaTH: 129 or equivalent. Lab fee.

CONS 320. Computer Application in comstruction (3) Spring. Computer applications of construction programs in the areas of materials, methods and management. Two hours lecture, two hours laboratory. Prerequisites: admission to construction program, TECH 101 or equivalent, junior standing. Lab fee.

CONS 335. Construction Materials and Testing (3) Fall. Materials and testing as used in commercial construction. Emphasis on foundation, sitework, soils, and concrete. One and one-half hours of lecture and three hours laboratory. Prerequisites: CONS 235 and PHYS 201. Lab fee.

CONS 336. Structural Design (3) Spring. Stendaro methods utilizing shear and bending stresses to size structural members. Emphasis on floor framing systems, columns and connections in steel and wood per design codes. Two hours of lecture and two hours laboralory. Prerequisite: DESN 243. Lab fay,

CONS 337. Heeting, Ventilating and Air Concititoning Sysiems (3) Spring. Mechanical systems for heating, ventilating, air conditioning cooling of buildings and in production processes. Experience with conventional and solar mechanical systems; determining losses, make-up, system sizing, control. Methods, materials and problems encountered in installing mechanical systems are siressed. One and one-half hours of lecture and three hours taboratory. Prerequisite: ET 191 or CONS 235 or permission of instructor. Lab fee.

CONS 406. Temporary and Concrete Stuctures (3) Fall. Design and construction of conerete structures. Placement of temporary formwork including sheathing, bracing and shores. Concrete design of stabs, beams and columns. Three hours of lechure. Prerequisite: CONS 336 . Materials foe.

CONS 412. Water Resources and Treatment (3) On demand. Introduction to design fundamentals associated with providing a public water supply and wastewater collection systems. Topics include fluid mechanics, water and wastewater quality, treatment requirements, design methods of water distribution, and environmental considerations. One and one-half hours of lecture and three hours laboratory. Prerequisites: CHEM 125, PHYS 201, or consent of instructor. Lab fee.

CONS 435. Construction Methods and Practices (3) Spring, on demand. Advanced course in commercial construction emphasizing superintendent's role in planning, inspecting, expediting and supervising construction operations. One and one-half hours of lecture and three hours laboratory. Prerequisites: CONS 335, CONS 336. Lab fee.

CONS 437. Construction Equipment (3) Fall. Equipment factors related to construction operations. Ownership and operating costs and productivity of major construction equipment; frequent down-time items. One and one-half hours of lecture and three hours laboratory. Prerequisite: CONS 235. Lab fee.

CONS 439. Estimating and Cost Control (3) Fall. Take off and costing and pricing for typical construction project. Preparation of final bid document including all materials, labor, equipment and overhead costs, and profit margin. One and one-half hours of lecture and three hours laboratory. Prerequisite: CONS 235. Lab fee.

CONS 440. Construction Contracting (3) Spring. Type of construction procurement, contracts, and specifications important to project management. Subcontracting, insurance, bonds, mechanics liens, and labor relations. Concepts applied to cases. Two hours lecture, two hours laboratory. Prerequisite: Senior Standing or parmission of instructor. Lab fee.

CONS 442. Construction Scheduling (3) Fall. Management utilizing critical path method, activity on arrow, Gantt charts, and PERT techniques. Planning, scheduling, control, resource allocation, and least cost expediting using computers. Two hours lecture, two hours laboratory. Prerequisites: Senior standing or permission of instructor. Lab fee.

CONS 470. Construction Capstone Project
(3) Fall, Spring. Formulate a construction project manual using several software packages. The comprehensive manual includes schedule, quantity survey, estimate, project management considerations, and a panel defense. Prerequisites: CONS 439, CONS 442. Lab fee.

CONS 400. Problems in Construction Technology ((1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in construction technology. May be repeated. Prerequisite: consent of instructor. Materials fee. Graded S/U.

## Cooperative Education (COOP)

COOP 050. Work Block (0) Fall, Spring, Summer. Work and study in business and industry, service or government agency in a supervised position related to major. May be repeated. Prerequisite: consent of cooperative education program.

## Creative Writing (ENG)

$\triangle E N G$ 205. Craft of Poetry (3) Fall. The way poetry works, analysis of poetic form, theory and technique in traditional and contemporary works, emphasis on poetry writing exercises and revision. Required for majors in BFA creative writing program. Prerequisite: ENG 112.

AENG 206. Craft of Fiction (3) Spring. The way fiction works, analysis of fictional form, theory and technique in traditional and contemporary works, emphasis on story writing exercises and fiction terminology. Required for majors in BFA creative writing program. Prerequisite: ENG 112.

AENG 208. Imaginative Writing (3) Fall, Spring. Explorations of the creative process through the writing of poetry and fiction. Emphasis is on the means whereby private fantasy is transformed into artistic expression. Open to all students.

AENG 209. Creative Writing Workshop (3) Fall, Spring. Principles of poetic composition and fiction writing; analysis of contemporary models and group discussion of student's work. May be repeated once.

AENG 308. Creative Writing (3) Fall, Spring. Imaginative writing, fiction and poetry. Class discussion and individual conferences. Required for creative writing major. Prerequisite: B or better in ENG 209 or permission of instructor. May be repeated once.

ENG 407. Writer's Workshop (3) Fall, Spring. Original composition, enalysis of contemporary creative writing models, emphasis on fiction and poetry. Creative writing seniors taking their second workshop, creation of senior thesis. Prerequisite: B or better in ENG 308 or approval of instructor. May be repeated once.

## Criminall Justice (CRJU)

RRJU 210. Introduction to Criminal Justice (3) Fall, Spring. Philosophical, historical, operational aspects of criminal justice agencies and processes in a framework of social control in a democracy. Crime and corrections problems and response of criminal justice agencies to them.
$\triangle$ CRJU 220. Law Enforcement in American Society (3) Fall. Overview of the police role in modern American society; emphasis on problems and issues confronting police and solutions within an organizational framework. Prerequisite: CRJU major.
$\triangle C R J U$ 230. Investigations: Theory and
Practice (3) Spring. Investigator's role in various types of investigations-criminal, civil, personal history and liability. Techniques of evaluation and preservation of data, sources of information; processes of specialized' investigations. Prerequisite: CRJU 210. CRJU major.

CRJU 310. Criminal Justice Research
Methods (3) Fall. Survey of research methods including research design, measurement and sampling, survey, experimental and field methods and data collection and analysis. Emphasis on orpreting and critically evaluating research meriminal justice. Prerequisite: CRJU major.

CRJU 320. Crime Prevention and Security
(3) Spring. A critical examination of crime prevention and security practices and approaches; emphasis on evaluating the effectiveness and problems of various approaches. Prerequisite: CRJU major.

CRJU 330. Juvenile Justice Subsystems (3) Fall. Examination of the varied agencies, methods and fechniques used in handling deviant youths (historic and contemporary); emphasis on agency effectiveness and perspectives. Prerequisite: CRJU major.

## CRJU 340. Drugs, Crime and Criminal

 Justice (3) Spring. Explores the legal and social aspects of drug and alcohol use and the criminal justice response to that use. Topics include types and effects of drugs, relationship to crime, and treatment of drug users. Criminal Justice credit not given for both CRJU 340 and HED 340 . Prerequisite: CRJU major.$\triangle$ CRJU 395. Workshop-Current Topics (13). May be repeated. Any semester. Special topics or issues in criminal justice, primarily of a current or unique interest to students/ ractitioners. Prerequisites: CRJU 210, junior anding or permission of instructor. ferequisite: CRJU major.

CRJU 410. Victimology (3) Spring. An examination of the victim in the criminal justice system. The course covers the development of victimology, basic concepts and issues, specific types of victimization, and societal/system response to the victim. Prerequisite: CRJU major.

CRJU 420. The Criminal Courts (3) Fall. Structure, jurisdiction, procedures including the nature of criminal law and the interaction of other criminal justice agencies (police, prosecutor, probation) with the courts. Prerequisite: CRJU major.

CRJU 470. Independent Study in Criminal Justice (1-3) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisite: consent of instructor. May be repeated. Prerequisite: CRJU major.

CRJU 480. Senior Seminar in Criminal Justice (3) Fall, Spring, Summer. Consideration and evaluation of selected policies and practices in criminal justice field. Attempt to integrate criminal justice field and to focus on common problems and concerns. Problems of theoretical and practical nonconvergence. Individual research interests explored, formalized, reported. Required of all CRJU majors. Prerequisites: senior standing and completion of 25 hours of CRJU core courses.

CRJU 491. Practicum (1-12) Fall, Spring, Summer. Experience working in a criminal justice agency under both practitioner and academic supervision. Emphasis on practice rather than observation. May be repeated.
Prerequisites: permission of program director and completion of ENG 112 or equivalent. Concurrent enrollment in other courses permitted with permission of program director. Graded S/U.

CRJU 492. Practicum Seminar (3) Fall, Spring, Summer. Analysis of problems and experiences encountered in the practicum. Relations between field experiences, coursework and related literature. Prerequisite: permission of director. Corequisite: CRJU 491.

## Dance (DANC)

DANC 101. Folk and Square Dance (1) Fall. Two contact hours. Dances of American and international cultures examined through active participation. Dance constumes, customs, music introduced with culturalinformation for more thorough understanding of specific dances. May be repeated up to 4 hours. Graded SN.

DANC 102. Ballroom Dance I (1) Fall, Spring. Two contact hours. Basic step patterns of social dances: Foxtrot, waltz,
swing, polka, cha-cha. Leading and following as a dance partner; music and rhythms. May be repeated up to 4 hours. Graded S/U.

DANC 107. Jazz Dance I (1) Fall, Spring, Summer. Two contact hours. For student with limited or no previous dance training. Studio instruction of basic jazz dance techniques and historical origins. May be repeated up to 4 hours. Graded S/U.

DANC 110. Tap I (1) Fall, Spring, Summer. Two contact hours. For student with limited to no previous dance training. Studio instruction of basic tap dance technique and historical origins. May be repeated to 4 hours. Graded S/U.

DANC 115. Modern Dance I (2) Fall, Spring. The first in a series of progressions in modern dance, exploring basic movement skills and correct body alignment; may be repeated up to six hours.

DANC 120. Classical Ballet I (2) Fall, Spring. Studio instruction of classical ballet fundamentals with emphasis on correct body alignment, barre and basic center work; may be repeated up to six hours. Prerequisite: beginning competency and permission of instructor.

DANC 207. Jazz Dance II (2) Fall, Spring. Four contact hours. Second in a series of jazz dance technique level which includes extended center combinations and complex rhythms. May be repeated to 6 hours. Prerequisites: DANC 107, 120 and/or permission of instructor.

DANC 215. Modern Dance II (2) Fall, Spring. The second in a series of progressions, including studio instruction in modern dance with floor and center work in varying modern styles; may be repeated up to six hours. Prerequisite: DANC 115 or permission of instructor.

DANC 220. Classical Ballet II (2) Fall, Spring. The second of a graded series of progressions, including studio instruction in classical ballet techniques with emphasis on adagio and allegro enchainements; may be repeated up to 6 hours. Prerequisite: DANC 120 or permission of instructor.

DANC 224. Dance Performance Workshop (1) Fall, Spring. Experience in choreography and participation as members of the concert group; may be repeated up to 6 hours. Prerequisites: audition and permission of instructor.

DANC 301. Teaching Methods of Folk and Square Dance (2) Fall. Folk and square dance skills and techniques applying introductory teaching methods. Prerequisite: DANC 101.

DANC 302. Jeaching Methods of Ballroom Hance (2) Spring. Ballroom and social dance stills and techniques applying introductory teaching methods. Prerequisite: DANC 102.

DANE 307. Sazz Dance II (2) Spring, altemate vears. Four contact hours. Third in a sentes of jazz dance tachnique levels which includes professional training for performance, incorporating artistry and aesthetic Gvereness. Prerequisites: DANC 207 and/or perniesion of instructor.

DANC 315. Modem Dance III (1) Fall, Spring. The third in a graded progression including studio instruction in varying styles of mpdem dance; emphasis will be placed on horizontal and oblique design, turns, falls, jumps, leaps and complicated rhythms; may be repeated up to 6 times. Prerequisite: OANC 215 or permission of instructor.
0.NE 220. Ciassical Ballet ill (1) Fall, Spring. The third in a graded series of progressions, including studies instruction in classlcal ballet techniques, added difficulty in barre, adagio and allegro work and introduction to pointe work; may be repeated up to 6 hours. Prerequisite: DANC 220 or permission of instructor.

OANO 322. Pointe Technique (1) Fall, Sping (atemating years). Two contact hours. Sudio instrcution of pointe technique in ballet genre for students with strong technical base. No experience in pointe necessary. May be repeated to 4 hours. Prerequisite: DANC 120 and/or permission of instructor. Graded SIU.

DKNC 325. Theory and Methocis of Teaching Dance (i) Fall alternate years. A seminar experience in pedagogical practices, in classical ballet and modern dance forms. Prefequisites: DANC 215, 220 or permission oí instructor.

DANE 326. Dance Composition (2) Spring. Basic principles of form and flow of movement and their application to compositions in dance. Prerequisites: DANC 215, DANC 220 or permission of instructor.

DANC 327. Choreography Workshop (1) Fall. Sudto analysis of the elements of choreography; development of dance compositions; specific assignments of selected problems; may be repeated up to 6 hours. Prerequisite: DANC 326 or permission of instructor.

DANC 387. Practicum in Dance ( $1-4$ ) Fall, Spring, Summer. Under supervision of dance facuty in School of HPER; petitioning required before registration; credit hours epproved separetely by program araa. Prerecuisites: sophomore or junior standing and approval of dance faculty.

DANC 424. Dance History I (3) Fall, alternating years. Influence of culture, philosophy, persons and events on dance from primitive times to 1900s.

DANC 425. Dance History II (3) Spring, alternating years. Dance developments from 1900 to present; influential events, personalities, technologies and philosophies.

DANC 426. Dance Production (3) Spring alternate years. Classroom and hands-on experience; problems and techniques in dance lighting, sound, costuming, direction, publicity and general management.

DANC 470. Independent Study in Dance (1-3) Fall, Spring, Summer. In-depth study project of topic of particular significance to student. Project must be approved by project supervisor and division chair before registration. May be repeated. Prerequisite: permission of instructor.

DANC 487. Practicum in Dance (1-6) Fall, Spring, Summer. Under supervision of dance faculty in School of HPER; petitioning required before registration; credit hours approved separately by program area. Prerequisites: junior or senior standing and approval of dance faculty.

## Economics (ECON)

TECON 100. Development of the American Economy (3) Fall. Study from colonial times to present to provide perspective for understanding current economic problems. How Americans lived, changes in population and income distribution, agriculture, industry, lechnological change, labor, transportation, money and banking, foreign trade, role of government.

TAECON 200. Introduction to Economics (3) Fall, Spring. Alternative economic goals; economic growth, full employment, price stability, fair income distribution, economic security, economic freedom, consumer sovereignty, efficiency. Recommended for sludents taking only one ECON course. Does not count toward the total hours of economics required for BSBA, BS in Economics, BA in Economics, or Minor in Economics; cannot be used to satisfy specialization, non-business nor free elective requirements for BSBA degree.

9 $\triangle E C O N$ 202. Principles of Microeconomics (3) Fall, Spring. Price and allocation of resources. Demand, supply; price theory; income distribution; market failure; current problems and public policy. Enhances students' ability to evaluate economic policy. Recommended before ECON 203. Prerequisite: high school algebra or equivalent.

1]AECON 203. Principles of Macroeconomics (3) Fall, Spring. National income and employment, inflation, banking system, monetary and fiscal policy; sconomic grown. and development; intemational econonics. Develops students' understanding of tradeoffs and enhances critical reasoning abilities. Prerequisite: high school algebra or equivalent. ECON 202 recommended.
$\triangle E C O N$ 301. Price Theory and Applications (3) Offered on demand. This is a noncalculus version of ECON 302 and is designed for siudents pursuing the BA in Economics. Course topics include theory of demand, of the firm, of production, and distribution. Compares market structures. Factor price determination and welfare economics. Prerequisites: ECON 202, 203 and MATH 120 or equivalent or higher. No credit is allowed towards the BSBA degree or the BS in Economics degree.
$\triangle E C O N$ 302. Intermediate Wicroeconomic Theory (3) Fall, Spring. Theoretical course on decisions by consumers and firms. Theory of demand, of the firm, of production and distribution. Compares market structures. Factor price determination and weltare economics. Prerequisites: ECON 202, 203 and either MATH 126 or 131 or equivalent. Normally students should not take both ECON 302 and ECON 304.
$\triangle E C O N$ 303. Intemediate Macroeconomi Theory (3) Fall, Spring. A theoretical course on how the economy as a whole operates. Measurement and determination of national income, employment, the price level, interest rates, and growth. International intluences on the economy. Alternative theories are compared. Prerequisites: ECON 202 and ECON 203.

ECON 304. Managerial Economics (3) Fall, Spring. Applications of microeconomic theory to decision-making process of the firm. A profit maximizing framework is developed to apply and adapt to a diverse set of issues related to contrasting market structures and alternative pricing policies. Prerequisites: ECON 202 and ECON 203 and STAT 212. Normally students should not take both ECON 302 and ECON 304.
$\triangle E C O N$ 311. Money and Banking (3) Fall, Spring. Monetary policy and financial institutions. Causes and effects of changes in the money supply. Interest rates, commerolal banking, central banking policy, and international monetary insitutions. Prerequisites: ECON 202 and ECON 203.

ECON 321. Labor Economics (3) Spring. Economics of manpower employment and labor market; labor organizations, collective bargaining, regulation of labor by government, wage determination, unemployment and social security. Prerequisites: ECON 202 and ECON 203.

ECON 323. Poverty and Discrimination (3) Fall alternate years. Analysis of poverty, mphasis on effect of discrimination on Lonomic opportunities of the poor. Measures of poverty and income inequality and their use in development of public policy over time. Effect of poverty on women, public policy directed toward poor women, international comparison of poverty and social responses to poverty. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

ECON 331. Public Finance (3) Fall, Spring. Survey of government finance. Public expenditures, taxation and debt; emphasis on federal level. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

ECON 332. State and Local Government Finance (3) Fall or Spring. Economic functions of state and local governments; revenue sources, expenditures, debt and intergovernmental fiscal relations. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

ECON 335. Environmental Economics (3) Fall. Implications of environmental philosophies; benefit-cost analysis with applications; economics of pollution and resource management; application of economic tools to environmental problems. Prerequisite: ECON 202 or consent of instructor.

CON 351. International Trade and
Finance (3) Fall, Spring. Structure and regulation of foreign trade, mechanics of international finance, new elements in U.S. foreign trade. Prerequisites: ECON 202 and ECON 203 or ECON 200 and BA 390.

ECON 400. Mathematics for Economists (3) Fall. Elementary mathematical methods and basic applications to economic theory. Not recommended for students who have had MATH 131 or above.

ECON 401. Mathematical Economics (3) Spring. Economic theory in mathematical context; microeconomic and macroeconomic models, their structure and analysis. Constrained optimization. Prerequisites: ECON 400 or equivalent of calculus, and ECON 302 or ECON 303.

ECON 402. Econometrics (3) Spring. Statistical techniques used to measure economic data and to test validity of theoretical models. Prerequisites: STAT 212 and ECON 4.00, or equivalent; or consent of instructor.

ECON 404. Business Conditions (3)
Spring. Components of gross national product, statistical measurement of business mactuations. Determinants of the level of iconomic activity. Keynesian, monetarist and other theories of business cycles. Methods of macroeconomic forecasting. Prerequisites: ECON 303 or ECON 311, and STAT 212.

ECON 414. Monetary and Fiscal Policy (3) Spring. Objectives, means and analysis of monetary and fiscal control; effect on total economic activity. Prerequisite: ECON 303 or ECON 311.

ECON 421. Labor-Management Relations
(3) Spring. Employer-employee relations from historical and legal aspects to collective bargaining process, including mediation and arbitration procedures. Prerequisite: ECON 200 or ECON 202 or consent of instructor.

ECON 422. Labor Relations Policy (3) Fall. Collective bargaining and labor negotiation and their ties to federal and state legislation process, including negotiation and arbitration procedures. Prerequisite: ECON 200 or ECON 202 or consent of instructor.

ECON 440. Women, The Economy and Society (3) Spring. Role of gender in the world economy, varieties of feminism, feminization of poverty, the relationship between household and labor market roles, the integration of women into the working world, causes of and responses to the gender wage gap, causes and alternative reactions to sex discrimination in labor markets. Prerequisite: ECON 202 or consent of instructor.

ECON 451. International Trade (3) Fall. Microeconomic aspects of international economics. Comparative advantage, gains from trade, free trade agreements, protection and real wages, international factor movements, commercial policy including analysis of tariffs, quotas and voluntary export restraints. Prerequisite: ECON 351 or consent of instructor.

## ECON 452. International Monetary

Economics (3) Spring. Macroeconomic side of international economics. Open economy macroeconomics, exchange rates and the balance of payments, fiscal and monetary policy, fixed versus floating exchange rates, budget deficits and international coordination of macroeconomic policies. Prerequisites: ECON 303 (or ECON 311) and ECON 351 or consent of instructor.

ECON 454. Economic Development (3)
Fall. Obstacles to and current efforts for promotion of economic growth in emerging nations. Prerequisite: ECON 202 or consent of instructor.

ECON 462. Urban Economics (3) Spring. Urban spatial theory and analysis, economic analysis of urban problems including poverty, housing, transportation, the environment and public finance. Prerequisites: ECON 202 and ECON 203.

ECON 471. Industrial Organization: Study of Business Size and Competition (3) Fall. Study of size and behavior of firms, especially large firms, and how size and behavior
influence profits, pricing, costs, product differentiation, and innovation. Emphasis on policy issues about size and regulation. Prerequisite: ECON 202 or consent of instructor.

ECON 472. Comparative Economic Systems (3) Spring. Economic structures, conditions, problems and policies in a selection of countries. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

ECON 473. History of Economic Thought (3) Fall. Development of economics and economic analysis from Adam Smith to J.M. Keynes. Prerequisites: ECON 202 and ECON 203.

ECON 476. Seminar in Contemporary Economic Problems (3) On demand. Interested students should consult with chair of department.

ECON 491. Studies in Economics (1-3) On demand. Treatment of selected areas in depth. Offered to individual on lecture basis or in seminar depending on student needs and material. May be repeated to six hours.

ECON 495. Readings for Honors in Economics (3-6) On demand. For economics major with accumulative GPA of 3.0; normally culminates in treatise or comprehensive examination which must receive approval of department. Consult department chair. Prerequisite: consent of department.

## Education Curriculum and Instruction (EDCI)

$\triangle E D C I$ 100. College Reading/Learning Skills (2-3) Fall, Spring, Summer. Designed to improve basic reading/learning habits of college studentsóvocabulary, comprehension, notetaking, time management, test taking, analytical and critical thinking. Lab required. $\$ 10$ lab fee. Graded A-B-C-no record. Summer 3 hrs.; fall and spring 2 hrs.; Firelands 2-3 hrs. Fall, Spring, Summer.

IEDCI 101. Speed Reading (2) Fall, Spring. Designed to improve study-type reading speed; leisure reading speed; adjusting reading speeds to purposes, material difficulty and background experience of reader. (Minimum score of 260 words per minute with 60th percentile comprehension on reading speed test is necessary to receive $C$ in course.) Prerequisite: departmental testing or successful completion of EDCI 100. Clinic/lab required: 15 hrs . Lab fee: $\$ 15$.
$\triangle E D C I$ 121. Transition Course (1) Summer. Transition to University life through orientation to University facilities and options; activities stressing study skills and personal growth.

AEDCl 202 . Introduction to Teaching (3) Fall, Spring. One and one-half hour oncampus class each week with supervised experience in schoois one day per week for ten weeks. On-campus classes require students to demonstrate acquisition of body of professional knowledge. Field experiences require students to apply this body of professional knowledge through working as teachers' aides, observing and analyzing school practices and completing structured held activities. Students are assigned to an elementary school for five weeks and a secondary school for five weeks. One of thece settings will be culturally, racially and socioeconomically diverse in terms of pupil enrolment. Prerequisites: Recommended that sludents have complated at least two semesters of undergraduate coursework. Fequired in all teacher certification programs except hose offering an approved alternative, Grade of $C$ or better required to be eligible for studont teaching. Cross-listed in EDFI. C/F hours: 50. lab fee.

AEDCl 348 . Literaey and the Young Child (3) Fall, Spring, Summer. Young child's accuisition of oral and written language, emphasis on roles of child development, social interaction, culture and environment. Prerequisites: EDFI 302 or consent of instruclor. C/F hours: 30.

AEDCI 349. Fundamentals of Reading (3) Fall, Spring, Summer. Basic understandings anci instructional implications of reading acquistion and devalopment from linguistic, soclet, psychological, cognitive, historical and curricular perspectives. Prerequisites: EDFl 302 or consent of instructor.

EDCl 350 . Panning and implementing insiruction in the Classroom (3) Fall, Spring. Demonstration and analysis of interdisciplinary nature of media, methodology and classroom management in elementary classrooms. Practicum experience in a selected classroom to demonstrate acquired mowedge and skills. Must obtain a grade of eprior to student teaching. Prerequisite: Admission to elementary education program. C/F irs.: 30.

Encl 30 t. Social Studies in the Elementary School (3) Fall, Spring. Teaching social studies in K-8. Objectives, content learning experiences, instructional resources, ovalustion of leaching, learning in the olassroom. Must obtain a minimum grade of C prior to student teaching. Prerequisite: admission to elementary education program. Cff hes.: 30.

EDO: 552. Mathematics Methods for the Elementary School (3) Fall, Spring, Summer. Teaching contemporary mathematics in grades K-8. Objectives, curriculum, materiais of instruction, methods of teaching and evaluation. Must obtain minimum grade of C priof to student teaching. Prerequisite:
admission to elementary education program. C/F hrs.: 30.

EDCI 353. Science in Elementary Schools (3) Fall, Spring, Summer. Teaching of science in grades K-8. Objectives, curriculum, materials of instruction, methods of teaching and evaluation. Must obtain a minimum grade of C prior to student teaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.

## EDCl 355. Teaching Reading in the

 Elementary School (3) Fall, Spring. The basic theory of developmental reading including teaching procedures, setting objectives, designing curriculum, utilizing instructional materials and evaluation. Prerequisite: admission to elementary education program and EDCI 349. Must obtain a minimum grade of $C$ prior to student reaching. C/F hrs.: 30.EDCl 356. Language Arts in the Elementary School (3) Fall, Spring. Basic course in teaching English language arts. Overview of language development and theory from sociocultural perspectives. Focus on integrated development of communication skills with literature as primary resource. Classroom decision-making from objectives and lesson planning to evaluation for language arts instruction. Must obtain a minimum grade of C prior to student reaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.

EDCl 35\%. Kindergarten-Primary Curriculum and Methods (3) Fall, Spring, Summer. Objectives, curriculum, instructional and resource materials, methods. Laboratory experience in kindergarten-primary education. Should precede semester of student teaching. Prerequisite: EDFI 302 or EDFI 342 and EDCl 348 . C/F hrs: 30.

EDCI 360. Content Reading for Specialized Subject Areas (2) Fall, Spring. Designed for preservice teachers seeking cerification in specific subject areas at elementary and/or secondary levels. Participants become acquainted with reading needs of students in content area class. Prerequisites: early field experience and EDF: 302. C/F hrs: 30.

EDCI 366. Computer Utilization in the Classroom-Elementary (3) Fall, Spring, Summer. Impact of the computer on educational methods and applications in the classroom. Evaluation of software. Integration of the computer and associated technologies into the content areas. Focus on elementary classroom. Prerequisites: EDFI 302 and junior standing. Lab fee $\$ 15$.

EDCI 367. Computer Utilization in the Classroom-Secondary (3) Fall, Spring. Impact of the computer on educational methods and applications in the classroom.

Evaluation of software, Integration of the computer and associated technologies into the content areas. Prerequisite: admission into the secondary education program. C/F hrs.: 40. Lab fee $\$ 15$.

EDCI 370. Generai Teaching Methods in Secondary Schools (3) Fall, Spring, Summer. Processes and issues that form the basis of instruction in all content areas; development of strategies and teacher behaviors associated with effective instruction. Prerequisites: attainment of 60 semester hours; accumulative GPA of at least 2.5; grade of C or better in IPC 102, ENG 112, EDCI/EDFI 202, EDFI 302. Lab fee.

EDCI 371. English in Secondary Schoois
(3) Fall, Spring. Philosophies of, experiences in and mathods of teaching English in secondary schools. Prerequisites: admission inio the secondary education program, ENG 380 and ENG 381. Grade of C or better required. C/F hrs.: 40. Lab fee.

## EDCI 372. Speech in Secondary Schools

(3) Fall, Spring. Principles, objectives, instructional and resource materials, and methods for teaching of speech in secondary schools. Prerequisites: EDF 302, EDCI 370 and senior standing. Grade of $C$ or better required. C/F hrs.: 40.

EDCI 373. Teaching Foreign Language in the Schools I (3) Fall, Spring. Principles of second language learning; theory and practice of K-12 curriculum, development of fundamental skills and abilities in teaching listening, speaking, reading, writing in foreign language; techniques of instruction planning; concepts of teaching culture. Prerequisites: EDCI/Fl 202, EDFI 302 and junior standing. C/F hrs.: 30.

EDC: 374. Mathematics in Secondary Schools (3) Fall, Spring. Principles, objectives, curriculum, materials and methods of teaching mathematics in secondary schools. Prerequisite: admission into the secondary education program. Grade of C or better required. C/F hrs.: 40. Lab fee.

EDCI 375. Science in Secondary Schocis (3) Fall, Spring. Principles, objectives, curriculum, instructional and resource materials, and methods of teaching science in secondary schools. Prerequisite: admission into the secondary education program. Grade of C or better required. C/F hrs.: 40. Lab fee.

EDCI 376. Social Studies in Secondary Schools (3) Fall, Spring. Principles, objectives, curriculum, instructional and resource materials, and methods of teachinge social studies in secondary schools. Prerequisite: admission into the secondary education program. Grade of $C$ or better required. C/F hrs.: 40. Lab fee.

EDCI 378. Journalism Methods for. High School Teachers (3) Fall, Spring. Principles, jectives, curriculum, materials, methods of aching mass media in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. Grade of C or better. required. C/F hrs.: 40.

## $\triangle E D C 1$ 395. Workshop on Current Topics

(1-3) On demand. Intensive education experience on selected topics related to skill development, content update or materials development. Typically, an all-day or similar concentrated time format. Requirements usually completed within time format. May be repeated on approval of adviser.

EDCI 418. Effective Teaching/Classroom Management (3) On demand. Effective teaching principles dealing with techniques, organization, planning and management combined with strategies used to facilitate learning and to reduce behavior problems.

EDCI 420. Developmental Reading in the Content Areas (3) Fall, Spring, Summer. Orients the teacher to the developmental reading process as it applies to the various subject matter areas. Prerequisite: admission into the secondary education program or consent of instructor. C/F hrs.: 40.

EDCI 423. Investigations in the Teaching of Mathematics (3) Spring, Summer. eisearch in mathematics education as it dffects elementary schools. Curricular trends reflecting basic mathematical skills appropriate for elementary schools. Examination and analysis of materials for teaching mathematics. Prerequisite: EDCI 352. C/F hrs.: 30.

## EDCI 424. Investigation in Teaching of

 Elementary Social Studies (3) On dernand. Seminars in the teaching of social studies. Indepth study of values education; the interdisciplinary approach, problem solving techniques, and the role of social studies in controversial issues. Each can be taken alone but recommended that 3 of the 4 be completed. Prerequisite: EDCI 351.EDCI 425. Investigations in the Teaching of Language Arts (3) On demand. Investigation of language arts in the elementary school, the nature and interrelationships of the various components, objectives for teaching, and development and evaluation of language learnings, materials and methodology. Prerequisite: EDCI 356.

EDCI•426. Investigations in the Teaching of Elementary Science (3) On demand. Analysis of the science concepts and principles which are developed; nature of materials and methodology and designs of evaluation procedures. Prerequisite: EDCI 53 recommended.

EDCl: 429. Teaching Foreign Language Skills in the Schools II (3) Spring. Ad-vanced-level skills and abilities in teaching listening, speaking, reading and writing in foreign languages as applied to the K-12 curriculum, classroom management, testing and evaluation, individualized instruction and culture. If taken for graduate credit, a research paper is required. Prerequisite: EDCl 373. C/F hrs.: 30.
$\triangle E D C I$ 490. Problems in Education (1-3). On demand. For advanced student wanting to conduct intensive study of selected problems in education. May be repeated to six hours; undergraduate credit only. Prerequisite: consent of department. C/F hrs.: 20.

EDCI 492. Student Teaching (1-10) Fall, Spring. Classroom teaching at the elementary level urider supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

EDCI 497. Student Teaching (1-16) Fall, Spring. Classroom teaching at the secondary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 30 hrs./wk. May be repeated. Graded S/U.

## Educational Adiminstration and Supervision (EDAS)

## $\triangle E D A S$ 409. Organization and

 Adminstration of Education in American Society (3) Fall, Spring, Summer. Local, state and federal involvement in American education as it relates to society. Teacher interrrelationships; school organization and climate, school finance, legal issues, job placement, professional responsibilities, teacher evaluation, school-community relations, current educational issues and politics of education. Prerequisites: EDFI 302 and junior status.IEDAS 490. Problems in Education (1-3). On demand. For advanced student wanting to conduct intensive study of selected problems in education. May be repeated to six hours; undergraduate credit only: Prerequisite: consent of department.

EDAS 492. Student Teaching ( $1-10$ ) Fall, Spring. Classroom teaching at the elementary level under supervision on fuli-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

EDAS 497. Student Teaching (1-10)•Fall, Spring. Classroom teaching at the secondary level under supervision on full-day basis. - Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Educational Foundations and Inquiry (EDFI)

$\triangle E D F I$ 202. Introduction to Teaching (3) Fall, Spring. One and one-half hour oncampus class each week with supervised experience in schools one day per week for ten weeks. On campus classes require students to demonstrate acquisition of body of professional knowledge. Field experiences require students to apply this body of professional knowledge through working as teachers' aides, observing and analyzing school practices and completing structured field activities. Students are assigned to an elementary school for five weeks and a secondary school for five weeks. One of these settings will be culturally, racially and socioeconomically diverse in terms of pupil enroliment. Prerequisites: Recommended that students have completed at least two semesters of undergraduate coursework. Required in all teacher certification programs except those offering an approved alternative. Grade of $\ddot{\mathrm{C}}$ or better required to be eligible for student teaching. Cross-listed in EDCI. C/F hours.: 50. Lab fee.

4EDFI 302. Educational Psychology (3) Fall, Spring, Summer. Theory and research on learning, development, personality and motivation applied to educational processes in various learning environments. Some field or clinical work. Prerequisites: PSYC 201 and sophomore status. C/F hrs.: 20.

EDFI 342. Psychology of Childhood (3) Fall, Spring, Summer. Behavior and development of children through elementary school age. Prerequisite: PSYC 201. EDFI 302 recommended.

EDFI 395. Workshop on Current Topics (1-
3) On demand. Intensive educational experience on selected topics related to skill development, content update or materials devélopment. Typically, an all-day or similar concentrated time format used. Requirements usually met within time format. May be repeated on approval of adviser.

AEDFI 402. Assessment and Evaluation in Education (3) Fall, Spring, Summer. Assessment and evaluation applied to instructional procedures; construction of assessment tools; interpretations of assessment results. Prerequisites: EDFI 302. C/F hrs.: 20.

EDF1 405. Psychological Foundations of Classroom Management (3) On demand. A survey of major approaches to classroom management with particular emphasis upon the applications of different approaches to case studies, to field observations, and to personal attifudes and values. Prerequisites: PSYC 201 and either EDFI/CI 202 or EDFI 302.

TAEDF: 408. Education in a Pluralistic Society (3) Fall, Spring, Summer. Critical interdisciplinary examination of selected policies and assumptions about education. Devalopment of a dynamic, personal philosophy of education in the context of a multicultural world. Prerequisites: EDFI 302 end junior stauiding or concurrent enrollment in EDFI 302. C/F hrs:. 10.

EDFF 414. Teachers' Role in Guidance (3) On demand. Human relations and classroom management practices which teachers may use to meet affective and cognitive learning needs of students; practical application counseling and guidance techniques and strategies which encourage positive classroom climate. Prerequisite: senior standing.

## SDN 412 . Education of Disadvantaged (2)

On demand. Effects of socioeconomic deprivation on educational performance; teaching techniques appropriate to needs and characteristics of disadvantaged student. Prerequisites: education methods and EDFI 302.

EDFI A15. Spaceship Earth Seminar (3) On demand. Integrating, synthesizing, environmental education seminar for upperclass and graduate students. Using inquiry approach, partucipants consider relationships of humankind with total environment.

EDFI 416. Philosophy of Environmental Education (3) On demand. Concepts and processes of environmental education including theories such as Toledo model, Strand approach, Environmental Studies Project, Boulder and other representative model.

EDFI 417. Urban Education (2) On demand. Research, methods and concepts from sociology and psychology discussed as basis for crifictally analyzing current educational practices, program and policies of urban sehools. Resource people used. Library and fiold research required. Prerequisite: commitmert to, or at least serious interest in, urbari education.

EDFI 429. Assessment of Young and Atypical Children (3) Fall. Concepts and principles of measurement and instruments used in assessing young and atypical children; integration of measurement and - insiruction. Prerequisito: EDFI 302. C/F hrs.: 20.

EDFI 460. Sex Role Stereotyping and Sex Discrimination in Education (2) On demand. Education as influential institution and process in society in terms of sexism in educational materials, curriculum, structure, federal, state, local policy responses to this concern; consideration and development of other policies for action regarding sex equity in education.

## EDFI 480. Seminar in Educational

 Foundations (3) Fall, Spring, Summer. Indepth study of selected topics, offered on demand. May be repeated once if subject matter is different.EDFI 481. Leadership Training in Behavior Analysis Program (1-5) On demand. Prepares individuals to function as group leaders in academic, year-long, inservice behavior analysis program. Prerequisite: permission of instructor and enrollment in behavior analysis program.

EDFI 482. Direct Study of the Child (1-5)
On demand. Part of behavior analysis program. A child studied using predetermined framework.

EDFI 490. Problems in Education (1-3) On demand. For advanced student wanting to conduct intensive study of selected problems in education. May be repeated to 6 hours; undergraduate credit only. Prerequisite: permission of instructor.

EDFI 492. Student Teaching (1-10) Fall, Spring. Classroom teaching at the elementary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300 . May be repeated. Graded S/U.

EDFI 497. Student Teaching ( $1-10$ ) Fall, Spring. Classroom teaching at the secondary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Electronic Technology (ET)

$\dagger$ ET 100. Electric Codes and Regulations
(i). National Electric Code and its application to wiring installations. Electric principles that dictate the provisions of the code. Wiring installations are examined for adequacy and compliance with the code.

AET 191. Energy, Power, Instrumentation and Control (3) On demand. Principles of automated systems, how machines work and emphasizing energy, power, measurement and controlling devices. One and one-half hour lecture and three hours laboratory. Lab fee main campus.

AFT 196. Electrical - Electronic Systems
(3) Fall, Spring, and Summer on demand. An overview of electrical principles, instruments electrical machines, selected electronic devices, and computer control systems. Also, fabrication and assembly techniques are covered. One and one half hours of lecture and three hours of laboratory. Prerequisite:: None. Lab fee main campus.

AET 240. Electric Circuits (4) Fall, Summer on demand. Electron theory; DC and AC units and theory; circuit component; circuit analysis techniques; RLC circuits; power concepts; use of test instruments. Two and-one-half hours of lecture and three hours of laboratory. Three hours of lecture at Firelands. Prerequisite: MATH 128 or equivalent. Lab fee main campus.
$\Delta E T$ 241. Electronic Circuits (4) Spring, Summer on demand. Analog and digital electronic circuits and semiconductors. Design and application of power supplies, amplifiers, oscillators and digital gates to communication, instrumentation and process control. Two-and-one-half hours of lecture and three hours of laboratory. Thrse hours of lecture at Firelands. Prerequisite: ET 240 or permission of instructor. Lab fee.
†ET 244. Communication Circuils (4) Spring odd numbered years. Communication circuits including telecommunications and amplifiers; amplifier design, components anc applications, oscillators, communication components and principles of receivers and transmitters. Six hours of lecture and laboratory. Prerequisite: ET 241 or permis. sion of instructor.
†ET 245. Communications Systems (4) Fall even numbered years. Applications of principles of communications circuits to large and complex systems including telecommunications. Techniques of transmission and radiation of electromagnetic energy applied to pulse, television and micro-wave systems. Six hours of lecture and laboratory. Prerequia: site: ET 241.
$\dagger$ ET 247. Electrical Measurement (3) Spring. Electrical Measurement and instrumentation devices, transducers and elements; principles underlying their design and use. Two hours of lecture, three hours of laboratory. Prerequisite: ET 241, Lab fee.
$\dagger$ ET 248. Industrial Equipment and Controls (3) Fall. Automation and industrial control principles. Study and application of typical devices such as time control switches, motor controls, servo-mechanisms, photoelectric switches. Two hours of lecture, three hours of laboratory. Prerequisite: ET 241. Lab fee.
†ET 249. Digital Electronic Components and Systems (4) Fall. Basic digital system logic analysis and synthesis techniques;
number systems and codes; Boolean algebra and circuit minimization techniques.
haracteristics of modern digital integrated fcuit components. Three hours of lecture, three hours of laboratory. Prerequisite: ET 191. Lab fee.

## †ET 250. Real Time Microcomputer

Systems for Industrial Control (4) Fall.
Principles and practices of interfacing microcomputers in the real time environment of industrial process control. Organization and operation of computers, various process control modules (A/D and D/A), signal conditioning and converting, and design of process control systems. Three hours of lecture, three hours of laboratory. Prerequisite: ET 249 or consent of instructor. Lab fee.
$\dagger$ ET 290. Studies in Electronic Technology (1-3) Fall, Spring, Summer. Experimental study projects, seminars and workshops dealing with topics in industrial technology.

ET 300. Electric Machinery and Controls (3) Spring, Summer on demand. Electric motors, generators, power electronic controls; operating characteristics, selection, testing and control of direct current, single and three-phase machinery. One and onehalf hours of lecture and three hours laboratory. Prerequisite: ET 241. Lab fee.

ET 310. Programmable Logic Controllers
3) Fall even years, Summer on demand. A
tưddy of programmable logic controllers including, programming in ladder diagrams for counting, sequencing and timing functions, input/output modules, planning, installation, and applications. One and onehalf hours of lecture and three hours of laboratory. Prerequisite: ET 196. Lab fee.

## ET 344. Electronic Communication

 Circuits (3) Spring, and Summer on demand. The principles of electronic circuits as applied to large and complex telecommu: nication systems. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 241. Lab fee.
## ET 345. Electronic Communication

Systems (3) Fall even years, and Summer on demand. A study of the concepts of transmission, radiation and reception of eléctromagnetic energy in communication systems, with focus on wave guide, television and complex telecommunication systems. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 344. Lab fee.

ET 357. Electrical Power Transmission (3) Fall odd years. Power converters, polyphase distribution systems including conductors, transformers, voltage regulation, protection, rontrol, phasing and metering. Electrical codes, methods and materials used in electric installation. Problems in electrical construction work. One and one-half hours
lecture and three hours laboratory. Prerequisite: ET 191 or ET 196. Lab fee.

ET 358. Digital Electronics (4) Fall odd years, Summer on demand. Digital integrated circuit devices with medium and large scale applications. Digital families, their functions, use of specification sheets, discussion of digital system. Two and onehalf hours lecture and three hours laboratory. Prerequisite: ET 241 or PHYS 202. Lab fee.

ET 441. Instrumentation (3) Fall, Summer on demand. Industrial instrumentation, measuring mechanical, fluid and electric phenomenon, transducers, recorders, indicators and controllers. Principles underlying their design and applications. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 241 and CS 205 or consent of instructor. Lab fee.

4ET 442. Digital Computer Analysis (3) Spring even years, and Summer on demand. Organization and construction of mini-micro computers, machine language programming, interfacing, including developing logic design, selection of integrated circuits, assembly, testing, and system diagnostic testing procedures. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 358 or consent of instructor. Lab fee.

ET 443. Electronic Devices (3) Fall, Summer on demand. Semiconductor devices, FET transistors, operational amplifiers and optoelectronic devices including theory of operation, specifications, performance testing and applications. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 241 or consent of instructor. Lab fee.

ET 453. Digital Computer for Process Control (3) Spring, Summer on demand. Basic concepts, terminology; evaluation and types of control systems as they apply to industrial process control and positioning systems. These systems will be subdivided into measurement, controllers and final control elements. One and one-half hours lecture and three hours laboratory. Prerequisite: ET 358 or CS 217, CS 205, Math 131 or equivalent. Lab fee.

ET 486. Digital Communication and Networking (3) Spring odd years, and Summer on demand. Intensive study of digital electronic communication and networking: digital modulation schemes, transmission media characteristics, interface standards like RS 485, network standards and configurations, testing equipment. One and one-half hours lecture and three hours laboratory. Prerequisites: ET 344, ET. 442 and CS 205. Lab fee.

ET 490. Problems in Electronic Technology (1-3) on demand. For advanced students wanting to conduct intensive study of selected problems in electronic technol-
ogy. May be repeated. Prequisite: consent of college. Materials fee. Graded S/U.

## English (ENG)

ENG 100. English as a Foreign Language I (4) Fall, Spring. Develops intermediate skills in listening, speaking, reading and writing academic American English in students whose first language is not English. Placement on basis of performance in proficiency tests. No more than four hours from ENG 100 and ENG 101 may be applied toward graduation. Graded S/U.

ENG 101. English as a Foreign Language II (4) Fall, Spring, Develops advanced skills in listening, speaking, reading and writing academic American English in students whose first language is not English. Placement on basis of performance in ENG 100 or proficiency tests. No more than four hours from ENG 100 and ENG 101 may be applied toward graduation. Graded S/U.

AENG 110S. Developmental Writing (3) Summer only. Development of skills in sentence structure, edited American. English usage, mechanics, paragraph and short essay construction. Placement through departmental pretesting. Students must complete course and departmental portfolio assessment successfully to receive $S$ and to be eligible to enroll in ENG 111; students who receive No Record must enroll in ENG 110. No more than 6 hours from ENG 110S, ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded $S /$ No Record.

AENG 110. Developmental Writing (5) Fall. Development of skills in sentence structure, edited American English usage, mechanics, paragraph construction; basic expository writing; emphasis on organizing and developing coherent essay of approximately 600 words for college-educated audience. Placement through departmental pretesting. Student must complete course and departmental portfolio assessment successfully to receive $S$ and to be eligible to enroll in ENG 112; students who receive No Record must enroll in ENG 111. No more than 6 hours from ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.
$\triangle E N G$ 111. Introductory Writing (3) Fall, Spring. Basic expository writing; emphasis on organizing and developing coherent essay of approximately 600 words for college-educated audience. Placement through departmental pretesting or No Record of ENG 110. Students must complete course and departmental portfolio assessment successfully to receive. S. No more than 6 hours from ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.

AENG 112. Varieties of Writing (3) Fall, Spring. Expository writing including research paper, emphasis on analytical writing based on critical reading. Placement through departmental pretesting or successful completion of ENG 110 or ENG 111. Student must complete course and departmental portfolio assessment successfully to receive passing grade. Graded A, B, C/No Record.

TENG 150. Response to Literature (3) Fall, Spring. A general education course emphasizing discussion of humanistic themes based on student responses to readings in fiction, drama, poetry and nonfiction. Not accepted toward English major or minor. Prerequisite: enrollment in or completion of ENG 111.

7A空NG 200. introduction to Literature: various topics: Short Story, Literature and Fim, Science Fiction, Fantasy, Women in Literature, Black Literature (2,3) Fall, Spring. A general education course with emphasis on humanistic themes and basic literary concepis. Some topics for 2 hours, most for 3. Can be repeated once if topics differ. Not accepted for English major or minor. Prerequisite: enrollment in or completion of ENG 112 .

ENG 201. Literature and Writing (4) Fall, Sping. Literary interpretation and criticism of poems, short stories, novels and plays. Sudy of the literary elements and forms of composition about literature. Extensive expository writing. Required for all English majors/minors before third-year courses. Prerequisite: ENG 112.

TIAENG 203. Introduction to Literature: various topics: Literature of Laughter, Literature of Growing Up, Literature of Romantic Love, Literature and Art, Literature and Religion, Literature and Science, Literature of War, Literature and the Natural World (3) Fall, Spring. A general education course with emphasis on humanistic inemes and basic literary concepts. Can be repeated once if topics differ; no more than six hours of ENG 200/203 may count toward graduation. Not accepted for English major or minor. Prerequisite: enrollment in or compietion of ENG 112.

AENG 205. Craft of Poetry (3) Fall. The way poetry works, analysis of poetic form, theory and technique in traditional and contemporary works, emphasis on poetry writing exercises and revision. Required for majors in BFA creative writing program. Prerequisite: ENG 112.

LENG 206. Craft of Fiction (3) Spring. The way fiction works, analysis of fictional form, theory and technique in traditional and contemporary works, emphasis on story writing exercises and fiction terminology. Fequired for majors in BFA creative writing program. Prerequisite: ENG 112.

AENG 207. Intermediate Writing (3) Fall, Spring. Work on developing mastery of the rhetorical principles of planning, executing and revising prose. Emphasis on strengthening analytical writing, both expository and argumentative; valuable for writing on the job. Prerequisite: ENG 112.
$\triangle E N G$ 208. Imaginative Writing (3) Fall, Spring. Exploration of the creative process through the writing of poetry and fiction. Emphasis on the means whereby private fantasy is transformed into artistic expression. Open to all students.

- ENG 209. Creative Writing Workshop (3) Fall, Spring. Principles of poetic composition and fiction writing; analysis of contemporary models and group discussion of students' work. May be repeated once.

ENG 251. Writing About Films (3) Fall. Same amount of writing as in ENG 207; deals entirely with film theory, films, film scripts, novels on which films are based and film reviews. Equivalent of ENG 207. Prerequisite: ENG 112.

TAENG 261. Masterpieces of World Literature (3) Fall, Spring. Major works of world literature to 1400 , including such authors as Homer, Confucius, Aeschylus, Sophocles, Plato, Aristophanes, Virgil and Dante. Prerequisite: any ENG literature course or ENG 112.

ๆENG 262. Masterpieces of World
Literature (3) Fall, Spring. Major works of world literature since 1400 , including such authors as Montaigne, Cervantes, Goethe, Hugo, Balzac, Dostoevski and Kafka. Prerequisite: any ENG literature course or ENG 112.

## IENG 264. English Literature Survey to

 1700 (3) Fall. Major authors in the context of major literary traditions from Anglo Saxon times through the Restoration; introduces historical approach to the study of literature. Prerequisite: any ENG literature course or ENG 112.TENG 265. English Literature Survey, 1700-1900 (3) Spring. Major authors in the context of major literary traditions from the eighteenth century through the Victorian Age; introduces historical approach to the study of literature. Prerequisite: any ENG literature course or ENG 112.

T/AENG 266. American Literature Survey to the Civil War (3) Fall, Spring. Roots of American literary traditions and growth of national independence of expression: religious, political, philosophical sources of American imagination based on texts of representative writers including Edwards, Paine, Irving, Cooper, Poe, Bryant, Emerson, Thoreau, Hawthorne, Whitman, Melville. Prerequisite: any ENG literature course or ENG 112.

7AENG 267. American Literature Survey, Civil War to World War 1 (3) Fall, Spring. Literary patterns of idealism, skepticism and emergent materialism based on texts of representative writers such as Dickinson, Twain, James, Howells, Wharton and Norris; literary movements such as local-colorism, realism and naturalism. Prerequisite: any ENG literature course or ENG 112.

ENG 268. 20th Century Masterpieces of American and British Literature (3) Fall, Spring. Seminal works of modern and contemporary literature, seen in relation to the social and human problems of the age. Prerequisite: any ENG literature course or ENG 112. Not accepted toward English major or minor.

IENG 269. Canadian Fiction (3) Spring. Short stories and noveis by leading Canadian authors from English-speaking areas, emphasis on recent writers. Tittes chosen to represent diversity of expression from various regions, with some attention to women's concerns as well as Native American, Eskimo and ethnic views. Prerequisite: any ENG literature course or ENG 112.

ENG 272. Literature of Minorities (3) Fall. Minority literary expression: aims, methods and accomplishments. Prerequisite: any ENG literature course or ENG 112.

ENG 290. Language Study (3) Spring. Aspects of form and style in language: structure, usage, semantics; language change and cultural convention; social and regional dialects. Prerequisite: sophomore standing. Not applicable for state certification requirements. Not a substitute for ENG 380 requirement for English education.

ENG 291. Language Study for Elementary
Teachers (3) On demand. Structure of English; emphasis on linguistic basis of reading, spelling, and other language arts concerns. Prerequisite: ENG 112.

ENG 295. Telecourse on Current Topics in English (1-3) On demand. Selected topics within the discipline. Includes departmentally supervised presentations via television, complemented by seminars and/or other student-instructor means of interaction on a group or individual basis.
$\triangle E N G$ 300. Themes in Literature (3) On demand. Literary treatment of single theme, such as hero and heroine in literature, youth and age, love and death, innocence and experience, war and peace, wealth and poverty, etc. Prerequisites: any ENG literature course and ENG 112. May be repeated once if themes differ.
©ENG 301. Shakespeare (3) Fall, Spring. Representative comedies, history plays,
Tgedies and tragicomedies, and sonnets. signed for student with.no previous
Shakespeare courses. Prerequisites: any ENG literature course and ENG 112.

ENG 306. Bible (3) Fall. English Bible as literary classic; its development and influence on literary culture. Prerequisites: any ENG literature and ENG 112.

ENG 307. Great Books (3) On demand. Books not usually studied in other courses; organized according to topic such as love, war or death, or according to genre such as fantasy; science fiction or romance, or according to LeGuin or Tolkien. Prerequisites: any ENG literature course and ENG 112.
$\triangle E N G$ 308. Creative Writing (3) Fall, Spring. Imaginative writing, fiction and poetry. Class discussion and individual conferences. Required for creative writing major. Prerequisite: B or better in ENG 209 or permission of instructor. May be repeated once.

AENG 310. Multiethnic American Literature (3) Fall, Spring, Summer. Modern and contemporary literatures by visibly ethnic American writers. Themes, literary techniques, other topics at points where these literatures intersect. Prerequisite: ENG 201, or 267.

IENG 320. Modern Poetry (3) Fall. English and American poetry and European poetry in translation from 1900 to 1945; writers and works significantly influencing development of poetic forms. Required for creative writing major. Prerequisites: any ENG literature course and ENG 112.
$\triangle E N G$ 322. 19th-Century American Fiction (3) Fall. Short stories and novels. Includes Poe, Hawthorne, Melville, Twain, James and Crane; minor writers including regional humorists. Prerequisites: any ENG literature course and ENG 112.

ENG 323. Modern Fiction (3) Fall. Émphasis on the novel; American and English works as well as works in translation from 1900 to 1945; works which represent development of forms of fiction. Required for creative writing major. Prerequisites: any ENG literature course and ENG 112.

ENG 325. Modern Drama (3) Fall. Great plays by Ibsen, Chekhov, Shaw, O'Neill, and others; dramatist's insight into human condition..Prerequisites: any ENG literature course and ENG 112.

ENG 330. Contemporary Poetry (3) Spring. pss section of English and American etry and European poetry in translation, mostly written since 1945; writers and works representing major trends in development of poetry. Required for creative writing major.

Prerequisites: any ENG literature course and ENG 112.

- $\triangle$ ENG 333. Contemporary Fiction (3)

Spring. Cross section of American and English fiction and European fiction in .. translation, mostly written since 1945; works representing major trends in development of fiction. Required for creative writing major. Prerequisites: any ENG literature course and ENG 112.

ENG 335. Contemporary Drama (3) Spring. Plays since 1945 by American, British and European dramatists (in translation); new techniques, thematic trends, and aspects of the human condition revealed through plays. Prerequisites: any ENG literature course and ENG 112.
$\triangle E N G$ 342. Children's Literature (3) Fall, Spring. Reading and evaluation of books for children from nursery school through junior high school; novels, folklore, informational literature, poetry and bibliographical sources. Prerequisites: any ENG literature course and ENG 112.

ENG 343. Literature for Adolescents (3)
Fall, Spring. Reading and evaluation of books for junior and senior high school students; emphasis on fiction; also biography and other nonfiction, folklore, myth and poetry. Prerequisites: any ENG literature course and ENG 112.

ENG 380. Introductory English Linguistics (4) Fall, Spring. Structure of English through recent linguistic theories and related topics such as dialects, usage, dictionaries. ENG 290 will not satisfy this requirement for English education. Prerequisite: sophomore standing.

ENG 381. Grammar and Writing (3) Fall, Spring. Application of grammatical models (traditional, structural and transformational) to the teaching of writing. Prerequisite: ENG 380.

ENG 385. Studies in Literature-Film (3) On demand. Problems in film's relationship to literature; definitions and theory; specific films and literary works. May focus on author, genre or historical period. May be repeated once if topics differ. Prerequisites: any ENG literature course and ENG 112.
$\triangle$ ENG 388. Introductory Technical Writing (3) Fall, Spring. Application of basic forms of writing for business, industry and government. Requires writing and revising a number of short papers including instructions, definitions, descriptions and reports. 'Prerequisite: junior standing .

ENG 389. Professional Editing (3) Fall. Editing technical, scientific and other professional writing, such as proposals, reports, journal articles, conference proceedings and books. Includes introduction to
managing editorial services. Prerequisites: junior standing and permission of instructor.

ENG 400. Chaucer (3) Fall. The Canterbury Tales,-Troilus and Criseyde, and such dreamvision poems as The Book of the Duchess and lyrics, in Middle English. Prerequisites: any ENG literature course and ENG 112.

ENG 401. Shakespeare II (3) Alternate years. Shakespeare's dramatic technique in tragedy, comedy or history play. Prerequisite: ENG 301.

ENG 402. English Medieval Literature (3) Alternate years: Poetry, prose and drama including such works as Beowulf (selection), Pearl, The Wakefield Plays and The Prick of Conscience read in Old and Middle English or in translation. Prerequisites: any ENG literature course and ENG 112.

ENG 403. 16th-Century English Poetry and Prose (3) Alternate years. Renaissance literature, including great sonnets, early novels, Spenser's Arthurian epic, Skelton's satires and Marlowe's erotic love poetry. Prerequisites: any ENG literature course and ENG 112.

ENG 404. 17th-Century Writers (3) Alternate years. Poetry and prose from 1600 to 1660; Donne, Jonson, Herrick, Herbert, Vaughan and Marvell, Bacon, Browne, Hobbes and Bunyan. Prerequisites: any ENG literature course and ENG 112.

ENG 406. English Renaissance Drama (3) Alternate years. English drama (except Shakespeare) before 1642; including Marlowe, Jonson and Webster; reading in antecedent forms and traditions. Prerequisites: any ENG literature course and ENG 112.

ENG 407. Writer's Workshop (3) Fall, Spring. Original composition, analysis of contemporary literary models, emphasis on fiction and poetry. For creative writing seniors taking their second workshop, creation of the senior thesis. Prerequisite: B or better in ENG 308 or approval of instructor. May be repeated once.

ENG 408. Milton (3). Alternate years. Paradise Lost, Paradise Regained and Samson Agonistes and selected minor poems and prose. Prerequisites: any ENG literature course and ENG 112.

ENG 410. English Restoration and 18thCentury Drama (3) Alternate years. Restoration features heroic drama, pathetic tragedy and libertine comedy; 18th century sentimentality and laughing comedy. Stage and theatre design, historical and social background. Prerequisites: any ENG literature course and ENG 112.

ENG 411. 18th Century Writers (3)
Allernate years. Prose and poetry from Restoration, Augustan and Johnsonian periods; neoclassical and preromantic writers; Dryden, Swift, Pope, Johnson and Eoswell. Prerequisites: any ENG literature course and ENG 112.

ENo tis. English Novel: Defoe to Austen (3) Aliernate years. Defoe, Richardson, Fielding, Smollett, Sterne, Austen and contemporaries. Prerequisites: any ENG literature course and ENG 112

ENG 4ic. English Novel of 19th Century (3) Alternate years. Bronte, Dickens, Hardy and other novelists of Victorian England. Beginnings of modern society, its problems and possibilities, and development of novel as a unique modern form. Prerequisites: any ENG literature course and ENG 112.

ENC 447. Romantic Writers (3) Alternate years. English poetry and prose from 17891832; Blake, Wordsworth, Coleridge. Byron, Shelley and Keats. Prerequisites: any ENG literature course and ENG 112.

ENe 448. Victorian Writers (3) Altemate years. I'rose and poetry of Carlyle, Mill, Tennyson, Browning, Arnold, the PrePaphaelite poets and successors. Prerequisites: any ENG literature course and ENG 112.

ENe AT9. Modern British Writers (3) Altemate years. British writers from 1900 to 1945: Joyce, Lawrence, Conrad, Forster, Woolf, Yeats, O'Casey, Shaw and Auden. Prerequisites: any ENG literature course and ENG 112.

ENQ 420. Modern American Writers (3) Spring. Major American writers from 1900 to 1945: Eliot, Pound, Stein, Frost, Stevens, O Neill. Hemingway, Fitzgerald and Faulkner. Prerequisites: any ENG literature course and ENC 112.

TNG 423. Womer's Studies in Literature
(2) Fall. Topics such as women poets or vomen novelists, depiction of women in works by men, fominist criticism; primarily Brillsh and American writers. May be repeated once if topics differ. Prerequisites: any ENG literaiure course and ENG 112.

TENG 424. Topics in Multiethnic American Literature (3) Fall, Spring, Summer. Literary works by witers from one designated ethnic Arnerican culture. In-depth study of significant texts placed in their culturally specific context. May be repeated once if topics differ. Prerequisite: ENG 310.

ENG 430. American Transcendentalism (3) Alternate years. Major writers of transcendentalist movement and social and philosophical background of their time; Emerson and Thoreau. Prerequisites: any ENG literature course and ENG 112.

ENG 435. Hawthorne and Melville (3) Alternate years. Major works of Hawthorne and Melville and background of the age. Prerequisites: any ENG literature course and ENG 112.
$\triangle E N G$ 442. Studies in Children's Literature
(3) Alternate years. Problems in children's literature; history, criticism, trends, individual authors, types. Prerequisite: ENG 342 or permission of instructor.

ENG 456. Critical Writing (3) Alternate years. Writing from various critical perspectives such as biographical, textual, psychological, mythical and analytical. Prerequisites: any ENG literature course and ENG 112.

ENG 460. Literature of Genocide and the Holocaust (3). Examination of the literature (including memoir, fiction, drama, poetry, philosophy and history) of genocide, the systematic attempt to destroy an entire ethnic, religious or national group. Specific attention to the Native American, Armenian, Cambodian, Soviet-Stalinist and Nazi genocides. Prerequisites: Any ENG literature course and ENG 112.

## AENG 470. Directed Readings in Lan-

 guage and Literature (1-4) Fall, Spring. For advanced student or small group of students to work independently in specialized subject not covered by existing courses. Prerequisites: junior standing; six hours of ENG beyond ENG 112; written description of the proposal, prepared by student and signed by proposed instructor, to be submitted to undergraduate curriculum committee in English prior to end of preceding semester.AENG 480. Studies in English or American Literature (3) Intensive study of author, literary school, genre or theme. May be repeated once if topics differ. Prerequisites: any ENG literature course and ENG 112.

## ENG 481. Advanced English Linguistics

(3) Alternate years. Intensive study of topic in English linguistics. Topics announced in advance and vary from section to section and semester to semester. May be repeated if topics clearly differ. Prerequisite: ENG 380 or permission of instructor.

ENG 482. History of English Language (3) Alternate years. Changes in sounds, grammar, usage and meaning from Old English to present. Prerequisite or corequisite: ENG 290 or 380.

ENG 483. Advanced Writing (3) Fall.
Expressive, expository and argumentative writing. For anyone interested in developinc. thetorical skills such as invention, arrangement and style in discourse. Especially recommended for students who plan to write as part of their careers. Prerequisite: junior standing.

ENG 484. The Writing Process (3) Fail, Spring. Traditional and modern theory and practice of rhetoric and composition; examination of the ways writers gather and organize knowledge, assess their audience, control style and revise.

ENG 485. Writing Film Criticism (3) On demand. Principles and assumptions underlying approaches to film criticism as. revealed in commentaries and critiques; application of these principles to writing film criticism. Prerequisite: ENG 201 or ENG 207 or ENG 208 or ENG 251, or permission of instructor.

ENG 488. Technical Writing (3) Fall, Spring. Advanced study of theory and research in documentation. Student produces a proposal for funding and a full-length portolio-quality manual or report. Prerequisite: ENG 388 or permission of instructor.

ENG 489. Internship in Technical Writing (1-9) Fall, Spring, Summer. Full-time technical writing internship for 15 weeks it industrial publications office under superv. sion of professional publications director. Available only for students with exceptional skill in lechnical writing, with approval and recommendation of technical writing staff. Prerequisites: ENG 488 and approval of technical writing staff. Graded $\mathrm{S} / \mathrm{U}$.

ENG 495. Honors Reading (3). For superior major or minor who wants to pursue common studies determined by interests of group looking toward granting of honors in English. Prerequisite: consent of instructor.

ENG 498. Senior Project Tutorial (3) Fall, Spring. Student selects faculty member to guide work on topics such as major author, theme, period, genre or linguistics. Research and writing to produce a scholarly essay of approximately 25 pages. Prerequisite: 20 hours of English beyond ENG 112. Credit may not be received for both ENG 498 and 499.

ENG 499. Senior Thesis Workshop (3) Fall, Spring. Workshop on research techniques and writing designed to assist students to produce a scholarly essay of approximately 25 pages. Credit may not be received for both ENG 498 and 499. Prerequisite: 20 hours of English beyond ENG 112.

## Environmental Health ENVH)

## TENVH 210. The Global Commons:

 International Perspectives on Environmental Health and Protection (3) Spring. An examination of environmental conditions throughout the world, and how culture affects response to and perceptions of environmental conditions. Prerequisites: ENG 112 or equivalent.ENVH 301. Public Health and Sanitation (3) Fall. Assessment of public health in the community. Institutional inspection techniques, communicable disease control, solid waste disposal and prevention of food-borne disease. Three hours lecture. Prerequisite: BIOL 204.

ENVH 302. Industrial Hygiene (3) Fall. Basic concepts in recognition, evaluation and control of workplace hazards including chemical, physical and biologic stressors. Three hours lecture. Prerequisites: CHEM 127, 128 and PHYS 201. Majors only or obtain consent of instructor.

ENVH 303. Industrial Hygiene Laboratory (1) Fall: Evaluation methods for chemical, noise, radiation and physical hazards in the workplace and environment. Three hours
*oekly. Corequisite: ENVH 302. Major stricted or instructor's consent.

ENVH 304. Air Quality Managemf nt (3) Spring. Principles of air quality; pcilution sources, effects and control straregies. Three hours lecture. Prerequisites: CHEM 127, 128 and PHYS 201. Major restricted or instructor's consent.

ENVH 305. Air Quality Laboratory (1) Spring. Sampling and analysis methods in air quality control. three hours weekly. Corequisite: ENVH 304. Major restricted or instructor's consent.

ENVH 306. Environmental Regulation, Organization and Administration (3) Spring. Foundations of environmental law. Structure and function of federal, state, regional and local environmental agencies. Key environmental statutes. Environmental program administration.

ENVH 307. Occupational Safety (3)
Workplace safety principles including regulations, program development and program implementation.

ENVH 308. Industrial Ventilation (3) Fall. Principles of ventilation. Design and evaluation of general dilution and local thaust systems for control of industrial lzards. Prerequisites: PHYS 201, MATH 128 or 120 and 129.

ENVH 402. Principles of Water Quality (3)
Fall. Properties of water and biological, chemical and physical pollutants. Relationship between use and quality. Mànagement strategies. Three hours lecture. Prerequisites: CHEM 127, 128 or 137, 138; BIOL 205.

ENVH 403. Water Quality Laboratory (1) Fall. Laboratory practices in water quality. Three hours weekly. Corequisite: ENVH 402. Major restricted or instructor's consent.

ENVH 404. Water Supply and Pollution Control (4) Spring. Examination of water sources, requirements and treatment for potable use, and wastewater treatment and disposal. Three hours lecture, three hours lab. Prerequisites: ENVH 403 or instructor's consent.

ENVH 405. Hazardous Material Management (3) Spring. Principles of managing hazardous waste and material; disposal, treatment, emergency response and cleanup. Consideration of environmental toxicology and risk assessment. Prerequisite: CHEM 127, 128 or 137, 138.

ENVH 407. Environmental Toxicology (3). Measurement, effects and mechanisms of toxicity on human health and the environment. Use of toxicology in environmental risk assessment and risk management. Prerequisite: CHEM 306.

ENVH 449. Epidemiology (3) Principles and methods of epidemiological investigation: Distribution and determinants of health and disease in humans. Three hours lecture. Prerequisite: Statistics course, BIOL 204 and 205 or instructor's consent. Cross-listed as BIOL 449.

ENVH 470. Special Problems in Environmental Health (1-4) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisite: program director's permission. May be repeated.

ENVH 491. Practicum (1-3) Fall, Spring, Summer. Experience working under supervision in selected environmental, public health or health planning agencies or industries with environmental health units; emphasis on practice rather than observation. Prerequisites: instructor's permission, at least junior status. May be repeated up to 4 hours. Graded S/U.

ENVH 492. Comprehensive Environmenta! Health Practices (3). A capstone course for integrating environmental health principles into practical application. Dissemination and examination of internship research will also be considered. Prerequisite: ENVH 491.

## Environmental Health Technology (ENVT)

†ENVT 110. Basic Microbiology (3) Fall. Fundamentals of microbiology; emphasis on morphology, growth, genetics, pathogenic microorganisms and their control.
$\triangle E N V T$ 270. Occupational Safety and Hygiene (3) Spring. Regulatory considerations, evaluation and control of industrial hazards, personal protective equipment, employee assistance programs, accident prevention and investigation, emergency. planning. Three hours lecture.

## Environmental Studies (ENVS)

TAENVS 101. Introduction to Environmental Studies (3) Fall, Spring, Summer. Overview of environmental principles and concepts. Students consider contemporary environmental issues as they relate to the: quality of life. Topics of environmental concern are used to develop skills in evaluation, analysis and values clarification. Field trip fee.

ENVS 201. Concepts in Environmental Studies (3) Fall: Introductory course for wellprepared students. May be taken in place of ENVS 101. Prerequisite: one year of high school environmental studies or consent of instructor. No credit for students who have completed ENVS 101. Field trip fee.

TIENVS 301. Environmental Problems (3) Fall, Spring, Summer. In-depth. study of specific environmental problems. Current and historic responses:are examined through research and review of source materials. Emphasizes a synthesizing, multidisciplinary team approach to problem solving. Field trip fee.

AENVS 400 . Special Topics in Environmental Studies (1-3) Fall, Spring, Summer. Selected topics and subject areas in environmental studies. Offered on demand to cover current environmental issues. Prerequisite: consent of instructor. Can be repeated once for a maximum of 6 credits, if topics differ. Field trip fee.

ENVS 401. Environmental Strategies (2), Fall, Spring. Investigation of strategies used by various organizations, institutions and government agencies related to current environmental issues. Models and simulation exercises are developed to illustrate different strategies which may be used to address such concerns as toxic substances, water resources, pesticides, land and energy use.

ENVS 402. Environmental Impact State mente (3) Fall, Spring. History, philosophy and legal authority for environmental impact statements and assessments. Specific documents are analyzed and the development of evidential information and techniques are included. Practice in writing an environmental impact statement is given using one of more current issues as a focus. Field trip fee.

ENVS 403. Geographic Information Systems (4) Fall. Collection, manipulation, integration and automated display of spatial data from various disciplines with particular emphases on environmental geology, resource management, and spatial analysis. Three lectures and one three-hour laboratory. Credit allowed for no more than one: ENVS 403, GEOL 403 or GEOG 424.

AENVS 412. Great Lakes Ecosystems (3) Fall, An interdisciplinary study of Great Lakes ecosystems with emphasis on history, dévelopment, natural resources, environmental concerns, transboundary issues and the potential for international cooperation. Field trip fee.

ENVS 470. Readings/Research in Environmental Studies (1-3) On demand. Independent readings or research on topics of current or specialized interest in environmental síudies. May include library, laboratory or field work. Prerequisite: consent of instructor. May be repeated to a maximum of six hours. Graded S/U.

ERVS 489 . internship (1-3) On demand. Applied experience for students in environmental programs. Specific proposal and approval of undergraduate adviser and supervising instructor required prior to enrollinent. May be repeated to a maximum of six hours. Pre-requisites: junior standing and 2.5 GPA . Graded S/U.

## Envirommental Technology (ENVR)

YENVR 421. industrial Pollution Control (3) Spring. Air and Water pollution control regulations as they apply to industry. Furctioning and selection of parameters of incustrial pollution control equipment and sslected case studies. Materials fee.

AENVF 490. Problems in Industrial Environment Technology (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in industrial environment technology. Prerequisite: consent of college. May be repeated. Materiais fee. Graded S/U.

## Ethnic Studies (ETHN)

TAETHN 101. Introduction to Ethnic
Studies (3) Fall, Spring, Summer. Introduction to the discipline of ethnic studies, including methods and approaches to studying major ethnic groups in the United States.

ETHN 110. Introduction to Latinos in the United States (3) Fall, Spring. Latino experience in the United States; cultures, life experiences and the limited political, education, socio-economical opportunities of this minority.
qETHN 120. Introduction to Black Studies
(3) Fall, Spring, Summer. Introduction to the black experience with special emphasis upon but not limited to the cultural experience of the United States.

## q|AETHN 130. Introduction to Asian

 American Studies (3) Fall. Similarities and differences of the various components of the iAsian Americanî category with reference to their individual histories and collective situation from the 19th century to the present.ETHN 140. Introduction to European American Studies (3) Fall, Spring. Immigration experience of several European groups in the U.S. and their cultural adaptation thereafter. Specific groups to be studied might be Irish, Polish, Italian, Jewish and German Americans.

ETHN 160. Introduction to Native Amerlcan Studies (3) Fall. Introduction to Native America; culture, language, origin myth, subsistence activities, political organization, kinship patterns and religion.

TETHN 210. Chicanos in the United States (3) Fall, Summer. The Mexican-American culture and its place in U.S. society. Topics include family, immigration, religion and others.

ETHN 211. History of Mexican Americans
(3) Spring. History of Mexican Americans from, the Texas Revolution, MexicanAmerican War to the present.

IETHN 220. African Literature (3) Fall.
Creative and critical writing in the English language by writers of African descent. Also writers from the Caribbean.

IETHN 260. Contemporary Issues in Native America (3) Fall. Examines selected contemporary issues in Native America; migration and urbanization, reservation economic development, activism and native land, water, fishing and hunting rights, education, religious freedom, selfdeterminiation and sovereignty.

ETHN 300. Topics in Ethnic Studies (3) Fall, Spring, Summer. On demand. Special ethnic topics of interest to students provided as a part of regular offering.

TETHN 301. Ethnicity in the United States (3) Fall, Spring, Summer. Advanced study of the methods and approaches of the discipline of ethnic studies by focusing on contemporary issues and comparative theories of ethnicity. Prerequisite: Any 100level ETHN course.
qETHN 302. Women of Color in the United States (3) Fall, Spring; Summer. An overview of female experience in U.S. society, highlighting that of women of color, with emphasis on diversity. Study of changes in women's status, the cultural and material constraints that continue to limit women, and their responsis to these barriers.

ETHN 303. Ethnicity and Popular Stereorypes (3) Spring. Stereotyping based upon ethnic identification. Stereotyping of ethnic groups in novels; films and by the media in general.

ETHN 304. Ethnicity and Creative Writing
(3) Spring, Fall. A writer's workshop focusing on the interaction between processes and strategies of creative writing and issues of ethnicity. Students create a portfolio of original writing which may include one or a combination of stage play, film/teleplay, fiction, poetry, essays, reviews, etc.

ETHN 305. Qualitative Research Methods
(3) Spring. Emphasizes conducting qualitative modes of research in racial and ethnic communities, including multiculturalresponsive research practices.

ETHN 310. Mexican Culture (3) Spring. The culture of Mexico in the 20th century with emphasis on economics and the national experience as reflected in the family, religion, arts and other select facets of the culture.

ETHN 311. Origins of Latino Culture (3) Fall, Spring. Origins of Latino culture and its contributions to art and folklore.

ETHN 320. Literature of Black Nationalism
(3) Spring. Contributions made by African and African American writers to the rise of nationalism.

ETHN 321. Novels of Black Liberation (3) Spring, Summer. Artistic, historical, social and cultural influences on the new worid contemporary black novel.

ETHN 330. Introduction to Asian-American Writing ( 30 Fall, Spring. A survay course on important texts by Asian-American writers based on genres, themes and historical problems. A comparative approach will contextualize the texts in their sociohistoric conditions.

ETHN 351. International Perspectives on
Women (3) Spring. An introduction to the yes and concerns of women around the Vorld. Addresses the impact of the global order on women's day-to-day existence.

ETHN 360. Ethnicity and Native American Identity (3) Spring. Examines the transformations of the tribe by looking at the process and content of Native American ethnic reorganization and its impact on the formation of a Native American panethnic identity.

IETHN 361. Native American Women (3) Spring. Examines the social, political, economic, and spiritual lives of Native American women of various tribal nations in their traditional and contemporary aspects.
$\triangle E T H N$ 395. Workshop on Current Topics (1-3) Fall, Spring, Summer. Comprehensive study of America's ethnicity with special emphasis upon the represented ethnic groups in northwest Ohio.

ETHN 400. Senior Project (3) Fall, Spring, Summer. Directed individual research concerning issues in ethnic studies, resulting in a research paper. Prerequisites: senior status, ethnic studies major or minor, permission of instructor, and approval of department.
ETHN 410. Mexican-American Social Thought (3) Spring. The development of the Mexican philosophical thought as related to the Chicano ideologies, their signifcant parallels within contemporary periods and institutions.

ETHN 420. The Ethnicity of Baidwin and Achebe (3) Spring. The ethnic dimensions of James Baldwin and Chinua Achebe.
$\triangle E T H N 470$. Readings in Ethnic Studies (1-4) Fall, Spring, Summer. Individual extensive readings in consultation with instructor in fields of special interest. May be repeated. Prerequisite: consent of instructor. May or may not partially fulfill group requirements.

ETHN 480. Seminar in Ethnic Studies (3) Fall, Spring, Summer. Specific content areas offered depends on demand and interest of staff. May be repeated three times: Prerequisite: consent of instructor. May or may not partially fulfill group requirements.

ETHN 489. Field Study in Ethnic Studies (1-12) Fall, Spring, Summer. Placement of students in a variety of agencies or businesses, which are relevant to the study of ethnicity or research/study outside of

Bowling Green. Prerequisites: junior standing; 6 hours of upper division ETHN courses relevant to the study; and permission of instructor. Graded $\mathrm{S} / \mathrm{U}$.

## Family and Consumer Services (FCS)

FCS 100. Professional Perspectives (1)
Spring. Integrative focus to discipline of family and consumer sciences. Contemporary issues, pertinent resources, career options, professional leaders, organizations. Recommended for all majors. First eight weeks of semester (II). Graded S/U.

FCS 195. Telecourse on Current Topics in Family and Consumer Sciences (1-3) On demand. Selected introductory topics; departmentally supervised presentations via television complemented by seminars or other student-teacher interaction in groups or individually.

FCS 205. Resource Management (3) Fall, Spring. Effects of values and philosophy on decisions regarding family resources: time, energy, knowledge, ability, skills and attitudes in achieving family goals. Utilization of human and material resources in family managerial system.

FCS 250. Foundations of Family and Consumer Sciences (3) Fall; even years. Family and consumer sciences: the profession, the role of the educator and understanding students; development of educational strategies including peer teaching through field and clincial experiences. One hour of seminar and three hours of experience in a professional setting. C/F hrs.: 50.

FCS 295. Telecourse on Current Topics in Family and Consumer Sciences (1-3) On demand. Selected advanced topics; departmentally supervised presentations via television complemented by seminars or other student-teacher interaction in groups or individually.

FCS 311. Family Resource Management (3) Spring, even years. Integration and application of concepts; processes and principles of family resource management within household environment. Four hours lecture/lab plus arranged. Prerequisites: FCS 205 and F\&N 207. Lab fee.

FCS 352. Vocational Family and Consumer Sciences in Secondary Schools (3) Fall, odd years. Principles, objectives, curriculum instructional materials and methods of vocational family and consumer sciences. No S/U grade for family and consumer sciences education majors. Prerequisites: FCS 250, EDFI 302 or junior standing. C/F hrs.: 10.

FCS 353. Organization and Teaching in a Vocational Job Training Program (3) Spring, even years. Techniques of teaching, occupational analysis, curriculum planning and supervision of cooperative education in school programs and in vocational and technical schools. No S/U grade for family and consumer sciences education majors. Prerequisites: FCS 250; FCS 352 prerequisite or concurrent. C/F hrs.: 20.

FCS 354. Curriculum Management in Family and Consumer Sciences (2) Spring, odd years. Field experience and coordinated seminar examining curriculum management as it differs in urban, suburban or rural schoools. No S/U grade for family and consumer sciences education majors. Arrangements made in consultation with family and consumer sciences education faculty. Prerequisite or corequisite: FCS 352. C/F hrs.: 45.

FCS 389 . Supervised Field Experience (15) Fall, Spring, Summer. Supervised work experience of diversified nature in approved field site. Contact hours and specific requirements obtainable from authorized family and consumer sciences faculty members in the specialized areas. May be repeated. Prerequisite: consent of department. Graded $\mathrm{S} / \mathrm{U}$.

FCS 395. Workshop on Current Topics (13) On demand. Intensive educationalexperience on selected topics related to skill development, content update or materials development. Typically, an all-day or similar concentrated time format used. May be repeated on approval of adviser. Some workshops require transportation.

FCS 405. Family and Consumer Economics (4) Fall. Families' financial planning; conditions as they affect consumer decisions in relation to patterns of living, income and goals. Not open to students with credit for BUSE 240.

FCS 470. Independent Study (1-3) Fall, Spring, Summer. For advanced students who want to conduct intensive study of selected ${ }^{-}$ problems in family and consumer sciences. For undergraduate credit only. Prerequisite: consent of department chair.

FCS 480 . Seminar in Family and Consumer. Sciences (1-3) On demand. In-depth examination of topics in family and consumer sciences not covered by existing coursework. Repeatable once. Undergraduate credit only. Some seminars require transportation and/or lab fee:

FCS 489. Internship. (5-12) Fall, Spring, Summer. Internship in a professional environment. Work settings are approved on an individual basis. May be repeated.
Graded S/U.

FCS 497. Student Teaching (1-10) I. Vocational lamily and consumer sciences classroom teaching at the secondary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs: 300 . May be repeated. Graded $\mathrm{S} / \mathrm{U}$.

## Finance (FIN)

The availability of summer classes and electives is subject to demand.

AFIN 200. Personal Finance (3) Fall, Spring, Summer. Personal financial management; borrowing sources and costs; auto, property and life insurance; homeownership financing; personal investment strategy, and long-range personal financial planning.

AFIN 300. Business Finance (3) Fall, Spring, Summer. Acquisition of assets and funding in business enterprise. Fundamenfals of tinancial analysis, working capital management, and investment and financing decision-making. Prerequisites: ACCT 221 or ACCT 325, ECON 200 or ECON 202 or ECON 203, and two years of high school algebra or equivalent.

## FiN 320. Corporate Pure Risk Manage-

 ment (3) Fall, Spring, Summer. Methods and alternatives for managing pure property, liability, human resource risk exposures. Risk assessment; risk control (risk avoidance, loss prevention, loss reduction), risk financing (risk retention and risk transier, including commercial lines of insurance and social insurance).FiN 330. Investment Analysis (3) Fall, Spring, Summer. Security evaluation theory. Presentation of the functions and operations of securties markets, appraisal of investment risks of specific securities; valuation and suitability of specific securities for investment; appropriateness of securities for inclusion in investment portfolios. Prerequisites: STAT 212 and grade of C or better in FIN 300.

FIN 300 . Financial Markets (3) Fall, Spring. Nature and function of money and capital markote, with omphasis on interest rate determination and forces shaping structure of financial markets, including issues of regulation and controi. Prerequisite: grade of C or better in FIN 300.

FIN 350. Corporate Finance (3) Fall, Spring, Summer. Adivanced practices of financial management are developed. Financial models used in decision-making and their applicetion to major areas of business finance are emphasized. Prerequisites: STAT 212 and grade of $C$ or better in FIN 300.

FIN 410. International Financial Management (3) Fall, Spring. Is an extension of financial management to the international arena. Topics covered include foreign exchange markets, currency futures and options markets, comparative equity and bond markets, international short term and long term asset management. Prerequisite: grade of C or better in FIN 300.

FIN 425. Insurance Company Operations
(3) Fall, Spring. Operations and organization of insurance companies. Topics covered include financial reporting requirements, financial statement analysis, regulation, job functions (marketing, underwriting, claims adjusting), premium investment management, and reinsurance. Prerequisite: grade of $C$ or better in FIN 320.

FIN 435. Investment Management (3) Fall, Spring. Applications of security analysis and portfolio management. Extended discussion of topics in both security analysis and portfolio theory, applied security analysis and development and management of investment portfolios. Prerequisite: grade of C or better in FIN 330.

FIN 445. Bank Management (3) Fall, Spring. Management of banking fund sources and their allocation among reserves, loans, and investments; and their impact on bank liquidity and profitability. Depositors' services, and credit and lending analysis practices. Prerequisite: grade of C or better in FIN 340.

## FIN 447. Real Estate Management (3)

 Summer. Investment decision making in land resource use, appraisal and investment analysis. Real estate location, markets, property rights, financing, taxation and valuation. Accepted by Ohio Real Estate Commission as one of four required courses for licensing exam. Prerequisite: grade of C or better in FIN 300.FIN 455. Financial Management (3) Fall, Spring. The case method is used to apply decision-making procedures to realistic problems in financial management. Prerequisite: grade of C or better in FIN 350.

FIN 491. Studies in Finance (1-3) On demand. In-depth study of selected areas. Offered to individual students on lecture, seminar, or independent study basis, depending on student needs and nature of material. May be repeated to six hours. Prerequisite: permission of instructor and chair. Graded S/U.

## Foods \& Nutrition (F\&N)

AF\&N 207. Nutrition, Health and You (3) Fall, Spring, Summer. Application of fundamental nutrition principles in selecting diets for optimal health. Discussion of current nutrition concepts and controversies, including world hunger.

F\&N 210. Fundamentals of Food Science (3) Fall, Spring, Summer. Art and science of foods. Specific food science principles reinforced by actual preparation of foods. Two hours of lecture and three hours of lab. Lab fee.

## F\&N 212. Meal Service Management (3)

Fall, Spring, Summer. Management of available resources for planning, organization, preparation and service of family and commercial type meals. Controls in purchasing, receiving, storage and costing. One hour of lecture and four hours of lab. Prerequisite: F\&N 210. Lab fee.

F\&N 230. Professional Catering Techniques (3) Spring only, odd years. Techniques of preparation and presentation germane to food service catering specialists. Laboratory fee. Prerequisite: F\&N 210 or equivalent. Professional liability insurance required.

F\&N 310. Nutritional Assessment and Patient Instruction (3) Spring, Summer. Methods for evaluating nutritional status of individuals and population groups, and techniques used in diet instruction. Methods of quality assurance, program evaluation, laws, regulations and standards affecting dietetic practice. Two hours lecture and one three-hour lab. Prerequisite: F\&N 207, CHEM 306 or consent of instructor. Lab fee

F\&N 326. Foods of Other Cultures (2) Fall odd years. Geographic, economic, political, religious and cultural influences on dietary patterns in selected regions of the world. includes a variety of experiences with. cultural and ethnic foods. One-hour lecture, one two-hour lab. Lab fee.

P\&N 331. Quality Food Production (3) Fall. Planning and service of quantity foods for institutions and restaurants. Menu planning, purchasing, production scheduling, recipe standardization, receiving, storage and issuing. Two hours lecture, three hours clinical experience. Prerequisite: F\&N 210 or consent of instructor. Professional liability insurance required.

FRN 335. Principles and Practice of Food Protection (3) Fall. Principles involved in identification and prevention of the causes of food contamination. Public health regulations and microbiologic control measures in various food service operations. Could lead to Education Foundation Sanitation Certification. Three hours lecture.

F\&N 431. Experimental Foods (3) Spring. Experimental methods of quality control and product development. Scientific reasoning applied to the methods of food preparation. Subjective and objective evaluation criteria will be practiced. Two hours of lecture and three hours of lab. Prerequisites: F\&N 210, CHEM 306 or consent of instructor. Lab fee.

F\&N 432. Advanced Nutrition (3) Spring yoics in normal nutrition, nutrient metabom interrelationships, and metabolic integration. Analysis and validity of current literature. Three hours of lecture. Prerequisites: F\&N 207, CHEM 306.

F\&N 433. Principles of Foodservice Management (3):Spring. Management principles and procedures in institutional or commercial food services: Selection, training and supervision of personnel. Food procurement, production and marketing. Clinical practicum. Two hours lecture and three hours of clinical experience. Prerequisite: F\&N 331 or consent of instructor. Professional liability insurance required.

F\&N 434. Diet Therapy (3). Fall. Diseases and dietary modifications they necessitate. Determination of rationale for inclusion or exclusion of specific foods in prescribed diet; clinical dietitian's roles. Two hours of lecture and four hours of clinical experience. Prerequisites: F\&N 432, CHEM 308, BIOL 332. Professional liability insurance required.

F\&N 435. Nutrition for Infants and Young Children (3) Fall. Nutrition of infants and children in health and disease, from prenatal period to adolescence. Two hours of lecture and two hours of lab. Prerequisite: F\&N 207.
fessional liability insurance required.
r\&N 436. Nutrition for the Aging (3) Spring, Summer. Psychological, physiological and socio-economic factors affecting dietary practices and nutritional needs of the eiderly in group and individual situations.
Two hours of lecture and two hours of clinical experience. Prerequisites: F\&N 207 and BIOL 332, or consent of instructor. Professional liability insurance required.

F\&N 437. Advanced Foodservice Management (3) Fall. Management application to the unique aspects of the foodservice industry. Organizational leadership, employee motivation, legal aspects of the industry. Involves role playing, case studies; problem solving techniques. Prerequisite: FCS 489 or consent of instructor. Lab fee.

F\&N 438. Applied Clinical Nutrition (3)
Spring. Principles of dietetics: practice germane to specialized nutritional problems. Expansion of clinical theory introduced in F\&N 434. Prerequisite: F\&N 434 or consent of instructor.

F\&N 440. Research Methods in Nutrition; Foods and Dietetics (3) Fall. Methods in research design, data analysis and presentation. Techniques in dietetics, nutrition, foods,
dservice management and clinical dies. Preparation of research proposals, evaluating published research and ethical issues. Two hours lecture, three hours lab. Prerequisites:. F\&N 310 and MATH 115 or equivalent. Lab fee.

## French (FREN) •

Students who had French in high school should attend the placement session during orientation and registration or contact the department prior to enrollment in a course. Credit will not be given for coursework more than two levels lower than the highest level completed in high scihool, unless authorized by the chair of the department.
$\Delta$ FREN 101. Elementary French (4) Fall, Spring. Beginning oral-aural study; attention to grammar. Four class periods and scheduled oral practice each week.
$\triangle$ FREN 102. Elementary French II (4) Fall, Spring. FREN 101 continued. Four class periods and scheduled oral practice each week. Prerequisites: FREN 101 or one year of French in high school.

7/AFREN 201. Intermediate French I (3) Fall, Spring. Grammar review; development of the four skills. Three class periods and laboratory practice each week. Prerequisite: FREN 102 or two years of French in high school.

7/DFREN 202. Intermediate French II (3) Fall, Spring. FREN 201 continued. Three class periods and scheduled laboratory each week. Prerequisite: FREN 201 or three years of French in high school.

TFREN 212. French Cultural Readings IV (3) Fall, Spring. Development of reading comprehension in French using cultural and/ or literary materials. Reading in French or Francophone texts. Conducted in English. Prerequisite: FREN 201 or three years of French in high school. Cannot be taken for credit if 202 credit has been received.

## 7FREN 284. French Canadian Life

Through Literature (3). Selected authors studied in translation. Use of a socio-critical approach enables students to discover the particularity in the French Canadian expression of the American experience.

FREN 350. Problems in Translation (3). Practical work in translingual rendering of expository texts, stressing vocabulary building and critical reading. Prerequisite: FREN 202 or 212.

FREN 351: French Composition and Conversation I (3) Fall. Intensive grammar review for development of oral and written skills. Prerequisite: FREN 202.

FREN 352. French Composition and Cónversation II (3). Continued development in oral and written expression. Prerequisite: FREN 202.

FREN 353. French Dictation' (3). French pronunciation; syllabification, stress, linking, intonation. Prerequisite: FREN 202.

FREN 355. French Linguistics (3) Fall.
Sound system and grammatical structures of modern French; practical application. Prerequisite: FREN 202.

FREN 361. Introduction to French Literature I (3). Development of major trends in French literature from the Middle Ages to 1850. Introduction to techniques of literary analysis. Prerequisite: FREN 351.

FREN 362. Introduction to French Literature II (3): Development of major trends in French and Francophone literature since 1850. Introduction to techniques of literary analysis. Prerequisite: FREN 351.

FREN 371. French Civilization I (3). Political, social, intellectual, artistic life of French people from prehistoric times to' Industrial Revolution; study of geographic and ethnic divisions. Prerequisite: FREN 351.

FREN 372: French Civilization II (3). FREN 371 continued; political; social; intellectual, artistic life of modern France and Francophone areas. Prerequisite: FREN 351.

FREN 389. Contemporary Touraine (3) Summer. Individual research projects culminating in term paper dealing with some aspect of region of Touraine. Prerequisite: FREN 202. Offered only abroad.

FREN 444. French Film (4). Overview of French film history; film as reflection of society; introduction to iauteurî criticism and semiotics. Film in French and subtitles. English and French discussion sections: Prerequisite 300/400 literature/culture course or permission.

FREN 451. Advanced Composition and Conversation (3). Development of fluency and accuracy in written and oral skills at an advanced level. Prerequisite: FREN 351 or 352.

FREN 453. Advanced French Dictation (3). Continued study of pronunciation, stress and intonation. Prerequisite: FREN 353.

FREN 454. Translation Workshop (3). Intensive practice in translating technical and literary texts. Emphasis on French to English translation. Intended to prepare student for certification by a professional translators organization. Prerequisite: FREN 350.

FREN 458. Career French I (3). Terminology used in commercial operations, economics, international trade; emphasis on business: correspondence; some translation. Prerequisite: FREN 351 or FREN 352.

FREN 459. Career French II (3). Advanced study of the economic and administrative structures in France and in Francophone areas, with intensive concentration on
related technical language. Prerequisite: FREN 458.

FREN 464. Seventeenth Century French Literature (4). Baroque and classical French literature. Prerequisite: FREN 361.

FREN 470. Independent Readings in French ( $1-3$ ). Readings for the advanced student who wishes to study a particular author or period, or problem in language or civilization. Prerequisites: consent of department chair and instructor.

FREN 474. Eighteenth Century French Literature (4). Literature of the Enlightenment. Frerequisite: FREN 361.

FREN 484. Nineteenth Century French Literature (4). Literature of France of the nineteenth century, including Romanticism, Realism and Naturalism. Prerequisite: FREN 361 or 362.

FREN 488. French Literature: Advanced Stucies (3). Intensive study of author, literary school, genre or a selected theme. May be repeated if topics clearly differ. Prerequisite: FREN 361 or 362.

FREN 494. Twentieth Century French Literature (4). Contemporary French and Francophone novel, theatre and poetry. Prerequisite: FREN 362.

## Eeography (GEOG)

आIGEOG 121. World Geography: Eurasia and Africa (3) Fall, Spring. Geographical analysis of selected topics in Asia, Africa and Europe. Ecological aspacts of cultural, political and economic problems.
§ $\triangle$ GEOG 122. Worid Geography: Americas and Pacific (3) Fall, Spring. Geographical malysis of selected topics in the Americas and Pacific world. Ecologica aspects of cultural, political and economic problems.
\# $\triangle$ AEOG 125. Weather and Climate (3) Fall, Spring. Atmospheric elements and controls; earth-sun relationships, weather components, weather prediction, and climatic types and distribution. Two one-hour lectures, one-hour demonstration-discussion.

GEOG 126. Vegetation and Soils (3) Fall. Physical geography; distribution and classification of vegetation and soil types using maps and profiles. Two one-hour lectures, one-hour discussion-demonstration.

GEOC 127. Land Form Development and Distribution (3) Spring. Physical geography; processes of land form development, worldwide distribution of land forms, and U.S. physiographic features and regions. Two one-hour lectures, one-hour demonstrationdiscussion.

GEOG 213. Meteorology (3) Fall, Spring. Physical processes of atmosphere and relationships to daily weather patterns. Two one-hour lectures, one two-hour laboratory.

IIUGEOG 225. World Economic Geography (3) Fali, Spring. Ways in which people have developed natural and human resources to meet economic needs which result in different economic patterns and landscapes.

TIUGEOG 230. Cultural Geography (3) Fall, Spring. Geographic influences upon population distribution, religion, dietary patterns, economics, others.

GEOG 300. Topics in Geography (3) On demand. Experimental courses considered part of regular offering.

GEOG 303. Severe Weather (3) Fall. Occurrence, cause and hazards of blizzards, surface cyclones, hurricanes, severe thunderstorms, tornadoes, lightning, hail, floods, droughts and unusual weather patterns.

GEOG 312. Geography of Marketing (3) On demand. Geographical study of marketing concerned with the spatial nature of commerce examined on the macro- and microscales. Theoretical and applied research are used to examine different areal contexts, tertiary economic activities, and targeted populations.

## GEOG 321. Cartography and Map

 Communication (3) Fall or Spring. Practical map planning and construction, and production; thematic mapping; basic cartographic theory; and computer application. Two hours of lecture and two hours of lab.GEOG 323. Research Methods (3) On demand. Geographic research techniques; quantitative methods of describing and analyzing spatial distributions.

1GEOG 325. Population Geography (3) Spring. Spatial analysis of size, distribution, density, migration, age-sex composition, and dynamic factors of change in major world population regions and sub-regions.

GEOG 326. Environment and Aging (3) Spring. The development of services and facilities which enhance the ability of older persons to function in their environment; particular emphasis on the impacts of housing and transportation on the lives of older persons.

GEOG 327. Delivery of Social Services: Geographic Perspectives (3) Alternate years. Delivery of social services to subnational geographic areas; design and monitoring of delivery systems by examining specific social programs and problems, as those related to poverty, crime, health and eiderly.

IGEOG 331. Principles of Conservation Ecology (3) Fall or Spring. Principles necessary in considering environmental problems and application to various aspects of conservation; interdisciplinary approach combining social, biological and physical sciences.

GEOG 333. Geography of Recreation and Tourism (3) Fall. Spatial aspects of outdoor recreation; assessment of present and future recreational resources; space for urban and rural areas, accessibility of these resources, governmental policies and tourism.

GEOG 334. Geography of Diseases (3) On demand. Past and present spatial distribution of diseases; cultural and environmental impacts in distribution, transmission and causes of diseases in different regions of worid.

GEOG 335. Geography of Humen Migra" tions (3) On demand. Causes and consequences of selected historical and contemporary human migrations, both international and intemal; spatial analysis of characteristics of migration streams and places of origin and destination.

IGEOG 337. American Indian (3) Fall. Past and present spatial aspects of native American population in United States and Canada; distributions, migrations, economies, land tenure, cultures, art, rural-urban settlement, impact upon cultural and physical landscapes.

GEOG 341. Russia and Its Neighbors (3) Spring. Description and interpretation of geographic factors related to present development.
$\triangle$ GEOG 342. United States and Canada (3) On demand. Problems and factors influencing the development of the U.S. and Canada.

IGEOG 343. Europe (3) On demand. Environments, cultures, utilization of resources, problems of development and future opportunities in European countries.

IGEOG 344. Eastern Âsia (3) On demand. Problems and factors influencing development of countries of eastern Asia; emphasis on China and Japan.

GEOG 345. Southern and Southeast Asia (3) On demand. Countries extending from Philippine Islands to Pakistan; different cultures; utilization of resources, future opportunities and problems of development.

TGEOG 346. Middle East (3) On demand. Contemporary problems of Middle East; petroleum development and impact on society, food needs, population problems, and spatial characteristics of religious and linguistic groups.

GEOG 347. Africa (3) On demand. Georaphic factors influencing development of fícican countries.

IIGEOG 349. Latin America (3) Fall. Problems related to contemporary development of societies of Latin America.

GEOG 351. Ohio (3) Fall. Historical, physical, economic and social problems related to development of Ohio.

GEOG 400. Special Topics in Geography
(3) On demand. Experimental courses considered part of regular offering. May be repeated with departmental permission.

GEOG 402. Regional Economic Geography (3) On demand. Problems of subnational area units in county and regional planning, poverty pockets, delivery of services; emphasis on individual projects.

GEOG 404. Climatology (3) Fall or Spring. Fundamentals and applications; drought, water resources, human comfort, health, architecture; short- and long-term climatic changes.

GEOG 411. Theoretical Cartography (3) Alternate years. Analysis of cartographic research. Four hours per week; two hours lecture or discussion and two hours of poratory. May be repeated once upon onsent of instructor. Prerequisite: GEOG 321 or c̣onsent of instructor.

GEOG 412. Use and Interpretation of Aerial Photographs (3) Fall. Sources, types, characteristics, uses and limitations of aerial photographs. Training in use of standard equipment for stereoscopic viewing and height measurement.

GEOG 413: Introduction to Remote Sensing (3) Spring. Principles and proce-: dures used to obtain information about natural and cultural features through imagery derived from photographic, multispectral, thematic mapper and side-looking airborne radar señor systems.

GEOG 422. Computer Mapping (3) Fall, Spring. Map construction and display of geographical data using the computer. Prerequisite: CS 100 or GEOG 321 or consent of instructor.

GEOG 424. Geographic Information Systems (4) Fall or Spring. Collection, manipulation; integration and automated display of data with emphasis on geographic/ spatial analysis. Three hours of lecture and three hours of lab. Prerequisite: GEOG 321 or 422 or consent of instructor. Credit lowed for no more than one: GEOL 403, CNVS 403, GEOG 424.

IIGEOG 426. The American City (3) Fall.
Internal organization of cities. Eccological and land use problems, ghetto development, urban-economic base, urban sprawl and intra-urban delivery of services.

## GEOG 433. Soil Classification and

Mapping (3) On demand. Classification of soils; use of soil survey equipment; preparation of soil type, slope and erosion maps of assigned areas. Prerequisite: GEOG 126 or permission of instructor.

IGGEOG 435. Political Geography (3) Fall: Study of political features and processes - from a geographical perspective. Issues include land use planning, zoning, electoral patterns, and geopolitical relationships of countries.

GEOG 436. Topics in Community and Area Development (3) Alternate years. Field analysis of various problems and topics of urban and rural areas. Prerequisite: GEOG 402 or GEOG 426 or consent of instructor.

GEOG 442. Conservation: Resources and Regional Development (3) On demand. Problems of area development in relationship to cultural, economic and physical resources; obstacles to present development, needed changes and potentials for future growth.

GEOG 455. Global Atmospheric Problems (3) On demand. Interrelationships between humans and atmospheric environments; implications of air pollution, acid rain, snow, fioods, drought, temperature extremes and .global warming. Prerequisites: GEOG 125 and either GEOG 213 or 303.

GEOG 457. Global Water Resources (3) Spring. Analysis of the earth's water resources, surface water systems (drainage basins, rivers, lakes, reservoirs), distribution, supply demand, quality and hydrologic extremes. Prerequisite: GEOG 125 or consent of instructor.

GEOG 459. Topics in Physical Geography (3) On demand. Selected aspects of physical geography.

GEOG 475. Agriculture and Rural Development (3) On demand. Changes and trénds in availability, production and consumption of food resources; rural problems such as pollution, zoning, recreation and future uses of rural areas.

GEOG 489. Internship (3) Fall, Spring. Provides practical experience in applied geography, such as land use planning; urban and rural planning; recreational, regional and environmental planning; and location of industrial, commercial and health service facilities. May be repeated. Only six hours may be applied to GEOG major or minor; additional hours are for general electives. Graded S/U.

GEOG 490. Special Problems in Geography (1-3) On demand. Readings and research on varied topics to suit needs of student.

## Geology (GEOL)

TIUGEOL 100. Introduction to Geology (3) Fall, Spring, Summer. The earth; physical and historical geology; including economic, social and environmental aspects. Not open to geology majors and minors. Credit aliowed for no more than one: GEOL 100, GEOL 101, GEOL 104.
$\triangle$ GEOL 101. Earth Science (3) Survey of earth's geology, oceanography, meteorology and place in the universe. Credit allowed for no more than one: GEOL 100, GEOL 101, GEOL 104.

TIUGEOL 104. Earth Environments (4) Introduction to the science of geology. Relationship of man to physical environment of the earth and its natural resources. Three lectures and one two-hour laboratory. Credit allowed for no more than one: GEOL 100 , GEOL 101, GEOL 104. Lab fee.

TIGGEOL 105. Time, Life and Man (4) Introduction to the origin, evolution and extinction of major fossil groups in relation to moving continents, mountain building, changing environments and the appearance : of man. Three lectures and one two-hour laboratory. Lab fee.

TGEOL 205. Geologic History of Man (3) Evolution, distribution, way of life and geologic history of prehistoric hominids.

## TIUGEOL 2.15. Geologic History of

 Dinosaurs (3) Evolution, ways of life and extinction of the Dinosauria; geologic history of vertebrates and dinosaurs in relation to a changing earth. Two lectures and one twohour laboratory. Lab fee.GEOL 302. Earth Materials (4) Classification, identification, chemistry, association, economics and genesis of crystals, minerals and rocks. Three lectures and one two-hour laboratory. Prerequisites or corequisites: GEOL 104 and CHEM 125 or 135.

GEOL 304. Geology of the National Parks (4) U.S. regional geology as illustrated in the national park system. Three lectures and one two-hour laboratory. Prerequisite: GEOL 100 or GEOL 104.
$\triangle$ GEOL 305. Life of the Geologic Past (4) Study of fossils and the factors that influence the progressive development of life through geologic time. Three lectures and one twohour discussion-demonstration laboratory. For nonscientists; not open to geology majors in the B.S. program; not open to
students with credis for GEOL 415. Prerequisite: GEOL 100 or GEOL 101 or GEOL 105. Lab fee.

AtsEfn. 506. Rocks and Minerals (4) Nontechnical study of eanth materials as Illustrated by gems, minerals and rocks. Two lectures and two two-hour laboratories. Not open to geology majors in B.S. program. Credi not given for GEOL 306 and GEOL 302. Prerequisite: GEOL 100 or GEOL 104. Lab fee.

GEOL 308. Earth Structures and Tectonics (4) Identification and interpretation of geologic structures; mechanics of rock deformation, fracturing and folding, plate tectonics and orogeny. Three lectures and one three-hour laboratory. Prerequisites: GEOL 302, PHYS 201 or PHYS 211, and MATH 129 or equivalent; or consent of instructor.

GEOL 310. Geomorphology (3) Nature and classification of landforms and processes that produce them; geomorphoric systems in relation to varied geologic structures, rocks and climates. Two field trips required. Pierequisite: GEOL 104.

QEOL 316. Sedimentation and StratigraFhy (A) Classification and origins of sedimentary rocks; depositional environments; stratigraphic principles and procedures. Three lectures and one two-hour laboratory, Prerequisites: GEOL 105 and 302.

9GEOL, 322. Human Environmental Geology (3) Aspecis of geology critical to wise use of human environments. One halfday field trip required. Credil not given for both GEOL 322 and 420. Prerequisite: GEOL. 104.

GEOL 40\%. Economic Geology (4) Classification and genesis of metallic ore deposits illustrated by study of classic areas. Three lecfures and one two-hour laboratory. Prérquisites: GEOL. $309^{\circ}$ and GEOL 302.

GEOL 402. Computer Applications in Geolugy ( 3 ) Methods for the retrieval, extraction and manipulation of geological infometion and numerical data using computers. Prerequisites: minimum of 9 credil hours in GEOL and knowledge of FORTRAN (students may co-register for CS 280); or consent of instructor.

GEO4.403, Ceographic Information Systema (4) Coliection, manipulation, integration and automated display of spatial data from yanous disciplines with particular emptrases on environmental geology, resource management, and geographic enalysis. Credit allowed for no more than one: GEOL 403, FNVS 403, GEOG 424.

GEOL 415. Paleontology (4) Principles of paleontology; major groups of fossil animals. Three lectures and one two-hour laboratory. Prerequisite: GEOL 105 or consent of instructor.

GEOL 418. Geology of Ohio (3) Alternate years. Bedrock and surficial geology of Ohio; state's economic-mineral resources. Two lectures and one two-hour laboratory. Three full-day field trips required. Prerequisites: GEOL 100 or 104 and GEOL 105.

GEOL 419. Vertebrate Paleontology (3) Fossil vertebrates and their morphology, classification and evolution. Two lectures and one two-hour laboratory. Credit not given for both GEOL 419 and GEOL 305. Prerequisite: GEOL 100 or 101 or 105 or BIOL 104.

GEOL 420. Environmental Aspects of Geology (3) Contributions of geological concepts to environmental concerns. One half-day field trip required. Credit not given for both GEOL 322 and 420. Prerequisites: GEOL 104 and 310 or consent of instructor.

GEOL 423. Tectonics (3) Tectonic elements in the continents and ocean basins interpreted within the framework of plate tectonics. Prerequisites: GEOL 309 and 316.

GEOL 425. Micropaleontology (3)' Classification, morphology, phylogeny and paleoecology of selected groups of microfossils. Two lectures and one two-hour laboratory. Prerequisite: GEOL 415 or consent of instructor.

GEOL 431. Introduction to Geochemistry (4) Principles of mass action, acidity, solubility, introductory thermodynamics and petrogenesis. Three lectures and one threehour laboratory. Prerequisites: CHEM 127 and 128 or consent of instructor.

GEOL 432. Solid Earth Geophysics (4) Gravity, magnetic, and seismic properties of the earth; plate tectonics. Three lectures and one two-hour problem-solving laboratory. Prerequisites: GEOL 309, PHYS 201 or 211; or consent of instructor.

GEOL 440. Geologic Remote Sensing (4) Use of remotely sensed multispectral data for geological applications. Data acquisition, image processing and interpretation. Recent advances in geologic remote-sensing research. Three lectures and one two-hour laboratory. Prerequisite: GEOL 309.

GEOL 445. Surface Water Hydrogeology (4) Geological aspects of flowing water at the earth's surface, emphasizing open-channel' hydraulics, flood analysis, sediment transport, and water quality. Three lectures and one recitation section. Prerequisite: GEOL 346.

GEOL 446. Groundwater Hydrogeology (4) Hydraulics of groundwater flow, hydrologic properties of geologic materials, evaluation of groundwater resources and contamination. Three lectures and one recitation section. Prerequisite: GEOL 316.

GEOL 472. Marine Geology (3) Processes, sediments and organisms of modern environments; interrelationships and expression in rock record. Prerequisite: consent of instructor.

GEOL 475. Workshop in Seismology (1) Supervised program in theory of seismology, operation of seismological observatory, interpretation of seismic records. May be repeated to four hours. Prerequisite: consent of instructor. Graded S/U.

AGEOL 480. Seminar in Geology (1-3) Study of selected topic. May be repeated. Prerequisite: consent of instructor.

GEOL 483. Coastal Marine Geology (3)
Summer only. Inshore and nearshore geological processes, sedimentation patterns and landform development. Prerequisites: physical and historical geology. Taught at Gulf Coast Research Laboratory under their number GEOL 431.
$\triangle$ GEOL 490. Geological Problems (1-3) Individual work for student who has showr ${ }^{1}$ proficiency and marked degree of independence in work. May be repeated. Prerequisite: consent of instructor.

GEOL 493. Field Experience (1-6) Summer only. Recognition and study of geologic materials, structures and landforms in the field. Written report required. Not open to B.S. geology majors. Prerequisites: GEOL 104 and 105, or GEOL 304, or consent of instructor. Lab fee.

GEOL 494. Field Geology (6) Summer only. Principles and practices of field geology and geologic mapping. Final map and report required. Prerequisites: grade of $C$ or better in both GEOL 309 and GEOL 346, or consent of instructor. Lab fee.

GEOL H499. Honors Thesis (3) For students in the departmental honors program only. The thesis describes and presents the results of independent research, which normally is completed under GEOL H490. Graded S/U.

## German (GERM)

Entering students who had German in high school should attend the placement session during orientation and registration or contac: the department prior to enrollment in a course.

Credit for a degree is not granted for foreign language courses which duplicate more than two units of high school study.

ERM 101. Elementary Lánguage and jiture I (4) Fall,' Spring. Cultural approach beginning language study in the four skills: listening, speaking; reading, writing. Four class periods and laboratory practice each week.

GERM 102. Elementary Language and Culture II (4) Fall, Spring. GERM 101 continued. Four class periods and laboratory practice each week. Prerequisite: GERM 101, or by placement.

GERM 117. Beginning Conversational German I (2) Fall. Basic conversational German. Suggested as a supplemental course to accompany GERM 101, or may be taken independently. Not open to students who have completed GERM 102.

GERM 118. Beginning Conversational German II (2) Spring: Basic conversational German continued. Prerequisite: GERM 117 or GERM 101 or permission of instructor. Not open to students who have begun or completed GERM 201.

ๆGERM 201. Intermediate German 1 (3)
Fall, Spring. Grammar review; development of the four skills. Three class periods and laboratory practice each week. Prerequisite: GERM 102, or by placement.

ERM 202. Intermediate German II (3) Fall, Spring. GERM 201 continued. Three class periods and laboratory practice each week. Prerequisite: GERM 201, or by placement.

TGERM 217. Intermediate Conversational German I (2) Fall. Practice in conversation at the intermediate level. Suggested as supplemental course to accompany GERM 201, or may be takén independently. Not open to students who have begun or completed GERM 317. Prerequisite: GERM 118 or 102 or permission of instructor.

IGERM 218. Intermediate Conversational German II (2) Spring: GERM 217 continued. Not open to students who have begun or completed GERM 318. Prerequișite: GERM 217 or 201 or permission of instructor.

GERM 231. Intermediate Reading (3) Fall, Summer. Development of reading skills in. expository prose from various fields (scientific, technical, commercial and others). Vocabulary building, analysis of syntax and grammar for reading purposes. Prerequisite: GERM 102 or equivalent.
qGERM 260. Modern German Literature in Translation (3) Spring. Readings in English internationally known authors, from Irman-speaking countries. May include Kafka, Mann, Hesse, Brecht, Grass and others. Course does not count toward a German major or minor.

GERM 300. Introduction to Study Abroad (1) Spring. Preparation for study abroad. Limited to Salzburg and German Exchange Program participants. Course does not count toward German major or minor. Graded S/U.

GERM 311. Introduction to Literature: 20th Century (3) Fall. Representative authors of the 20th century; development of reading skills and vocabulary necessary for discussion of literature. Prerequisite: GERM 202, or by placement.

GERM 313. Introduction to Literature: 18th and 19th Centuries (3) Spring. Major authors and representative works of the 18th. and 19th centuries; main genres and movements in historical and social context; literary terminology; development of reading skills, Prerequisite: GERM 202, or by placement.

GERM 315. German Culture and Civilization (3) Fall, Spring. Cultural-historical treatment of the social, intellectual and artistic life of the German-speaking peoples from medieval times to World War II. Lectures, audio-visual presentations and readings in English.

GERM 316. Contemporary Germany (3) Fall, Spring. Lecture-reading course in English. Division of Germany after World War II ; rebuilding and development of the two German states since 1949; political, economic and social systems, inter-German relations, patterns of daily living; revolution in East Germany and process of unification.

GERM 317. Composition and Conversation I (2-4) Fall. Extensive practice in speaking and writing German. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 202, or by placement.

GERM 318. Composition and Conversation II (2-4). Spring. GERM 317 continued. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 317 or permission of instructor.

GERM 319. German Phonetics and Pronunciation (1-2) Spring. Theory and .practice of German pronunciation; introduction to phonetic principles. Prerequisite: GERM 102.

GERM 331: Workshop in Translation (1-3) Spring. Small group work in German to English translation of scientific, technical or business writing or other types of expository prose in the student's specialty. May be repeated to six hours with different projects. Prerequisite: GERM 231 or GERM 201 or permission of instructor.

GERM 360. Literature in Translation (3) On demand. Variable topic course on German literature in translation; may center on authors, periods, genres or themes. May be repeated to six hours with different topics. Prerequisite: previous literature course in any department, or permission of instructor. Course does not count towards a German major or minor.

GERM 380. Topics in German Language, Thought or Culture (1-3) On demand. Topic chosen to meet curriculum needs and student requests. May be repeated to six hours with different topics. Prerequisites or corequisites: GERM 317 and GERM 311 or 313 or 331.

GERM 400. Senior Seminar (2-4) Fall, Spring. Capstone seminar in German on topic from literature or culture. Approaches and tools of German studies with German language skills development. Seminar paper in German required. Prerequisites: GERM 311,313 and 318 or permission of instructor.

GERM 407. Classical Age of German Literature (3) Alternate years. Selected works from classical period of German literature, especially the writings of Goethe and Schiller. Prerequisites: GERM 311 or 313, GERM 318.

GERM 409. German Romanticism (3) Alternate years. Major authors of the romantic era; introduction to the theoretical and philosophical representatives. Prerequisites: GERM 311 or 313, GERM 318.

GERM 411. Modern German Drama (3) Alternate years: Selected major representatives of modern German drama from Hauptmann to the present. Prerequisites: GERM 311 or 313, GÉRM 318.

GERM 412. Modern German Prose (3) Alternate years. Selected major representatives of prose fiction from about 1900 to present. Prerequisites: GERM 311 or 313, GERM 318.

GERM 415. The German Film (3) On demand. Cultural and literary aspects of German film; emphasis may be on important developments in German filmmaking, thematic aspects of film or on interrelationships between literary and cultural phenomena and the film.

GERM 416. Contemporary Austria (3) Fall. Offered in AYA Salzburg Program. Survey of political and social life, education, mass media, the arts and cultural life in presentday Austria. Guest lectures, discussion sessions, field trips. Prerequisite: admission to AYA program.

GERM 417. Advanced Composition and Conversation (2-4) Fall. Development of increased facility in speaking and writing.
(Niay be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 318 or permission of instructor.

GERM 418. Stylistics, Syntax and Siruciure of German (2-3) Spring. Practice and problems of writing style and syntax. Descriptive study of grammatical structures, contrastive analysis of English and German. (May be repeated for credit in AYA Salzburg Program.) Prorequisite: GERM 318 or permission of instructor.

GERM 419. German Drama Workshop (3) On demand. Practical advanced linguistic training through active participation in the espal projects; advanced phonetics; mes ds of utlizing dramatic productions as part of foreign language instruction.
Prerequisite: GERM 417 or permission of instructor.

## GERH 431. Advanced German-English

 Translation (1-3) On demand. Analysis and application of translation techniques; attention to levels and areas of style. Intensive general practice followed by work on individual projects. May be repeated to six hours with different projects. Prerequisites: six hours from GERM 317 and/or GERM 318 and/or GELAM 331.
## CEFFH 432 Advanced English-German

Translation (1-3) On demand. Analysis and application of translating techniques; expansion on working vocabulary and idiomatic basis in German. Treatment of structural differerices between languages through arror analysis. General practice; individual projecis. May be repeated to six hours. Prerequisites: six hours from GERM 317 and/or GERM 318 and/or GERM 331.

GERM4 480 . Selected Topics in German ( 1 4) On demand. Topic chosen from literature, culture or language to meet curriculum needs and student requests. May be repeated with different topics. Prerequisites: GERM 318 and two courses from GERM 311, 313, 331, 380, or permission of instructor.

GERA 482. Introciuction io Germanic Linguistics (3) On demand. Derivation of modern Germanic languages from Proto-Indo-European. Classification and history of the Germanic language group. Development of the German language to Now High German. Prerequisites: GERM 318 or permission of instructor.

GERRA 491. Studies in German (1-3). Independent study project for advanced students in German. May be repeated to six hours with different projects. Prerequisites: arrangement with instructor and consent of departient chair prior to registration.

## Gerontology (GERO)

GERO 101. Introduction to Gerontology
(3) Fall, Spring, Summer on demand. Study of aging froma multidisciplinary perspective; focus on the way people are thought about, evaluated and treated on the basis of their age.

TGERO 301. Aging and Ethnicity in the United States (3) Fall. Examination and analysis of cultural diversity and ethnicity in the older population residing in the United States.

GERO 330. Psychosocial Aspects of Aging (3) Spring. Advanced study of psychosocial aspects of aging that combines traditional classroom instruction with structured interaction with older adults in the community. Prerequisite: GERO 101 or equivalent; non-gerontology majors only.

GERO 402. Health and Aging (3) Spring. Demographic characteristics, health status of older adults; impairments and chronic conditions most typically demonstrated by older adults; pertinent medical terminology; formal and informal supports available to address the health care needs of older adults.

TGERO 405. Cross-Cultural Aging (3) Fall. Cross-cultural analysis of the aging process and the problems of the aged throughout the world. Prerequisite: GERO 101 or consent of instructor.

GERO 410. Administration (3) Fall. Administration of human service agencies with aging clients. Goal setting, staffing, evaluation, budgeting and organizational structures. Prerequisite: senior standing.

GERO 411. Principles of Nursing Home Administration (3) Spring. A capstone course for prospective nursing home administrators to assist them in the integration and concepts necessary for successful operation of a facility. Required of all gerontology majors who have selected the nursing home administration option. Open only to those students who have achieved senior standing in the nursing home administration option.

GERO 420. Proposal Writing (3) Spring. Funding potential, methods, design and proposals in human service agencies. Prerequisite: senior standing.

GERO 422. Research in Social Gerontology (4) Fall. Logic of scientific inquiry; the complexity of gerontologic research; critical evaluation of measures, methods used in gerontologic research; hands-on experience in data analysis, interpretation and presentation. Prerequisites: GERO 101; PSYC 270 or SOC 369.

GERO 440. Seminar in Gerontology (3)
Spring. Interdisciplinary study of special topics in gerontology. May be repeated by consent of the director of the gerontology program. Restriction: advanced gerontology majors.

GERO 470. Special Topics in Gerontology (1-3) On demand. Independent study on subject matter related to gerontology no: otherwise offered. May be repeated. Prerequisite: consent of program director.

GERO 491. Practicum in Gerontology (220) Fall, Spring, Summer. Experience in working under supervision in selected agencies providing services to the aged. Emphasis on practice rather than observation. May be repeated. Prerequisites: enrollment in gerontology program or permission of program director; junior or senior standing; 2.50 GPA prior to registration. Graded $\mathrm{S} / \mathrm{U}$.

GERO 493. Practicum Seminar (1). Fall, Spring, Summer. Analysis of problems and experiences encountered in practicum. Prerequisites: permission of program director and GERO 491. Graded S/U.

## Greek (GRK)

GRK 101. Elementary Greek I (4) Fall. Introduction to Ancient Greek with a focus on, listening, reading, and writing.

GRK 102. Elementary Greek II (4) Spring. Introduction to Ancient Greek with a focus on listening, reading, and writing. Prerequisite: GRK 101 or one year of Ancient Greek in high school.

TGRK 201. Intermediate Greek I (3) Fail. Grammatical review and reading of Ancient Greek texts. prerequisite: GRK 102 or two years of Ancient Greek in high school.

ITGRK 202. Intermediate Greek II (3) Spring. Grammatical review and reading of Ancient Greek texts. Prerequisite: GRK 201.

## Heaith and Human Services (HHS)

HHS 100. Seminar in Health and Human Services (1-5) On demand. Interdisciplinary study of special health or human service topics. May be repeated. Prerequisite: consent of dean's office.

HHS 395. Workshop on Current Topics in Health and Human Services (1-4) On demand. Current topics and issues in healt' and human services areas. May be repeate, if topics differ, with approval of program adviser.

HHS 440. Seminar in Health and Human
ervices (1-5) On demand. Interdisciplinary ddy of special health or human service topics. May be repeated. Prerequisite: consent of dean's office.

## Health Education (HED)

HED 209. Advanced Concepts in Personal and Community Health (3) On demand. Detailed study of factors that influence. personal and community health in a contemporary society. Primarily for health education and physical education students.
$\Delta H E D$ 215. Personal Wellness (3) Fall; Spring, Summer. Broad overview of the elements and principles of developing a wellness lifestyle. Personal assessment and behavior change techniques will be used to enhance health behavior.

HED 216. Introduction to Health Education (3) Fall, Spring. Introduction to the profession of health education. Fundamental concepts of health determinants, behavior determinants, process and practice, health education settings and the health education profession.

HED 301. Women's Health (2) On demand. Health topics of special interest and ortance to women. Open to all students. erequisite: HED 338 highly recommended.

## HED 310. Planning and Assessing Health

Promotion. Programs (3) Spring. Theories, principles and methods involved in the planning and evaluation of health promotion programs. Prerequísites: HED 215 and 216.

HED 313. Cardiopulmonary Resuscitation and Advanced First Aid and Safety (3) Fall, Spring, Summer. Provides knowledge and training in the prevention and treatment of accidents, injuries and procedures of basic life support. Satisfactory completion may result in American Red Cross certification. Participation in skill practice required. Lab fee.

HED 314. Instructors Advanced First Aid and Emergency Care (1) Fall, Spring. Successful completion may lead to advanced instructor's certificate by the American National Red Cross. Prerequisites: junior standing and valid American Red Cross advanced first aid certificate. Lab fee.

HED 315. Cardiopulmonary Resuscitation Recertification (1) Fall, Spring, Summer. Basic life support for victim of sudden cardiac arrest and/or respiratory failure. tisfactory completion may result in
erican Red Cross Certification. Participauon' in skill practice required. Prerequisites: junior standing and prior CPR Certification. Fee: $\$ 7.50$.

HED 338. Concepts of Human Sexuality (3) Fall, Spring, Summer. Information and concepts of human sexuality, including the physiological, social, psychological, moral -. and legal aspects. Prerequisite: junior standing or consent of instructor.

HED 340. Drug Use/Abuse (3) Fall, Spring. Knowledge regarding the ambiguity of drugs in society. Physical, psychological and social ramifications of drug use/abuse. Prerequi. sites: HED 209 and junior standing or consent of instructor.
$\triangle H E D$ 346. Health Education for the Elementary School Teacher (3) Fall, Spring, Summer. Content and techniques for teaching personal and community health in. the elementary school.

HED 348. Instructional Techniques in . Health Education K-12 (3) Spring, Summer, on demand. Principles, planning methods, materials, resources and human relations of teaching health. C/F hrs.: 4.
$\triangle$ HED 362. Instructors Drivers Education (3) Summer. First of two courses required leading to certification in the state of Ohio. Provides teacher with introduction to traffic problems in our society and overview of existing driver education programs. Fee $\$ 25$. Prerequisites: junior standing and driver's license. C/F hrs.: 5.

HED 393. Practicum in Health Education (2-5) Fall, Spring, Summer. An opportunity to observe and participate in health education activities in a professional setting on a limited basis. Includes campus seminars. May be repeated up to a total of five credit hours. Prerequisites: HED 313, and HED 348 or 310.

HED 395. Workshop on Current Topics (13) On demand. Intensive educational experience on selected topics related to skill development, content update or materials developed. Typically, an all-day or similar concentrated time format. Requirements usually completed within time format. May be repeated on approval of adviser. Prerequisite: as decided by instructor.

## HED 409. School Health Services and

 School Environment (3) Fall, Spring, Summer, on demand. Consideration of school health services and school environment, including principles, organization and administration of: health appraisal, health counseling, communicable disease control, educational adjustments, emergency programs, record keeping and a safe school environment. Prerequisite: junior standing. $\mathrm{C} /$ Fhrs.: 20.HED 411. Organization and Administration of Health Agencies (3) Fall. Basic concepts for organization and administration of health agencies. Topics include Principles of
organization, ethical and legal concerns, principles of management as they relate to fiscal and personnel policies, marketing, . public relations, and health statistics and information systems. Prerequisite: HED 310.
$\triangle H E D$ 462. Advanced Instructors Driver Education (3) Summer. Second of two courses required to qualify a student for state certification in driver education; students learn to organize, administer and teach driver education in Ohio secondary schools. Emphasis on laboratory experience involving Transportation Research Center. Prerequisite: HED 362. Fee: \$20. C/F hrs.: 15.

HED 470. Independent Study in Health Education (1-3) On demand. An in-dep. study project of a topic of particular significance to the student. Project must be approved by project supervisor and program area chair prior to registration. May be repeated.

HED 481. Seminar in Health Education (2) Fall. Issues and problems faced by the health educator. Prerequisites: HED 393 and senior standing.

HED 489. Internship in Health Education (15) Fall, Spring, Summer. A concentrated pre-professional experience for those preparing for a career in health education in settings other than schools. Prerequisites: Senior standing, satisfactory completion of HED 310, and a minimum GPA of 2.5 . Petitioning and one three-credit-hour HED 393 experience required before registration.

HED 492. Student Teaching (1-10) Fall, Spring. Classroom teaching at the elementary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirement must be met. C/F hrs.: 300. May be repeated. Graded S/U.

HED 497. Student Teaching (1-10) Fall, Spring. Classroom teachingat the secondary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Health Information Technology (HIT)

†HIT 100. Introduction to Health Information Systems (3) Fall. Survey of health care delivery systems and their levels of organization. Basic policies and procedures as they relate to technical information management standards as required by accreditation or licensing agencies. Three hours lecture, 24 hours clinical instruction. Prerequisite: acceptance into the program.
†HiT i01. Medical Terminology (2) Fall. Vocabulary and terms used by medical personnel; prefixes, suffixes, word roots and their combining forms, usage, spelling and pronunciation; specialized terms within body systems and medical specialities. Two hours lecturo.

THIT 102. Miedical Transcription (2) Spring. Skill in use of transcription equipment and expansion of medical terminology and keyboarding skills. Practice in document preparation of medical, clinical and health related reports. One hour lecture and two hours lab. Prerequisites: HIT 101 and keyboarding proficiency as indicated with a grade of C or better in BUSE 111 or equivalency, CS 180.
†HIT 104, Medicolegal Aspects of Health infomation (2) The management of the medical record as a legal document, conilidential communications, consents and zuthorizations for release of medical information. Current legal issues and problems. Prerequisite: enrollment is contingent on clinical site and/or laboratory space aveilability. Consultation with the program director is advised.
thit 12. Coding and Classification Systems ICD-9-CM (3) Spring. Coding, classifying and reimbursement systems utilizing ICD-9-CM. Skill in utilizing computerized encoding systems and application of reimbursement systems. Three hours lecture, 16 hours of clinical instruction per semester. Prerequisite: RT 101 or equivalent HIT 101 or permission of instructor.

HIT 200. information Systems for HIT (3) Components of modern information technology as it relates to health care including advanced systems applications, information technology planning and information resource management. Prerequisites: HIT 100 and MIS 200.
†HIT 201. Medical Record Directed Practice (2) Fall, Spring or Summer. Application of medical record theory to actual practice through a supervised learning experience in an assigned clinical setting under the instruction of a professional medical record practitioner. Prerequisites: HIT 102 and 112. Corequisite: HIT 211. 112 hours per semester of clinical instruction.

广H17 203. Coding and Classification Systems HCPCS and CPT (1) Coding, classification and reimbursement systems utilizing HCPCS and CPT. Skill in utilizing computerized encoding systems. Current topics related to reimbursement schemes. Prerequisite: HIT 101, RT 101 or permission of instructor.
†HIT 204. Pathophysiology (4) Spring. Disordered human functions and systems; language, causes and types of diseases;
diseases of the body systems, each described in terms of its etiology, pathology, symptoms and treatment. Four hours lecture. Prerequisite: RT 101.
$\dagger$ HIT 205. Reimbursement Methodologies (2). Use of coded data and health information in reimbursement and payment systems appropriate to all health care settings and managed care. Prerequisites: HIT 101 and 112 or HIT 203 or permission of instructor.
†HIT 210. Organization and Supervision of Health information (1). Principles of organization and supervision in order to develop effective skills in leadership, motivation and team building techniques in the multidisciplinary health care industry. Emphasis on organizational skills applicable to the health information field. Prerequisite: enrollment is contingent on clinical site and/ or laboratory space availability. Consultation with the program director is advised.
$\dagger$ HIT 211. Health Data, Data Statistics and Data Literacy (3) Fall. Health and hospital data collection, analysis and presentation. Emphasis on effective use, collection, arrangement, presentation and verification of health care data. Three hours lecture. Prerequisite: HIT 100.
tHIT 213. Advanced Coding (2) Spring. Coding, classifying and reimbursement systems utilizing ICD-9-CM and CPT-4. One hour lecture, two hours assigned lab.
†HIT 215. Clinical Assessment and Performance Improvement (1). Principles of quality assessment process and provision of a framework for joining skills in collecting and analyzing data in health care. One hour lecture, 8 hours clinical instruction per semester. Prerequisites: HIT 211 and BAT 209.
†HIT 220. Medical Record Directed Practice II: Acute Care (3) Fall, Spring or Summer. Continued application of health record theory to actual practice of technical skills under instruction of health record practitioners in assigned acute care site. Prerequisite: HIT 201.
$\dagger$ HIT 290. Topics in Medical Record Technology (1-3) Fall, Spring. Medical record technology projects, workshops and seminars dealing with current topics not covered in existing courses. Prerequisite: permission of instructor.
†HIT 291. Field Experience (3) Fall, Spring, Summer. Fifteen weeks of paid field work in a medical record department under supervision of Registered Record Administrator or Accredited Record Technician. Prerequisite: permission of instructor.

## History (HIST)

\#AHIST 151. World Civilizations (3) Spring, Fall, Summer. Comparative study of how and why economic, social, political and intellectual factors shaped and defined the history of selected Western and non-Western civilizations in the ancient and medieval periods.
\# $\Delta \mathrm{HIST}$ 152. The Modern World (3) Spring, Fall, Summer. Comparative study of how and why selected economic, social, political and intellectual revolutions of the modern worid have transformed and are shaping conternporary European and non-Western cultures.
§HIST 180. Asian Civilizations (3) Spring, Fall. Interdisciplinary study of Asian civilizations, such as China, Japan, Korea and India; emphasis on how and why socioeconomic, political and intellectual developments shaped traditional cultures of Asia and transformed modern Asia into the fastestgrowing region of the world.
\# $\triangle$ HIST 205. Early America (3) Spring, Fall, Summer. Selected constitutional, intellectual, political and social developments that defined and shaped America between its first European settlement and the end of Reconstruction.

ПUHIST 206. Modern America (3) Spring, Fall, Summer. How and why selected economic, intellectual, political and social developments transformed post-Civil War America and shaped 20th-century American society.

HIST 301. American Milltary History (3)
Fall. Development of American military institutions, policies, strategy, tactics from American Revolution to present.

HIST 303. World War II (3) Fall, Summer on demand. Background and causes of the war; the course, conduct and consequences of the struggle in Europe and Asia with special attention to strategy, technology, diplomacy and politics.

HIST 304. The Bible as History: The New Testament (3) On demand. Based on modern Biblical scholarship; analyzing the New Testament as a historical text reflecting the cultural matrix of Greco-Roman Palestine, conveying the eschatological message of Jesus through his disciples and maneuvering the evangelical mission of the early Christian church.

HIST 305. The Bible as History: The Old Testament (3) On demand. Major problems relating to text, content and conteat of the Old Testament as historically interpreted in modern Biblical scholarship with special attention to authenticity of evidence, integrity of explanation and continuity of experience found in Bible.
$\Delta$ HIST 306. History of Ohio (3) Spring.
recolonial background, early exploration,
lement, Ohio's place in national developnt in the nineteenth and twentieth centuries.

HIST 308. 20th-Century U.S. Presidents (3) Spring, Fall, On demand. Biographical study of the people who have served as President; course employs psychological and political models of analysis to ask: "Can performance as President be predicted?"

HIST 309. Latin America Before Independence (3) On demand. The Pre-Columbian era; European discovery and conquest; the colonial era; wars of independence. Special attention is given to the role of indigenous and European cultures in shaping Latin American development.

7HIST 310. Modern Latin America (3) Fall, Spring, Summer on demand. Common and unique social, economic, political and intellectual features of Latin American nations and Latin America's role in world affairs.
\#HIST 311. United States-Latin American Relations, 1810-Present (3) On demand. Development of the Western Hemisphere idea, Panamericanism, Dollar Diplomacy, the Good Neighbor Policy, cooperation in World II, the Cold War, the role of multinational borations and U.S. response to social enange in Latin America.

HIST 314. Black Religion and Culture (3) Spring. Thematic history of the Black church from its African and British colonial roots to 1968. Focuses on reciprocal dynamics between church and community/state, including factors of race, ethnicity, gender and class.

HIST 315. Slavery in the Americas (3) On demand. African slave trade and various slave societies to which that traffic gave birth in the Western hemisphere. Emphasis on Cuba, Jamaica, Brazil and the American South.
\#HIST 319. Indian in American History (3) Spring, Fall. Indian responses to the European invasion of North America, Indianwhite relations in the 19th and 20th centuries, Indian contributions to American culture and contemporary Indian life and culture on and off the reservation.

HIST 326. Women in American History (3) Spring. Women's experience in America from colonial period to modern times with emphasis on changes in women's working, family, sexual and political lives.

ST 327. Women in Modern Europe (3) Fall alternate years. Cross-listed with Women's Studies as WS 327. Examination of women in Europe since 1750. Emphasis on
changes in women's working, family, sexual and political lives in conjunction with Europe's economic and political modernization. Credit not given for both WS 327 and HIST 327.

HIST 337. The Vietnam War (3) Fall. The. American experience in Vietnam from several perspectives: origins of the war and U.S. escalation; media coverage, public opinion and anti-war movements; U.S. withdrawal and communist victory; the war in retrospect as seen in American popular culture, political debate and foreign policy.

## HIST 338. American Environmental

 History (3) Fall. Three centuries of changing American attitudes and actions toward the natural environment, the rise of the conservation movement and the development of an ecological perspective. Prerequisite: completion of ENG 112. Credit allowed for only one of HIST 338, ACS 338.HIST 357. English Origins of American Law (3) Fall. Medieval and early modern English history; origin and growth of legal and constitutional doctrines, institutions and procedures important to understanding the American legal system.

HIST 360. Representative Personalities of 20th Century (3) Spring. History of the 20th century looking at major themes and the roles played by leading individuals in them.

HIST 363. French Revolution and NapoIeon (3) On demand. Impact of French Revolution on society of Old Regime; formation of revolutionary creed; Great Revolution, Jacobin Republic, Thermidor; Napoleon and principles of 1789.

HIST 367. Hitler's Germany: Rise and Fall of Nazism (3) Fall. Major developments in Germany from defeat in 1918 through collapse in 1945 and recovery in Cold War era. Weimer Republic, Hitler, Third Reich, post-war reactions and conditions; keyed to causes and effects of Nazi totalitarianism and racism.

ПHIST 370. Introduction to Modern Russia (3) On demand. Survey and analysis of the development of Russian social, political and economic systems in modern times. Designed to provide an understanding of Russia and the Russian federation today.
\#HIST 377. 20th Century Europe (3)
Spring, Fall, Summer on demand. European historical development in 20th century; major forces, events and experiences that have shaped Europe and its place in contempo-• rary world.

HIST 381. United States and Asia (3) On demand. U.S. relations with China, Japan, India and southeast Asia in the 20th century; interaction of domestic politics and foreign
policy; Asian nationalism, militarism, communism; America's involvement in wars and peace-making.

THIST 382. Chinese Civilization (3) On demand. History of Chinese dynasties, from ancient to modern times. Emphasis on cultural, social-economic and political development of the world's oldest continuous civilization before the early 20 th century.

HIST 384. Korean Civilization (3) On demand. History of Korea from ancient to modern times; emphasis on cultural, socialpolitical and economic development of the Korean people. Importance of Korean tradition and transformation for our understanding of East Asia.

HIST 386. Japanese Culture: Multi-Media Approach (3) On demand. High culture in traditional Japan. Religion, visual arts, literature, theatre and uniquely Japanese arts. Political and institutional history as it relates to cultural development.

UHIST 391. Special Studies in History (1-3) On demand. Content and theme vary with instructor. Designed to meet needs and interest of nonmajors.
$\Delta$ HIST 400 . Topics in History (2-3) On demand. Study of selected topics or subject areas.

## HIST 401. Caesar and Christ: Social

 Worlds of Late Antiquity and Early Christianity (3) On demand. Basic issues and problems involved in tensions and conflicts between pagans and Christians that were eventually accommodated in the 4th century AD; social disaffection, political resistance and cultural alienation.THIST 411. Modern Mexico (3) Fall.
Analysis of the first Latin-American state to experience political, social and economic revolution in the 20th century; causes of the revolution, leaders and institutions produced; emergence of Mexico as a relatively stable and progressive state.

HIST 413. Caribbean and Spanish Main (3) On demand. Political, economic and social development of Greater Antilles and Spanish Main from 17th to 20th centuries; war and trade, slavery, revolution, caudillism and communism in the Caribbean.

HIST 414. Canada (3) Spring. European colonial rivalry, problems of European-settled colonies, emergence of colonial selfgovernment, confederation movement, search for national identity, nature of commonwealth nation, role as mediator in Anglo-American relations, importance as independent neighbor.

HIST 415. Spain and Portugal (3) On demand. Political, economic and social
development of Iberian peninsula from invasion of Moors to 20th century dictators; reconquest, reign of Hapsburgs, Spanish Civil Wars, regimes of Franco and Salazar.

AHET 421. American Coloniai History, 1492-1763 (3) On demand. European background of American history, establishment of European settlements and institutions, emergence of colonial culture, conflict between France and England for the New World.
$\triangle H$ ST 422 . American Revolutionary Era, 1763-1789 (3) On demand. Causes, course and consequences of the movement for independence in colonial British North America. Detailed analysis of strategies and campaigns of the War for independence and of the development of state and national constitutional republicanism.

HIST 425. Early National U.S., 1789-1848 (3) Fall. Development and growth of American social, political and economic institutions from the ratification of the Constitution to the Mexican War. Topics include the emergence of new ideologies of race and gender, the market revolution, slavery and the Old South, antebellum religion and reform.

HST 426. Clvil War and Reconstruction, $1861-1877$ (3) Spring. Political, economic and cultural conditions during the War; resulting problems to peoples and governments of both sections continuing through postwar period.

HIST 429. America Becomes Modern: 1877-1917 (3) On demand. How and why the United States was transformed into an urban-industrial society and the consequences of this transformation for American cufture, society and politics.

Whist 429. America Comes of Age: 19171945 (3) On demand. Why and how the U.S. became a great, and then a global power. The new "associational" state, World War I and World War II, consumer culture, the "new" woman, the Great Depression.

HST 430. U.S. Since 1945: Affluence and Anxiety (3) Spring, Summer on demand. Politics: persistence and demise of the New Deal party system; congressional coalitions. Public policy: Fair Deal, Eisenhower Equilibrium, Great Society, Reagan Revolution. Society: Red Scare, prosperity and poverty, conformity, black struggle, student revolt, íeminism, Middle America and reaction to protest.

HIST 432. Aspects of African American History (3) Fall, Summer on demand. History of African descendants in the United States, focusing on social, political and cultural issues pertinent to the African American experience, from the African background to the present.

HIST 433. American Constitutional History (3) On demand. Development of constitutional law and institutions from the framing of the Constitution in 1787 to the present, with special attention to issues of federalism, civil rights and liberties, government regulatory authority, and the role of the Supreme Court.

HIST 437. U.S. as World Power in 20thCentury (3) Spring, Summer on demand. American involvement in world affairs; imperialism in Asia and Latin America; World War I response to German militarism and Russian communism; post-war "isolationism"; World War Il-background to Pearl Harbor, wartime alliances, peace settlements.

HIST 441. Ancient Greece (1000-400 B.C.) (3) On demand. Ancient Greek society and culture from "dark ages" through "golden age" of 5 th century. Resourcefulness of Hellenism in democratic politics, imperialistic policies and classic products of Periclean Athens. Weakness of Greek civilization in coping with crises engendered by AthenoPeloponnesian war.

## HIST 442. Roman Revolution: From

 Gracchi Through Caesar Augustus (3) On demand. Crisis of social turbulence, political violence and cultural ambivalence that marked Rome's transition from city-state to world state; how and why Roman archaism, republicanism and imperialism contributed to collapse of Late Republic and creation of Early Empire.HIST 444. The Making of Europe (3) On demand. Cultural, religious, political and economic aspects of the Middle Ages which established the framework for modern European civilization; cross-cultural contacts with the Christian and Islamic East.

HIST 446. Early Modern Europe 1450-1750
(3) On demand. Comparative study of European societies in an age of transition. Renaissance, Reformation, growth of absolutism and constitutionalism, economic expansion, social change, intellectual development and emergence of baroque art forms.

HIST 454. European Foreign Relations, 1914-Present (3) On demand. Foreign policies and diplomatic practices of the great powers and their leaders: World War I, postwar quest for stability; World War II; Europe in the Cold War; contemporary problems.

HIST 455. Europe Since 1945 (3) Fall. Europe since World War II. International events (division of Europe, Cold War, fall of Communism), domestic developments (evolution of modern welfare state), and impact of nationalism and internationalism. Prerequisite: HIST 152 or 377.

HIST 458. England, 55 B.C.- 1689 (3) Fali, Major constitutional, economic, political, religious and social developments through the 17th century: making of the Anglo-Saxo., kingdom, feudal government and society, crisis of late medieval England, Tudor restoration of order, 17 th-century civil war and revolution.

HIST 459. Great Britain, 1689-Present (3) Spring. Growth of parliamentary government; impact of the Enlightenment, French Revolution and industrialization; Victorian England; political and economic reform; two world wars and their consequences.

HIST 462. British Empire-Commonwealth (3) On demand. Rationale of imperialism, expansion of Britain overseas, development of colonial holdings, evolution of the concept and reality of Commonwealth of Nations.

HIST 464. History of France Since 1815 (3) On demand. Social and economic development of France, 1815-Third Republic; Jacobin radicalism, emergence of French labor movement; France between two world wars; Vichy and the Resistance; problems of Fourth and Fifth Republics.

HIST 469. Imperial Russia (3) On demand. Development of Russian social, political and economic systems from the time of Peter the Great to the Revolution of 1917. Provides understanding of pattern of historical development with a grasp of basic resources necessary to continued study of Russian society.
\#HIST 470. Twentieth Century Russia (3) On demand. Development of Russian social, political and economic systems after the Revolution of 1917. Provides understanding of pattern of historical development with a grasp of basic resources necessary to continued study of Russian society.

HIST 471. Russian Political Economy (3) On demand. Russian political and economic systems, their structure and functioning from beginning of modernization to present. Provides understanding of pattern of historical development with a grasp of basic resources necessary to continued analysis of contemporary Russian political economy.

HIST 480. Research Seminar (3) Spring, Fall. Required for all history majors by the end of the junior year, except with prior permission of the undergraduate adviser. Designed to introduce majors to methods and problems in historical research through exploration of topics selected by the instructor.

HIST 483. Modern China (3) On demand. Late Ch'ing (Qing) reforms, the Nationalist and Communist revolutions, and China's struggle for modernization. Development of Chinese culturalism, nationalism and socialism.

HIST 486. Japan: New Superstate (3) On mand. Japan's successful modernization "opening" to West in 1853; political. uevelopment, industrialization, expansion; Japan's rise from defeat in World War II to world economic power.

HIST 489. Internship (1-3) Fall, Spring, Summer. Supervised field experience in ant applied history setting. Prerequisite: junior/ senior standing and permission of undergraduate adviser. Credit not applicable to history major or minor. May be repeated to maximum of six hours. Graded S/U.
$\Delta$ HIST 495. Workshop on Current Topics (1-3) On demand. Intensive educational experience on selected topics. Typically an all-day or similar concentrated time format , used. Requirements usually completed within time format. May be repeated if topics differ on approval of adviser.

AHIST 496. Readings in History (1-3) Spring, Summer, Fall. Individual readings in consultation with instructor in fields of special historical interest. Prerequisites: consent of department chair and instructor.

## Honors (HNRS)

IHNRNRS 201. Evaluating Social Controver(4) Fall, Spring. Interdisciplinary inquiry cial sciences. Analysis of arguments through assumptions, ambiguity, data and fallacies; formulation of conclusions and alternative inferences; value assumptions and decision making.

ПHNRS 240. Honors Seminar: Social Sciences (4) Fall. Interdisciplinary social sciences seminar that integrates at least two different social sciences. Content and skills relate to both specific disciplines and social sciences in general. Satisfies University general education core requirement in Social and Behavioral Sciences as well as Arts and Sciences group requirement. Prerequisite: admission to the honors program or permission of honors director.

## ๆHNRS 250. Honors Seminar: Natural

 Sciences (3-5) On demand. Interdisciplinary natural science seminar, integrating at least two different natural sciences. Content and skills relate to both specific disciplines and natural sciences in general. Satisfies University general education core requirement in Natural Sciences as well as Arts and Sciences group requirement. Prerequisite: admission to the honors program or permission of the honors director.THNRS 260. Interdisciplinary Humanities minar (3) Spring. Integrates at least two ferent humanities. Content and skills relate to both specific disciplines and humanities in general. Satisfies University general education core requirement in Humanities
and Arts as well as Arts and Sciences group requirement. Prerequisite: admission to the honors program or permission of the honors director.

HNRS 300. Special Topics Seminar (1-3) Fall, Spring. On demand. Subject matter varies. Special seminars are élective courses designed to meet the interest and curiosity of honors students. Prerequisite: approval of honors director. May be repeated up to six hours if topics differ.

HNRS 400. Special Topics Seminar (1-3) Fall, Spring on demand. Subject matter varies. Special seminars are elective courses designed to meet the interest and curiosity of honors students. Prerequisite: approval of honors director. May be repeated to six hours if topics differ.

HNRS 490. Independent Study in Honors (1-5) Fall, Spring. For students who wish to pursue intensive study in honors independently or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of instructor and director of honors program.

HNRS 499. Senior Honors Project (3) Fall, Spring, Summer. Student selects two faculty from different disciplines to advise the work on a research or creative project that draws upon the knowledge and skills from at least two disciplines. Prerequisites: senior standing with at least a 3.5 GPA.

## Human Development and Family Studies (HDFS)

HDFS 105. Human Development and the Family (3) Fall, Spring. Individual and family theories, examination of major domains of knowledge in human development and family studies, personal application.
\#HDFS 107. Black Families in America (3) Fall, Spring. Living patterns of the American black family: historical development, present status, strengths, problems and prognosis.

HDFS 120. Introduction to Professions in Human Development' and Family Studies (3) Fall, Summer. Introduction to range of careers related to children and families. Professional issues related to qualification, preparations and legal and ethical responsibilities. Transportation required.

HDFS 223. Child Study (2) Spring. Learning about the development of young children as individuals and in groups using observation and other data gathering techniques.

HDFS 224. Program Planning for Young Children (3) Fall, Spring. Play, materials, methods for enhancing development of children under six. Planning, implementing
and evaluating experiences and activities with groups of young children. C/F hrs.: 50. Lab fee.

HDFS 302. Contemporary Marriage and Family Relationships (3) Fall, Spring. Analysis of trends in marriage relationships in modern society, including family processes through the life cycle.
$\triangle$ HDFS 320. Infant and Toddler Development (3) Fall. Growth and development of infants and toddlers from conception to two years. Developmental theories and characteristics. Implications for enhancing development. C/F hrs.: 15.

HDFS 321. Child Development (3) Spring. Physical, emotional, social and cognitive development of children from conception to school age, emphasis on ages 2-6. Developmental theories; influences of family, peers and society. C/F hrs.

HDFS 322. Child Development Practicum (3) Fall, Spring. Supervised participation with preschool children. Two hours seminar and six hours of lab. Must apply in the Child Development Center office during preregistration for class enrollment. Prerequisites: HDFS 224 and 321 or EDFI 342. C/F hrs.: 120. Lab fee.

HDFS 328. Preadolescent and Adolescent in Family and Community (3) Fall.
Development and socialization of preadolescents and adolescents; youth growth, culture and potential problems. Focus on family and peers. A review of research relevant for intervention or service programming.
Prerequisite: HDFS 105 or consent of instructor.

HDFS 407. Research in Human Development and Family Studies (3) Fall, Spring. Research methodology: completing a research project on a topic of the student's choice in the area of human development and family studies. Prerequisite: junior or senior standing.

THDFS 408. Minority Families in American Society (3) Spring. Investigation of family patterns among racial, ethnic and cultural minority groups in the United States. Theoretical analysis of minority family systems. Prerequisite: junior or senior standing.

HDFS 421. Parenting and Parent Education (3) Fall, Spring. Theories related to process of parenting and interactive effects. of parent-child relationships including its impact on roles of professionals. Strategies for working with parents explored. No prerequisites.

HDFS 422. Cognitive Development of the Young Child (3) Fall. Contemporary theories of intellectual development of young children;
research pertaining to specific concept areas and the development of related experiences. Prerequisite: HDFS 320 or HDFS 321 or consent of instructor.

HOFS 423. Organization of Programs for Young Children (3) Spring. Factors in organization and administration of programs for young children. Prerequisite: HDFS 322 or consent of instructor. C/F hrs.: 20.

HDFS 425. Children and Families Under Stress (3) Fall. Stresses related to children, adolescents and families throughout the life cycle. Emphasis on theory and research related to family pole(s) and coping strategies. Prerequisites: HDFS 320 and 321 or consent of instructor.

## HDFS 427. introduction to Marriage and

 Family Counseling (3) Spring. Marriage and family counseling, including professional issues, major theories and techniques, introduction to family counseling skills. Prerequisites: HDFS 105 and 302 or consent of instructor.HDFS 428. Sexuality in Human Development and Family Studies (3) Spring. Analysis of sexuality through the lifespan and within the context of family interaction. Focus on process of sexual development and on relationship dynamics. Intended for students with backgrounds in sexual physiology and the social-psychological aspects of human sexuaity. Prerequisite: PSYC 307, HED 338 or consent of instructor.

HDFS 429. The Family in the Middle and Later Years (3) Spring. The family in the middle and later years, with emphasis on relationship between spouses, and with children and grandchildren. Identification and critical analysis of factors associated with success and problem areas for such families.

## MDFS 491. Pre-kindergarten Student

Teaching (1-12). Fall. Classroom teaching in a pre-kindergarten setting under supervision. Conferences and seminars supplement classroom teaching. Required of students in pre-kindergarten certification program. Fee: $\$ 5$ per credit hour. College/program eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Sumanities (HUM)

Finumi 101. Introduction to the Humanities (3) Spring. Experience of art including music, film, theatre, literature, dance, painting, sculpture, architecture, philosophy and the combined arts.

THUM 200. Topics in Humanities (3) Basic humanities concepts organized on a single topic; self and culture, the combined arts, art and nature, mythology and symbolism, comic and tragic in art, language and culture. Can
be repeated once if topics differ. Prerequisite: HUM 101 or consent of instructor.

## International Studies (INST)

INST 489. Internship (1-12) On demand. Applied experience for majors. Specific proposal and permission of program adviser required prior to enrollment. Guidelines available from adviser. Graded S/U.

## Interpersonal Communication (IPC)

$\triangle P C$ 102. Speech Communication (3) Fall, Spring, Summer. Basic principles of interpersonal communication, small-group communication and public speaking; exercises and activities in each area with attention to individual needs.
$\triangle \mathrm{JPC}$ 201. Human Communication (3) Fall, Spring. Summer. Development of theoretical formulations in speech communication. Emphasis on special heuristic (not general explanatory) theories which focus on relationship factors, as well as speaker and message aspects. Interdisciplinary perspectives utilized. Prerequisite: IPC 102.
$\triangle P C$ 203. Small Group Communication (3) Fall, Spring, Summer. Theory and practice in the analysis of social interaction in small groups as it affects problem solving and policy formation processes. Mass lecture plus lab sections. Prerequisite: IPC 102.
$\Delta \mathrm{IPC}$ 205. Presentational Speaking in Organizations (3) Fall, Spring. Principles of public communication, composition and public speaking, including practice. Prerequisite: IPC 102.

IPC 207. Interpersonal Communication I
(3) Fall, Spring, Summer. Introduction to dyadic communication with a focus on factors which influence effectiveness. Practical experience in behaviors associated with interpersonal competence. Prerequisite: IPC 102.

UPC 209. Interpersonal Communication and Interviewing (3) Fall, Spring. Introduction to interviewing as interpersonal communication. Theory, research and practice in the selection interview, perfor-mance-appraisal interview, informationgathering interview, survey interview, problem-solving interview and persuasive interview.

IPC 303. Persuasive Communication (3) Fall, Spring, Summer. Theories and concepts of persuasive communication; attitude change, audience analysis and strategies of persuasion. Prerequisites: IPC 102 and 201.

IPC 304. Leadership in Communication (3) Fall. Conceptions, methods and techniquer of leadership related to communication. ${ }^{2}$ Emphasis on understanding and application of communication theories to leadership. Prerequisites: IPC 102 and 201.

AIPC 306. Interpersonal Communication (3) Fall, Spring, Summer. Two-party communication, reduction of defensive climates as means of facilitating effective communication. Practical experience in information seeking, persuasive and personal encounters. For nonmajors only.

IPC 307. Organizational Communication (3) Spring. Message initiation, diffusion and reception in organizational setting. Role of communication in establishing and maintaining climates, systems, cultures;
organization's external environment.
Prerequisites: IPC 102 and 201.
IPC 308. Argumentation (3) Fall, Spring, Summer. Principles of argumentation; case analysis and construction; practice in forms of debating using comtemporary topics. Prerequisites: IPC 102 and 201.

IPC 395. Workshop on Current Topics (i3) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. May be repeated on approval of adviser, it. topics differ. Prerequisites: IPC 102 and ${ }^{2}$.

IPC 404. Communication and Conflict (3) On demand. Communication skills in conflict situations in dyadic, group, organizational settings, negotiation, mediation, arbitration processes. Prerequisites: IPC 102 and 201.

IPC 406. Topics in Communcation Studies (3) Fall, Spring, Summer. Selected topics or subject areas within the field of communication, marital communication, legal speaking, assertiveness and nonverbal communication. May be repeated to six hours.

IPC 407. Interpersonal Communication II (3) Fall, Spring, Summer. Extended analysis of current theoretical positions and research in interpersonal communication. Topics include social exchange, rules, attribution, attraction, relational stages, power, impression formation and management. Prerequisites: IPC 102 and 201, and IPC 207 or 306.

IPC 408. Intercultural Communication (3) Fall. Communication variables in intercultural contexts. Culture and meaning, communication values in intercultural dialogue, culture as symbolic worldview, culture shock, confict resolution across cultures. Prerequisites: IPC 102 and 201.

IPC 489. Communication Internship (1-10) all, Spring, Summer. Field experience in mmunication. Study of communication as ern in public or commercial agency. Open only to IPC majors in BAC program.
Prerequisites: IPC 102 and 201, 2.5 overall GPA, junior status and 12 hours of completed IPC courses. Graded S/U.

IPC 490. Problems in Communication Studies (1-3) Fall, Spring. For advanced student who wishes to do intensive study in rhetoric, public address or communication studies independently or in conjunction with courses regularly offered. May be repeated. Prerequisites: IPC 102 and 201 and consent of department.

## Italian (ITAL)

Students who had Italian in high school should attend the placement session during orientation and registration or contact the department prior to enrollment in a course. Credit will not be given for coursework more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.

ITAL 101. Elementary Italian I (4) Fall. Cultural approach to beginning language.
Development of the four skills: listening, baking, reading, writing. Four class riods and laboratory practice each week.

ITAL 102. Elementary Italian II (4) Spring. ITAL 101 continued. Four class periods and laboratory practice each week. Prerequisite: ITAL, 101 or one year of Italian in high school.

ПITAL 201. Intermediate Italian I (3) Fall. Grammar review. Development of the four skills. Three class periods and laboratory practice each week. Prerequisite: ITAL 102 or two years of Italian in high school.

IITAL 202. Intermediate Italian II (3) Spring. ITAL 201 continued. Three class periods and laboratory practice each week. Prerequisite: ITAL 201 or three years of Italian in high school.

ITAL 261. The Italian Cinema (3). Modern Italian culture and literature movements and their expression in cinema; demonstrates close relationship between literature and cinema. In English:

ITAL 351. Italian Composition and Conversation I (3). Improvement of oral and written skills; emphasis on composition. Prerequisite: ITAL 202.

[^2]ITAL 361. Introduction to Italian Literature
(3). Chronological evaluation of outstanding works in Italian literature from Middle Ages to present; various movements and genres. Prerequisite: ITAL 202.

ITAL 371. Italian Civilization I (3). Political, social, intellectual, artistic life from Middle Ages through 19th century. Background for literary studies and preparation for teaching of Italian. Prerequisite: ITAL 202.

ITAL 372. Italian Civilization II (3). ITAL 372 continued; political, social, intellectual, artistic life of modern Italy. Prerequisite: ITAL 202.

ITAL 470. Independent Readings in Italian (1-3). For the advanced student who wishes to study a particular author or period, or a problem in language or civilization. Prerequisites: consent of chair of department and instructor.

ITAL 488. Italian Literature: Advanced Studies (3). Study of author, literary school, genre or selected theme. May be repeated to nine hours if topics are clearly different. Prerequisite: ITAL 361.

## Japanese (JAPN)

JAPN 101. Elementary Language and Culture I (4) Fall. Introduction to modern spoken Japanese. Four class periods and scheduled oral practice each week.

JAPN 102. Elementary Language and Culture II (4) Spring. JAPN 101 continued. Four class periods and scheduled oral practice each week. Prerequisite: JAPN 101 or equivalent.

7JJAPN 201. Intermediate Japanese I (4) Fall. JAPN 101-102 continued. Conversation, writing, reading, grammar. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 102 or equivalent.
|JJAPN 202. Intermediate Japanese II (4) Spring. JAPN 201 continued. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 201 or equivalent.

JAPN 301. Third Year Japanese I (3). JAPN 201-202 continued. Development of the four skills. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 202 or equivalent.

JAPN 302. Third Year Japanese II (3) Spring. JAPN 301 continued. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 301 or equivalent:

JAPN 480. Selected Topics in Japanese (1-3) On demand. Topics chosen from Japanese literature, culture or thought to meet curriculum needs and student requests.

May be repeated to six hours with different topics.

JAPN 491. Studies in Japanese (1-3). On demand. Independent reading for the advanced student. Prerequisites: arrangement with instructor and consent of depart: ment chair prior to registration.

## Journalism (JOUR).

## $\triangle$ JOUR 100. Introduction to Mass

Communication (3) Fall, Spring, Summer.
Modern journalism and mass communication; mass communication media and effects; role and influence of journalistic media such as newspapers, magazines, broadcast media; photojournalism, computers and related fields of advertising and public relations. Open to nonmajors. Credit not given to students with credit for.TCOM 103.

JOUR 200. Introduction to Journalistic Writing (3) Fall, Spring, Summer. Practice in the elementary forms of newspaper, magazine, broadcast and public relations . writing; emphasis on grammar, spelling, punctuation and sentence structure. Prerequisites include completion of at least 30 hours of general education requirements including ENG 112 and JOUR 100. An overall grade point average of 2.7 must have been earned in the aforementioned coursework at the time of admittance into JOUR 200, as well as a minimum grade of $C$ in JOUR 100. This course is reserved for prejournalism majors, minors and exceptions approved by the Department of Journalism. Application for this course must be made at the journalism office, 319 West Hall. Credit not allowed for both JOUR 200 and JOUR 201.

JOUR 201. Journalism Techniques for Nonmajors (3) Fall, Spring. Introduction to news gathering, news writing, news editing and journalistic graphics for nonjournalism majors whose programs might benefit from such a course. Credit not applicable toward major or minor in journalism. Credit not allowed for both JOUR 200 and 201. Prerequisite: completion of freshman English composition requirements.

JOUR 250. Reporting (3) Fall, Spring, Summer. News gathering and news writing for all types of news stories ranging from the simple, factual story to the complex, specialized story. Practice in covering assignments for publication. Prerequisite: JOUR 200. Lab fee.

JOUR 310. Introduction to Visual Journalism (3) Fall. Introduction to news reportage through visual media. Includes sections on basic photographic techniques, such as composition, exposure, camera handling, film development and scanning. Also includes caption writing, news judgment, journalism
ethics, publication design, desktop publish. ing, and computer manipulation of imagos. Prerequisites: JOUR 200 and access to 35mm cemera. Lab fee.

JOUn 315 . Visual Journalism Editing (3) Spring. Techniques of processing and editing visual journalism iexts, in both still and video tormats. Basic computer image-editing iechniques as used in photojournalism, such as news photo selection, cropping, captioning and output. Basic news photo stafi management skills, such as assignmeni, rewards and other human resource management issuos. Prerequisite: JOUR 200. Lab tee.

JOUn 320. Feature writing (3) Fall, Spring. Developing story ideas, researching and writing newspaper and magazine feature aricles; researching free-lance markets. Prerequisites: JOUR 250; major or minor status, junior standing. Lab iee.

JOu4 325. Copy Editing (3) Fall. Theory and practice in editing local and wire news, headline writing, picture editing, evaluating new's, layoui and design, video display terminal operation. Prerequisites: JOUR 250; majo: or minor stalus; junior standing. Lab roe.

JOUR 330. Broadcast News (3) Fall, Summer. Techniques of writing, reporting and editing news for broadcast; rewriting wire copy; introduction to ENG shooting and editing techniques; preparation and use of television graphics. Student must provide own audio and video cassettes. Prerequisites: JOUR 250; JOUR 315; major or minor staus; junior standing. Lab fee.

## 30U解3AC. Frinciples and Practices of

 Pubiic Aelafions Writing (3) Fall, Spring. Conceptual and theoretical introduction to the practice of public relations. Public relations davelopment, definition, problems, poilcies, practices and fools applied to businesses and other organizations. Planning and preparation of print and audiovisual public relations messages. Fundamentals of writing for publications including newsletters, house journals, pamphlets and brochures. Prerequisites: JOUR 250; major or minor status; junior standing. Lab fee.Alolle 34s. Principles of Public Relations for Nommajors (3) Fall, Spring. Public relations problems, policies, practices applied to business and nonprofit organizations: media methods of communicating, survey research and attitude change. Open to noninajors only.

1OUR 345. Media Publication and Design (3) Fall, Spring. Theory and practice of edifing functions and techniques in producing specislized publications: magazines. newsletters, newspapers and brochures for business and nonprofit organizations. Electronic typesetting and computer
graphics. Prerequisites: JOUR 250; major or minor status, junior standing. Lab fee.

JOUR 400. Field Experience ( $1-3$ ) Fall, Spring, Summer. Journalism internship program required of all journalism majors and minors. Activity may be in more than one medium, full or part time, paid or voluntany. Prerequisites: JOUR 200 and JOUR 250; major or minor status. Graded $\mathrm{S} / \mathrm{U}$.

JOUR 410. Advanced Visual Journalism (3) Spring. Refining and building upon visual journalism skills, including the ability to produce news photographs as well as edit, critique and analyze the work of others. Designing, editing and producing news publications. Assembling a portfolio. Prerequisites: JOUR 250, JOUR 310, and JOUR 315; major or minor status, junior standing. Lab fee.
sOUR 420. Public Affairs Reporting (3) Spring. Field practice in covering governmental and community affairs with attention both to general and specialized areas. Prerequisites: JOUR 320; major or minor status, junior standing.

JOUR 430. Advanced Broadcast News (3)
Spring. Writing, editing, producing and anchoring for broadcast. Emphasis on ENG shooting and editing, field reporting and studio production. Research on issues affecting broadcast journalists. Student must provide own videotape cassette. Prerequisites: JOUR 315 and JOUR 330; major or minor status, junior standing. Lab fee.

## JOUR 440. Public Relations Campaigns

(3) Fall, Spring. Application of public relations theories, tools and techniques to the public relations campaign. Research, planning and execution are practiced. Prerequisites: JOUR 340 and JOUR 345; major or minor status, senior standing.

JOUR 450. Journalism Law and Ethics (3) Fall, Spring, Summer. Legal concept of freedom of the press, constitutional guarantees, libel, privacy, copyright, broadcast regulation, contempt, obscenity, ethical problems, right to know. Open to nonmajors.

## JOUR 455. Diversity Issues in the Media

(3) Fall. Focus on the news media image of racial and ethnic minorities and the image of women and other underrepresented social groups. Exploration of the extent to which discrimination and prejudice function within news media industries in terms of employment opportunities and how news coverage perpetuates stereotypes of women, people of color and other underrepresented social groups. Open to nonmajors.

JOUR 465. American Journalism History (3) Fall. American journalism from colonial newspapers to the multimedia age, emphasizing recurrent themes and issues in the
history of the mainstream and aliemative press. Open to nonmajors.

JOUR 475. Perspectives on internationad Media (3) Spring. Social, economic and political factors, organization and control in the national news and informational systerns of countries around the world. Open to nonmajors.

JOUR 480. Special Problems in Journalism (1-3) Fall, Spring, Summer. Research problems, practical projects, intensive readings or mini-courses to meet needs of student's special interests. Prerequisite: instructor's consent. Graded S/U.

JOUR 485. Media and Sociey (3) Spring. Media as institution, its role, content, effecis and responsibilities as a cultural force in - sociely. Topics vary. Open to nonmajors.

JOUR 490. Specialized Journalism Skills (1-3) Fall, Spring, Summer. Topics vary based on student and faculty interest and developments in the profession.

JOUR 495. Speclalized Joumalism Issues (1-3) Fall, Spring, Summer. Topics vary based on student and faculty interest and developments in the profession.

## Kinesiology (KNS)

KNS 110, 112, 116, 121, 123, 124. KKNS Professional Activity Courses. See School of HPER program requirements.) Courses of skill and knowledge development within each activity including identification/analysis/ observation of elements of movement. Two laboratories. C/F hrs.: 10 each.

KNS 110. Gymnastics-Men (2) Fall, Spring. KNS 112. Gymnastics-Women (2) Fall,

## Spring.

KNS 116. Soccer (2) Fall, Spring.
KNS 121. Tennis (2) Fall, Summer.
KNS 123. Track and Field (2) Fall.
KNS 124. Volleyball (2) Fall, Spring.
KNS 137. Educational Dance (1) Fall, Spring. Movement approach for dance in which the learner becomes aware of the expressive values inherent in dance by experiencing and analyzing movement, creating dances and responding to dance structure. One laboratory. Advisable to take concurrently with KNS 138.

KNS 138. Educational Gymnastics (1) Fall, Spring. Movement approach to gymnastics in which the learner becomes aware of how to manage body weight and understand concepts related to the development of versatile, qualitative and inventive movement. One laboratory. Advisable to take concurrently with KNS 137.

KNS 164. Introduction to Movement
nalysis (2) Fall. Introductory study and alysis of human motion through application of basic mechanical concepts and use of a movement framework. One lecture, one laboratory. Prerequisite: none. One activity course must be taken concurrently with this course.

KNS 201-205, 207-209, 213, 214, 217-219, 226-228. Professional Activities. Courses of skill and knowledge development basic to participation and understanding of the activity. One laboratory.
KNS 201. Archery (1) Fall. Alternate years.
KNS 202. Badminton (1) Spring.
KNS 203. Basketball (1) Fall, Spring.
KNS 204. Bowling (1) Fall, Spring. Extra fee required.
KNS 205. Diving (1) On demand.
KNS 207. Fencing (1) Spring. Alternate years.
KNS 208. Field Hockey (1) On demand.
KNS 209. Golf (1) Fall, Summer. Extra fee

## required.

KNS 213. Lacrosse (1) Spring (on demand). KNS 214. Rebound Tumbling (1) Spring (on dēmand).
KNS 217. Softball (1) Fall.
KNS 218. Swimming (1) Fall.
KNS 219. Synchronized Swimming (1) Fall, alternate years on demand.
KNS 226. Wrestling (1) Spring (on demand).
dUS 222. Adivanced Synchronized Swimming (1) On demand. For advanced synchronized swimmer or person interested in participating in production and demonstrations; choreography, lighting, publicity. Laboratory hours arranged. May be repeated for four hours. Prerequisite: consent of instructor.

KNS 224. Outdoor Leisure Pursuits (1) Fall, Spring. Knowledges and skills of lifelong leisure activities such as camping; orienteering, hiking and aquatic-based experiences. One laboratory.

KNS 225. Advanced Lifesaving (1) Call kinesiology division office for registration information. Red Cross Advanced Lifesaving training techniques and skills designed to save lives in the event of aquatic emergencies. Prerequisite for water safety instructor's course and lifeguard training. One laboratory. Prerequisite: eligibility testing conducted first week of course.

## KNS 227. The Physical Education

Profession (2) Fall, Spring. An introduction - to physical education as a professional career choice.

KNS 229. Individualized Exercise Precription (1) Development and administradon of exercise training programs designed for improving personal physical fitness. (2 hours per week). Class restricted to physical education majors and minors; others by permission of instructor.

KNS 230. Structural Kinesiology (3) Fall, Spring, Summer on demand. The study of movement based on functional anatomy. Two lectures; one laboratory: Prerequisite: KNS 164. Lab fee.

KNS 235. Professional Reading and Writing in Physical Education (1) On demand. Reading and interpretation of literature in physical education; writing professional paper; treatment of pertinent statistical techniques. Prerequisite: ENG 112.

KNS 238. Teaching Educational Gymnastics to Children (2) Fall alternate years. Movement approach to gymnastics for children with emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: KNS 138 or permission of instructor. C/F hrs.: 21.

KNS 241. Educational Games Teaching to Children (2) Fall, Spring. Movement approach to games/sports with special emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: KNS 137 or 138 or permission of instructor. C/F hrs.: 40.

KNS 247. Introduction to Teaching Physical Education (3) Fall, Spring. Introduction to the teaching of elementary and secondary physical education. Two lecture hours and arranged field hours. C/F hours: 40. Prerequisites: KNS 164, KNS 227 and two major activity courses. Field experience fee.

KNS 303. Biomechanics (2) Fall, Spring. The study of human motion through the examination of internal and external forces acting on the body and the effects produced by these factors. Two lectures. Prerequisites: KNS 164 and 230. Extra fee.

KNS 322. Water Safety Instructor's Course [WSI] (2) Fall on demand, Spring. Successful completion certifies student to conduct and to certify Red Cross swimming and lifesaving courses except WSI. One lecture, one laboratory. Prerequisites: Current advanced lifesaving certificate and consent of instructor. Eligibility testing conducted first week of course.

KNS 328. Principles, Ethics and Problems of Coaching (3) Fall, Spring. Non-technical, çoff-the-fieldá aspects of athletic coaching educational implications; coaching ethics; public relations; equipment; financing; liability; coach-athlete rapport.

KNS 329. Coaching Football (3) Fall. Development of personal skills and understandings in football; team administration, organization, philosophy, theory, fundamentals, strategy, methods and responsibilities of coaching football. Two lectures, two lab hours per week. Prerequisite: sophomore standing.

KNS 331. Coaching Basketball (2) Spring. - Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching basketbali. One lecture, two lab hours per week. Prerequisite: KNS 203Basketball.

KNS 332. Teaching-Learning Processes (3) Fall, Spring. Analysis of student-teacher behaviors through clinical and field-based experiences for the purpose of developing and improving teacher-learning effectiveness. Emphasis on personal assessment and development of techniques. Two lectures, one laboratory. Prerequisites: KNS 137, 138, 227, 241, 247 and/or consent of instructor. C/F hrs.: 60.

KNS 337. Teaching Education Dance (2) Fall. Movement approach to children's dance with special emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: KNS 137 or permission of instructor.

KNS 339. Coaching of interscholastic Sports: A Practicum (2) Fall, Spring. Offers prospective coaches instruction in planning, teaching, administrative functions, safety and liability essential to effective coaching. Taken during semester in which selected sport is in season. One lecture hour and arranged practicum hours. Prerequisites: KNS 328, HED 313.

KNS 340. Motor Development Across the Lifespan (3) Fall. Changes in human movement over the lifespan and the theoretical and empirical resaons for those changes. Two one-hour lectures, one twohour laboratory. Prerequisites: KNS 230 and PSYC 201. Course fee.
$\triangle$ KNS 342. Physical Education in the Elementary School (3) Fall, Spring, Summer. Movement approach to teaching elementary school physical education; human movement content knowledge; emphasis on conceptual and developmental perspectives. Prerequisites: KNS 137 and/or 138 recommended: EDFI 302 required; or consent of instructor.

KNS 350. Motor Learning (3) Fall on demand, Spring. Perception, learning, motivation and other psychological factors involved in motor learning and performance. Two lectures, one laboratory. Prerequisite: EDFI 302. C/F hrs:: 40. Lab fee.

KNS 355. Socio-cultural and Psychological Foundations of Teaching Physical Education (2) Fall, Spring. Socio-cultural and psychological foundations of physical education curriculum and instruction. Two lecture hours.

KNS 356. Historical, Philosophical and Curricular Foundations of Physical Education (2) Fall, Spring. History, philosophy and curriculum as related to physical education. Two lecture hours.

KNS 360. Exercise Physiology (3) Fall, Spring. Lecture/laboratory course; the immediate and long-range effects of exercise upon the human body. Two lectures, one laboratory. Prerequisite: BIOL 332. C/F hrs.: 20. Lab fee.

KNS 361. Applied Exercise Physiology (3)
Spring. Metabolism, body composition, cardiac patho-physiology, training for fitness, exercise prescription and instrumentation. Practical applications and assessments. Prerequisite: KNS 360. Fee required.

KNS 362. Teaching Motor Activity in Secondary Schools (3) Fall, Spring. Principles, objectives, lesson planning, instructional materials, teaching methods, curriculum and field experience in physical education in the secondary schools. Two lectures, two laboratories. Prerequisites: KNS 350, admission to major program and meets college retention requirements. C/F hrs.: 60.

KNS 387. Practicum (1-5) Fall, Spring, Summer. Field experience under supervision of KNS division of School of Health, Physical Education and Recreation. Petitioning required of each student before registration. Credit hours for each experience approved separately by program area. Prerequisite: approval of KNS division faculty.

KNS 392. Practicum in Secondary School Physical Education (2) Fall, Spring. Field experience in physical education in the puticic school. Weekly assignment includes being in a public school two half days and attending regular seminars. Arrange. Prerequisites: KNS 362, HED 313 and junior standing. C/F hrs.: 90.

KNS 395. Workshop on Current Topics (13) Summer and on demand. Intensive educational experience in selected topics related to skill development, content update or material development. Typically, an all-day or similar concentrated time format. Prerequisites: approval of KNS division faculty and chair.

KNS 400. Facilitating Movement Change in a Tutorial Setting (3) Fall, Spring. Application of the principles of motor skill instruction to a tutorial setting. Two one-hour lectures, one two-hour laboratory. Prerequisites: KNS 303, 340, 350 and 360 . Course fee.

KNS 402. Assessment and Evaluation of Motor Activity (3) Spring. Assessment and evaluation principles and techniques with application to performance/learning in
physical education and related activity programs. Two one-hour lectures and one two-hour laboratory. Prerequisite: junior standing. C/F hrs.: 22.

KNS 412. Organization and Administration of Physical Education and Interscholastic Athletics (3) On demand. Organization and administration of the total physical education program including instructions, intramurals, extramurals and interscholastic athletics. Prerequisite: senior standing.

KNS 423. Scientific Foundations of Physical Fitness (3) Spring. Assessment and development of physical fitness. Prerequisite: KNS 360.

KNS 428. The Movement Approach to Teaching Physical Education to Children
(5) On demand. Selection, design and application of learning experiences appropriate for elementary school child based on movement concepts. KNS 387 may be taken concurrently. Two lectures, three laboratories. Prerequisites: KNS 332, admission into KNS major program and meets college retention requirements. C/F hrs.: 100.

KNS 433. Adapted Physical Education (3) Fall, Spring. Principles, objectives and history of adapted physical education with an overview of disabilities. C/F hrs.: 35.

KNS 435. Movement Analysis in Adapted Physical Education (3) On demand. Advanced concepts of adapted physical education related to neuromuscular and neuromuscular dysfunction, proficiency in assessment techniques and administrative concerns. Required prerequisite: KNS 433, strongly recommended KNS 402. C/F hrs.: 20.

KNS 438. Seminar in Elementary School Physical Education (2) On demand. Identification and examination of selected curricular problems and issues in elementary school physical education. Prerequisite: KNS 428 or permission of instructor. C/F hrs.: 30.

KNS 470. Independent Study in Physical Education (1-3) Fall, Spring, Summer. An indepth study project of a topic of particular significance to the student. Project must be approved by project supervisor and program area chair prior to registration. May be repeated. Prerequisite: by permission.

KNS 481. Senior Project (4) Fall, Spring, Summer. Culminating experience in study of human movement. Students work in groups to conceptualize, carry out and report a research project on topic within human movement science. Prerequisites: KNS 400 and SMD 414 or consent of instructor. Course fee.

KNS 487. Practicum (1-5) Fall, Spring, Summer. Under supervision of KNS division of School of Health, Physical Education an. Recreation. Petitioning and approval required of each student before registration. Credit hours for each experience approved separately by program area. Prerequisite: approval of KNS division faculty.

KNS 492. Student Teaching ( $1-10$ ) Fall, Spring. Classroom physical education teaching at the elementary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/program eligibility requirements must be met. C/F hrs.: 300 . May be repeated.

KNS 497. Student Teaching (1-10) Fall, Spring. Classroom physical education teaching at the secondary level under supervision on full-day basis. Conferences and seminars supplement program.Fee: $\$ 5$ per credit hour. College/program eligibility requirements must be met. C/F hrs.: 300. May be repeated.

## Latin (LAT)

Students who had Latin in high school should consult the department about placement during orientation and registration or prior to enrollment in a course. Credit will not be given for coursework more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.

LAT 101. Elementary Latin I (4) Fall. Cultural approach to beginning language. Development of the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.

LAT 102. Elementary Latin II (4) Spring. LAT 101 continued. Four class periods and laboratory practice each week. Prerequisite: LAT 101 or one year of Latin in high school.

ILAT 201. Intermediate Latin I (3) Fall. Grammar review. Development of the four skills. Three class periods and laboratory practice each week. Prerequisite: LAT 102 or two years of Latin in high school.

TLAT 202. Intermediate Latin II (3) Spring. LAT 201 continued. Three class periods and laboratory practice each week. Prerequisite: LAT 201 or three years of Latin in high school.

LAT 351. Latin Prose Composition I (3). Developing increased ability to understand structural peculiarities of classical Latin. Prerequisite: LAT 202.

LAT 352. Latin Prose Composition II (3). veloping increased ability to understand lyctural peculiarities of classical Latin. erequisite: LAT 351.

LAT 361. Latin Literature I (3). Chronological survey of Latin literature into the Golden Age. Prerequisite: LAT 202.

LAT 362. Latin Literature II (3). Chronological survey of Latin literature from the Golden Age. Prerequisite: LAT 202.

LAT 470. Readings in Latin Literature (1-3)
Fall, Spring. Advanced reading for students wishing to study special period or great author. Prerequisites: consent of chair of department and instructor.

## Legal Studies (LEGS)

The availability of summer classes and electives is subject to demand.

LEGS 200. Perspectives of American L.aw
(3) Fall. Thematic case study of family law, property, privacy, torts, criminal law and other areas which explain social forces that give substance to American law, analysis and. reasoning behind court decisions. Prerequisite: 30 hours.

EGS 301. Business Law and the Legal vironment (3) Fall; Spring, Summer. The fundamentals of the structure of the American legal system, contracts, torts and selected topics related to the legal environment of business. Prerequisite: junior standing.

LEGS 305. Comparative Legal Philosophy
(3) Spring. Legal philosophy and comparative law using legal systems of Western, Communist and developing countries as models; treatment of commercial obligations and constitutional rights within different legal systems.

LEGS 401. Law of Business Relationships I (4) Fall. Legal environment of business relationships; includes study of contracts, sales, professional responsibility and commercial paper. No credit for students who have taken LEGS 301. Recommended for accounting students planning on taking the CPA examination.

LEGS 402. Law of Business Relationships II (4) Spring. Commercial law including secured transactions, bankruptcy, bailments, agency, partnership, corporation, insurance, trusts and wills. Prerequisite: LEGS 301 or LEGS 401. Recommended for accounting students planning on taking the CPA xamination.

LEGS 406. International Business
Transactions (3) Spring alternate years.

- Legal problems faced by individual and
corporate business persons when operating within international framework. Methods of control of multinational corporate entities, effect of doing business as national or foreign firm, and act of state doctrine relating to expropriation of assets of foreign firm.

LEGS 410. Business, Individuals and the Constitution (3) Fall. An analysis of economic and individual rights of U.S. citizens and businesses and their relationship with state and federal government. Topics of constitutional import will be featured: Prerequisite: junior standing.

LEGS 413. Trusts and Estates (3) Fall alternate years. Execution, administration, revocation of wills and trusts, guardianships, life insurance estates; insurance law relating to estates, their protection, and liability; role of wills and trusts in distribution of wealth. Prerequisite: LEGS 301 or LEGS 401.

LEGS 415. Realty Law (3) Spring. Creation of property rights; acquisition, transfer of realty; deeds and mortgages as security devices and their economic implications; landlord-tenant relations and economic role of leasehold interests.

LEGS 419. Employment Law I (3) Spring. A discussion of federal and state labor laws regulating (a) labor union and management relationships, (b) plant closings, (c) safe and healthy working environment, (d) employment of immigrants and aliens, (e) privacy (polygraph usage and drug testing) in the work place, (f) employment at will and for term, and (g) wrongful discharge. Prerequisite: Junior standing.

LEGS 421. Government Regulation of Business (3) Spring. Regulation of business and policy implications for public; antitrust, trade practices and securities regulation.

LEGS 423. Computer and Technology Law (3) Fall. Developing law concerning computers and technology, including acquisition of computer hardware and software, remedies for failure of a computer system, computer crime, privacy, liability and intellectual property.

LEGS 425. Health Care Law (3) Fall. Publicprivate constraints in foundation health agencies; experimentation and risk assumption; agency and independent contract liability; reasonable standards of care doctrines; governmental regulations.

LEGS 429. Employment Law II (3) Spring. A discussion of laws focusing on the prohibition of discrimination and harassment on the basis of race, color, national origin, sex, religion, age and handicap, and veterans; and on wage and salary discrimination using equal pay and comparable worth analysis. Prerequisite: Junior standing.

LEGS 431. Environmental Law (3) Spring.
History and development of modern concepts in environmental law; air, water, land, toxic waste; legal solutions to environmental problems.

LEGS 440 . Purchasing and Selling Law (3) Spring. Legal analysis of the state and federal laws regulating the purchasing, sale and marketing of goods and services. Regulations involving corporate procurement and marketing functions as well as consumer rights and remedies emphasized. Prerequisite: LEGS 301 or LEGS 401.

LEGS 450. Hospitality Law (3) Spring. Legal regulations, duties, liability and relationships of persons and businesses engaged in the food service, restaurant, hotel/motel' and hospitality industries.

LEGS 490. Legal Research and Drafting Seminar (3) Spring. Legal research and drafting seminar that requires use of all types of legal resources. Series of projects to develop competencies in legal research and drafting.

LEGS 491. Studies in Business Law (1-3). On demand. In-depth study of selected areas of law. Offered to individual or to small groups of students on a lecture, seminar, or independent study basis, depending on the student need and nature of material. May be repeated to six hours. Prerequisite: consent of chair of department and instructor.

## LEGS 495H. Readings for Honors in

 Business Law (1-3) Fall, Spring, Summer. For student in business administration who wishes to pursue supervised independent program of reading and study. Prerequisite: 3.0 accumulative GPA, or consent of department chair and instructor.
## Libraries and Learning Resources (LLR)

LLR 222. Research in the Electronic Library (2) Fall, Spring. Fundamental concepts of information and electronic access to information reseources, search strategies, electronic database features, scholarly communication, societal implications of electronic information.

## Library and Educational Media (LEM)

LEM 203. Introduction to Librarianship (3) Profession of librarian/information/media specialist; types of library/information/media centers, jobs performed, professional literature and organizations, history of libraries and materials. Lecture; discussion/ questioning; role-playing; practicum. C/F hrs.: 16.

LEM 301. Basic Educational Media (2)
Selection, operation and utilization of common classroom educational media. Lecture; discussion/questioning; problem solving; laboratory; practice/drill. Prerequisite: to follow EDFI 302. C/F hrs.: 16.

LEM 395. Workshop in Educational Media (1-2) On demand. Study, readings and development of materials to meet the needs of practitioners. Topics vary from offering to offaring. Miay be repeated with consent of adviser. C/F hrs.: yaries.

LEAR 403. Reference Services and Materials (3). Basic sources of information and use in providing library/information/ media services. Lecture; discussion/ questioning; viewing/istening/answering; problem solving. C/F hrs.: 25.

## LEM 404. History of Books and Libraries

(2). Development of books and libraries from earliest times to the present with emphasis on their roles in the preservation and communication of information. Lecture; discussion/questioning; viewing/listening/ answering. C/F hrs.: 4.

LEM 405. Government Publications (3) Nature, use, acquisition and organization of printed materials issued by federal, state and local governments and international agencles. Lecture; discussion/questioning; practice/drill; iaboratory. Prerequisite: LEM 403 or consent of instructor. C/F hrs.: 17.

LEM 407. Selection of Materials (3) Principles of selection and acquisition of print and nonprint materials. Lecture; discussion/ questioning; practice/drill; practicum; roleplaying; problem solving. C/F hrs.: 40.
t.EM 408. Classification and Cataloging (3) Tools and basic procedures of technical processing and organizing of library/media/ information materials. Lecture; discussion/ questioning; practice/drill; problem solving; laboratory; practicum. C/F hrs.: 40.

LEM 4i1. Materials for Secondary School Findia Centers (3) Print and nonprint materials and program activities for secondary school media centers. Special needs of adolescents including gifted and retarded. Lectire; discussion/questioning; viewing/ fistening/answering; problem solving. Prerequisite: 9 hours of LEM courses or consent of instructor. C/F hrs.: 20.

EEM $\mathbf{4 2 8}$. Advanced Utilization of EducaHional Media (3) Audio-visual materials to motivate, persuade, instruct. Selection, production, use and evaluation. Lecture; discussion/questioning; viewing/listening/ answering; problem solving; laboratory. Prerequisite: LEM 301 or consent of instructor. C/F hrs.: 16.

LEM 430. Preparation of Instructional Materials (3). Planning, designing and producing instructional materials in terms of stated objectives. Laboratory; practicum; discussion/questioning; problem solving. Prerequisite: LEM 301 or 428 or consent of instructor. C/F hrs.: 22. Lab fee.

LEM 431. Visual Communication in instruction (3). Role of visual stimuli in teaching/learning environments. Emphasis on instructional drawing. Lecture; practice/ drill; problem solving; laboratory. Prerequisite: LEM 301 or consent of instructor. C/F hrs.: 40.

LEM 433. Classroom Television (3). Television as an integral part of the instructional process. Includes equipment operation and selection and basic production techniques. Lecture; practice/drill; viewing/ listening/answering; problem solving; laboratory. Prerequisite: LEM 301 or 428 or consent of instructor. C/F hrs.: 20.

LEM 434. Individualizing Instruction with Educational Media (3). The application of educational technology (equipment, materials and instructional design techniques) to the conceptual and operational aspects of individualized instruction. Lecture; viewing/listening/answering; problem solving; independent learning/self-instruction. Prerequisite: LEM 301 or 428 or consent of instructor. C/F hrs.: 20.

LEM 438. Selection, Maintenance and Repair of Media Equipment (3). The role of the teacher and media specialist in selection, maintenance and repair of classroom media equipment at building level. Lecture; practice/drill; laboratory; independent learning/self-instruction; problem solving; discover. Prerequisite: LEM 428 or consent of instructor. C/F hrs.: 20.

LEM 441. Storytelling (3) Techniques and practice of storytelling in libraries, classrooms, etc. Selection of traditional and modern literature to tell and read aloud. Lecture; practice/drill; viewing/istening/ answering; role playing. Prerequisite: ENG 342 or consent of instructor. C/F hrs.: 8.

LEM 445. Computer Systems for Library Services (3). Information and bibliographic retrieval systems. Prerequisites: LEM 403 and 408. C/F hrs.: 39.

LEM 450. Media Center in the School (3). Organization and administration of school media centers. Lecture; discussion/ questioning; practice/drill; problem solving; practicum; role-playing. Prerequisite: just prior to student teaching. C/F hrs.: 20.

LEM 455. Instructional Media in Industry, Business and Government (3). Selection and utilization of instructional media in nonschool settings. Not available for students
with credit for LEM 428. Lecture; discussion/ questioning; viewing/listening/answering; problem solving; laboratory. Prerequisite: consent of instructor. C/F hrs.: 16.

LEM 490. Problems in Library and Educational Media (1-3). Independent study of selected topics. May be repeated to six hours. Prerequisite: consent of instructor. $\mathrm{C} /$ F hrs.: varies.

LEM 491. Field Work (2). Supervised field work in library, media center or information. service approved by department. May be repeated to 4 hours. Practicum. Prerequisite: consent of instructor. C/F hrs.: varies. Graded S/U.

LEM 492. Student Teaching (1-10) Classroom teaching at the elementary level under supervision on full-day basis. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/ program eligibility requirements must be met. C/F hrs.: 300 . May be repeated. Graded SN.

LEM 497. Student Teaching ( $1-10$ )
Classroom teaching at the secondary level under supervision on full-day basis. Conferences and seminars supplement program. College/program eligibility requirements must be met. Fee: $\$ 5$ per credit hour. C/F hrs.: 300. May be repeated. Graded S/U.

## Linguistics (ING)

LING 310. Introduction to Linguistics (3) Spring. Nature of languages and human communication; principles and procedures for analyzing and describing languages; language change and variation. Prerequisite: sophomore standing.

LING 490. Special Problems in Linguistics (2-3) On demand. Theories and applications of linguistics studies or problems in languages, literatures, psychology, speech and other related fields. Prerequisite: LING 310.

## Management (MGMT)

The availability of summer classes and electives is subject to demand.
$\triangle M G M T$ 300. Introduction to Production and Operations Management (3) Fall, Spring, Summer. Fundamentals of management of operations of firms; design of production systems, operation, coordination and control of production activity; major analytical tools for management. Prerequisite: STAT 212 or equivalent.
$\triangle M G M T$ 305. Principles of Organization and Management (3) Fall, Spring, Summer. Fundamentals of organization theory; objectives, policies, decision-making,
authority, management development, adership, communication, motivation and lective human relations; management principles. No credit allowed toward BSBA degree.

MGMT 330. Purchasing Management (3) Fall, Spring, Summer. Introduction to the general area of purchasing and materials management with in-depth coverage of selected topical areas. A general overview of the purchasing cycle is provided along with short term operational considerations of managing this functional group. The critical components of sourcing decisions, contract and legal terms and conditions, the purchase process for capital equipment and disposition of surplus and waste materials are also covered. Prerequisite: MGMT 300 (concurrent registration in MGMT 300 permitted with instructor approval).

AMGMT 360. Organizational Theory and Behavior (3) Fall, Spring, Summer. Microrelationships in organizations; historical perspective, changing nature of organizations, and individual and overall group behavior. Specific topics include motivation, decision-making, leadership, group dynamics, and organization structure. Prerequisite: STAT 212

## MGMT 361. Human Resource Manage-

 ient (3). Fall, Spring, Summer. Survey of RM activities including job analysis, performance appraisal, job evaluation, wage surveys, compensation and benefits, labor relations, health and safety, and relevant government regulations. Prerequisite: MGMT 305 or MGMT 360
## MGMT 430. Advanced Purchasing

 Management (3). Fall, Spring. Advanced topics in purchasing. Product-related issues of design, specifications, and price/cost are examined in detail. Special issues relating to government and institutional purchasing. Operational aspects of materials transportation, receiving, inspection, and warehousing Computer applications and purchasing information systems. Prerequisites: MGMT 300 and MGMT 330 (concurrent registration in MGMT 330 permitted with instructor approval).MGMT 439. Purchasing and Materials Management Problems (3). Fall, Spring. Capstone course integrating principles from other required courses in the area of purchasing and materials management; lectures, case discussions, simulations and research projects used for instructional purposes. Prerequisites: MGMT 330 and 430. Admission to purchasing specialization required.

GMT 441. Process and Quality Management (3). Fall, Spring. Effective design of production systems including long-term capacity planning, process selection, and alternative measures of system performance.

Quality management in production systems and its impact on the competitiveness of the firm in domestic and world markets
Prerequisite: MGMT 300.

## MGMT 442. Materials Management

Systems (3). Fall, Spring, Summer. Focus on material needs determination and the study of traditional theories and techniques of inventory control. Current inventory methodology such as kanban systems and just-in-time concepts are also studied. Broad range of inventory control problems covered. Prerequisite: MGMT 300.

## MGMT 445. Production Planning and

 Control (3). Fall, Spring. Production planning and control processes including: intermediate range scheduling such as aggregate planning and master scheduling; short range production scheduling such as job shop scheduling; capacity planning and control such as rough-cut capacity planning and capacity requirements planning; material planning and control using material requirements planning; project scheduling with resource constraints. Prerequisite: MGMT 300.MGMT 449. Problems in Production and Operations Management (3) Fall, Spring, Summer. Integrates principles, theories and techniques gained from previous courses in production and operations management to provide a broad perspective for the efficient and effective management of operations in both manufacturing and service organizations. Case studies, group projects and presentations, and integrative simulation models are used for instructional purposes. Prerequisites: MGMT 445 and either MGMT 441 or MGMT 442. Admission to production specialization required

MGMT 452. Human Resource Management in the Hospitality Industry (3) Fall. Concepts and skills involved in staff planning, selection, placement, appraisal and development of personnel in the hospitality industry. Prerequisites: MGMT 360 and completion of 400 hours of practicum. Admission to the BSBA program.

MGMT 454. Managing the Employment Process (3) Fall. Emphasis on employmentrelated activities including human resource planning, recruitment, selection, organizational entry, career development and training. Prerequisite: MGMT 305 or MGMT 360.

## MGMT 455. Managing the Compensation

 Process (3) Spring. Current practices and recommended methods in the establishment of base pay, incentive pay, and employee benefits and services. Government regulations concerning pay, job analysis and job evaluation, wage surveys, pay structure design, pay for performance, benefits and services, pay administration, and the issue of comparable worth. Prerequisite: MGMT 361(concurrent registration in MGMT 361 permitted with instructor approval)

MGMT 456. Managing Productivity, Employee Involvement and Reward Systems (3) Spring. Focus on productivity improvement strategies, employee involvement, work redesign and reward and incentive systems. Prerequisite: MGMT 305 or MGMT 360.

MGMT 463. Organization Theory, Analysis and Design (3) Fall, Spring. Organizational variables and processes which influence the overall design and functioning of organizations. Investigates traditional and contemporary theories of organization such as systems theory, social construction, political models, information processing and population ecology. Prerequisite: MGMT 360 or MGMT 305 (concurrent registration in MGMT 360 or MGMT 3035 permitted with instructor approval).

MGMT 465. Managing Change in Organizations (3) Fall. Examination of topics related to organization development and change including diagnosing the need for change, overcoming resistance to change, implementing and evaluating interventions, and confronting the ethical dilemmas of change. Prerequisite: MGMT 305 or MGMT 360.

## MGMT 468. Organization Development

 Field Experience (3) Spring. An integrative and applied course designed to allow students to develop and apply skills in diagnosing organizations, designing interventions and carrying out change in organizations. Prerequisite: MGMT 465.MGMT 489. Internship (1-3) Fall, Summer Experience in approved business position. Student participates in seminar to formally evaluate work experience. Must be arranged in advance and approved by coordinator. Work experience must be completed within one year of acceptance into program. No credit for students with credit from any similar program in College of Business Administration. Graded S/U.

MGMT 491. Studies in Management (1-3) On demand. Selected areas not covered by existing courses but which are developing rapidly as important parts of discipline. Offered to individual on lecture basis or in seminar, depending on student need and course content. May be repeated to six hours.

MGMT 495H. Readings for Honors in Management (1-3) Fall, Spring, Summer. For superior student who desires individual reading program to broaden knowledge of management literature on semi-independent basis. Prerequisite: academic standing in upper 20 percent of class.

## Management Information Systems (MIS)

The availability of summer classes and electives is subject to demand.
$\triangle$ MIS 200, Introduction to Management Information Systems (3) Fall, Spring, Summer. Principles of computer systems, role of information systems in organizations; introduction to microcomputer operating systems, spreadsheet and database software. Credit allowed for at most one of the following courses: MIS 200, CS 100. Lab fee

MS 302. Electronic Commerce (3) On demand. An examination of the opportunities that internet-related technologies have to offer for conducting electronic commerce. Includes coverage of a variety of tools, analysis of available business opportunities, skills needed to exploit exciting new opportunities and an analysis of critical management issues. Prerequisite: MIS 200 or equivalent.

HIS 360. introduction to Systems Concepts (3) Fall, Spring, Summer. Introduction to the general concept of a system and to systems theory, the system life-cycie and system development processes; emphasis is on application to business-orlented information systems. Prerequlsite: C or better in MIS 200 or CS 101 or equivalent.

MIS 370 . Database Management (3) Fall, Spring. Logical database design and effective implementation, including hierarchical, network and relational models. Prerequisites: MIS 360 or ACCT 360, and CS 205.

Wis 412. Decision Support Systems/ Expert Systems (3) Fall, Spring, Summer. Provides the student with skills necessary to conceptualize, design and implement decislon support systems (DSS) and expert systems (ES) in organizations; includes the use of a variety of software in creating DSS and ES. Prerequisite: MIS 360.

WS 417. Microcomputer Hardware and Software Management (3) On demand. Management of the microcomputer environment. Management issues associated with operations in a distributed computing business environment; emphasis on microcomputers using intel x86 architecture and its eperating systems. Course designed for future and user, manager or professional who will need to understand the components and their implications without necessarily wanting to build or maintain microcomputers. Prerequisite: Mis 200 or equivalent.

MIS 421. Business Data Communication and Distributed Processing (3) Fall, Spring, Summer. Basic concepts, security and design of business data communication systems and distributed processing of business information systems. Prerequisite: MIS 360 or ACCT 360.

MIS 432. End-User Computing (3) Fall. Explores the phenomenon of end-user computing with special emphasis on the effective use of microcomputers with regard to business productivity. Prerequisite: MIS 200 or permission of instructor.

MIS 433. Artificial Intelligence in Business Decision Making (3) Spring. Survey of the area of A.I. with an emphasis on business decision making. Students will do a project utilizing an A.I. language or Shell. Prerequisite: MIS 200 or permission of instructor.

MIS 471. Systems Analysis and Design (3) Fall, Spring, Summer. Concepts and methods of systems analysis and design; includes a project involving design of a computer-based information system. Prerequisite: MIS 370.

MIS 479. Information Resource Management (3) Fail, Spring, Summer. Managing information as a corporate resource. Involves the management of the various elements of the information systems areas as well as strategic planning of information resources using state-of-the-art technology in a dynamic field. Prerequisites: MIS 471, FIN 300, MKT 300, MGMT 360 and MIS 412, MIS 412 (or concurrent registration).

MIS 489. Internship Seminar (1-3) Fall. To be completed at first opportunity following suitable internship experience. Work experience to be preceded by at least 70 hours of academic credit.. No credit for students with other internship credit in College of Business Administration. No credit toward the MIS specialization within the BSBA program or the MIS minor. Graded S/ U.

MIS 491. Studies in Management Information Systems (1-3) On demand. Selected areas or contemporary problems. May be repeated to six hours. May be offered individually as well as in classes, depending upon student needs and nature of material. Prerequisite: approval of department.

## Manufacturing <br> Technology (MFG)

AMFG 112. Introduction to Manufacturing Processes and Systems (3) Fall, Spring, Summer on demand. Technology of the manufacturing enterprise. Production materials and methods, manufacturing
planning, organizing and controlling. Two one-hour lectures and one two-hour laboratory per week. Lab fee.
†MFG 134. Time Study (4) Fall, Spring. Responsibilities of a time study technician and equipment utilized; emphasis on performance, rating, conducting a time study, determining allowances, work sampling.
†MFG 211. Menufacturing Processes IfForming, Combining (3) alternate years. Traditional and nontraditional forming and combining processes in plastics; extrusion, injection, compression, vacuum, fiberglass, rotation and other processes stressed. Emphasis on industrial applications. Field visits to plastics processing plants. Two hours lecture; three hours laboratory. Prerequisite: MFG 113.
$\Delta$ MFG 213. Manufacturing Processes if (3). Computer numerical control technology, including machinability of materials, CNC, mathematics, and programming and operation of CNC lathes and mills. Four hours lecture and laboratory. Prerequisite: MFG 112.
†MFG 215. Metallurgy and Metrology (3) alternate years. Physical metallurgy and heat treatment of metals; metal structure, alloys, tool steels, tempering and powder metallurgy. Study of instruments and machines if measuring dimensions and surface finishes of machine tools. Two hours lecture, three hours laboratory. Lab fee.
$\triangle$ MFG 220. Metallic Materials and Processes (4) Fall, Summers of even numbered years. Metais and their hot and cold processing practices. Laboratory applications and rechniques. Two two-hour labs and two onehour lectures per week. Prerequisites: MFG 112 and MATH 128. Lab fee.
†MFG 222. Metallic Materials and Processes I (3) Fall. A survey of metallic machining practices. Laboratory applications and techniques are studied. Two one-hour lectures and one two-hour laboratory per week. Prerequisites: MFG 112.

AMFG 225. Plastic Materials and Processes (3) Spring.Identification, properties, characteristics and selection of plastic materials. Set-up and operation of plastic processing equipment. Two hours lecture and two hours laboratory. Prerequisite: MFG 112 or permission by instructor.
†MFG 229. Metalic Materials and Processes II (3) Spring. Hot metal forming and combining practices. Laboratory applications and techniques. Two one-hour lectures and one two-hour laboratory per week. Prerequisite: MFG 112.
$\triangle M F G$ 235. Properties and Testing of - Engineering Materials (3) Spring, Summer pdd numbered years. Mechanical Sperties and failure modes of engineering. materials. Destructive and nondestructive testing of these materials. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MATH 126 and PHYS 201 or consent of instructor. Lab fee.
†MFG 243. Quality Control (3). Quality assurance; product reliability; acceptance, attribute and variable sampling; control charts as related to quality control. Prerequisites: MFG 112 and 223, and MATH 115 or STAT 200 or 211 , or permission of instructor.
$\triangle$ MFG 290. Problems in Manufacturing Technology (3) on demand: For advanced students wanting to conduct intensive study of selected problems in manufacturing technology. May be repeated up to 3 hours. Prerequisites: sophomore standing and consent of instructor.

MFG 322. Non-Metallic Materials and Processes I (3) Spring. Wood, reconstructed wood, and ceramic materials, processing methods, and product applications. One twohour lecture and one two-hour laboratory. Prerequisite: MFG 112. Lab fee.
$\Delta$ MFG 326. Total Quality Assurance (3) Ppring, Summer of odd numbered years. erview and application of modern statistical and other techniques in assuring quality in designing a total quality system for a manufacturing environment. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MFG 220 and 235, DESN 204 or 243. Lab fee.
$\Delta$ MFG 327. Manufacturing Engineering Applications (3) Fall, Summer of even numbered years. Overview and application of modern techniques in assuring productivity in the manufacturing environment. Two hours lecture and two hours laboratory per week.
Prerequisites: MFG 220 and 235, DESN 204 or 243. Lab fee.

MFG 329. Plastics and Composite Materials and Processes (3) Fall, Summers of even numbered years. Identification, properties, characteristics and selection of plastics and composite materials. Set-up and operation of primary and secondary plastics processing equipment. One two-hour lecture and one two-hour laboratory per week.
Prerequisite: MFG 112. Lab fee.
$\triangle$ MFG 340. Computer Numerical Control (CNC) Programming and Machining (3) Spring, Summer of odd numbered years. Cartesian coordinate machine programıning milling and turning. Conventional and nversational languages. CNC machining setup and practice. One two-hour lecture and one two-hour laboratory per week. Prerequisite: MFG 220. Lab fee.
$\Delta$ MFG 424. Manufacturing Systems (3)
Spring, Summers of odd numbered years. Production methods, process equipment, tooling, organization and control employed in. manufacturing industries. One two-hour lecture and one two-hour laboratory per week. Prerequisites: Two of the following: MFG 220, 322 or 329. Lab fee.

MFG 426. Integrated Measurement Systems (3) Summer. Overview and application of modern metrology and measurement techniques in assuring quality in the manufacturing environment. Technical topics include data acquisition and manipulation, coordinate measurement, machine vision, calibration and traceability, and others. Two hours lecture and two hours laboratory per week. Prerequisites: All courses in the AQS option but MFG 427 and TECH 489. Lab fee.

MFG 427. Quality In Design (3) Summer. Design of experiments (DOE), Taguchi design methods and finite element analysis (FEA) applied for robust problem solving through experimentation and computer modeling techniques, oriented to enhancements and innovations in quality and reliability. Two hours lecture and two hours laboratory per week. Prerequisites: All courses in AQS option but MFG 426 and TECH 489. Lab fee.
$\triangle$ MFG 428. Automation and Computer Integrated Manufacturing (CIM) (3) Spring, Summers of odd numbered years. Automation in manufacturing, including fixed automation, flexible automation based on Computer Numerical Control (CNC) technology, and integration of these technologies into CIMS. One two-hour lecture and one two-hour laboratory per week. May be repeated. Prerequisites: MFG 220, MATH 126 or equivalent. Lab fee.

MFG 430. Concurrent Manufacturing Technology (3) Fall on demand. Contemporary manufacturing processes in which a newly designed product is expedited based on Computer Aided Design/Computer Aided Manufacturing (CAD/CAM). Four hours of lecture and laboratory each week. Prerequisites: MFG 112, 220 and 340, DESN 131 and 204. Lab fee.

MFG 438. Metallurgy, Metallography and Heat Treating (3) Fall, Summer of even numbered years. Metallurgical structure and its effects on properties of ferrous and nonferrous metals. Altering metal properties and performance through heat treating. Preparation of metals and examination by use of metallography. One two-hour lecture and one-two hour laboratory per week. Prerequisites: MFG 220, MFG 235. Lab fee.

## MFG 490. Problems in Manufacturing

 Technology (1-5) On demand. For advanced students wanting to conduct intensive studyof selected problems in manufacturing technology. Prerequisite: senior standing and consent of department. Materials fee. Graded S/U.

## Marketing (MKT)

The availability of summer classes and electives is subject to demand.
$\Delta M K T$ 300. Principles of Marketing (3) Fall, Spring, Summer. Introduction to marketing activities and decisions. Topics include:.product, price, promotion, distribution activities; market segmentation; behavior of consumers and business customers; marketing research; environmental analysis; services, nonprofit, international marketing. Prerequisite: ECON 200 or higher.

MKT 302. Consumer Behavior (3) Fall, Spring, Summer. Pertinent theoretical and empirical findings about consumer markets and behavior, implications for marketing practice. Topics include: processes of decision making and evaluation; personal, social, environmental and marketing influences; attitude formation and change; information processing and learning; segmentation of markets. Course also develops students' problem-solving skills. Prerequisite: C or better in MKT 300.

MKT 310. Marketing Communication and Promotion (3) Fall, Spring, Summer. Role of promotion in marketing process. Emphasis on communication theory and practice as related to promotional mix (advertising, personal selling, sales promotion, public relations). Topics include: role of promotion in marketing mix; implicit and explicit forms of promotion; promotional planining; commmunications process; information processing and communication response models; consumer decision making; diffusion of innovation; managing the promotional mix. Course also develops students' oral comunication skills. Prerequisite: C or better in MKT 300.

MKT 320. Marketing Research (3) Fall," Spring, Summer. Research as a process and source of information for marketing decision making. Examines research methods and techniques used in the collection, analysis and interpretation of primary and secondary data for consumer and business marketing. Course also develops students' written communication skills. Prerequisites: STAT 212 and C or better in MKT 300.

MKT 400. Topics in Marketing (1-3) Fall, Spring. Selected areas not covered in depth by existing courses but which are developing as an important part of marketing. Offered on lecture basis or in seminar, depending on student demand and course content. Typical topics, which may vary from semester to semester, could include nonprofit marketing;
demand analysis and forecasting；distribution systems；or pricing strategies．May be repeated to 6 hours．Prerequisites：depend－ ing upon course content，prerequisites in addition to C or better in MKT 300 may be required．

HKT 405．Services Marketing（3）Fall， Spring．Conceptual and analytic framework for the application of marketing principles to the service sector of the economy．Develop－ ment and understanding of the impact of unique service characteristics on the development of marketing strategies． Prerequisite：C or better in MKT 300.

明言T 412．Advertising Management（3） Fall，Spring．Managerial application of advertising theory；advertising effectiveness； impact on sociefy and economy；campaign design；setting of objectives；creative appeals；budget allocation and media planning；decision making．Focused projects and in－class exercises are usual experiential methods used．Prerequisites： C or better in MKT 300，and MKT 310.

## MK゙T 424．Advanced Marketing Research

 （3）Spring．Application of research methods and techniques to solve marketing problems． Research design，implementation，interpreta－ tion of results，reporting．Topics include： advanced study of sampling；questionnaire design；data collection and retrieval；data analysis；presentation of results．Prerequi－ sites：STAT 212，C or better in MKT 300 and MKT 320.MKT 430．Retail Management（3）Fall， Spring，Summer．Retailing is the study of companies involved in and the process of selling products to final consumer．Topics include：store location and trade area analysis；retail financial control；inventory planning；buying；merchandising；store layout；retall promotion．Prerequisite： C or better in MKT 300．Recommended：ACCT 221 or ACCT 325.

MKf 440．Professional Selling（3）Fall， Spring，Summer．The selling process is studied from a theory，techniques and application perspective．Topics include： behavioral aspecis of sales；prospecting； qualifying；approaching；presenting；handling objections；closing；follow－up；and other special interest topics．Sales presentation is required for all students．Prerequisite： C or better in MKT 300.

MKT 442．Sales Mianagement（3）Fall， Spring，Summer．Theory，principles and practices of selling and sales force adminis－ tration for manufacturing and wholesaling enterprises．Topics include：recruiting； training；compensation；sales force size and design；selling techniques；performance appraisal．Prerequisite：C or better in MKT 300.

MKT 445．Product Planning（3）Fall，Spring． Issues and concepts related to planning， development，management and analysis of products．Emphasis on role of new products in corporate strategy；process，organization， research and oversight of new product development and management of existing products．Prerequisite：C or better in MKT 300.

MKT 450．Business－to－Business Market－ ing（3）Fall，Spring，Summer．Theory and practice of marketing to organizations （business，institutions，government）．Topics include：organizational．buying behavior； market forecasting；segmentation and competitive assessment；business marketing partnerships and distribution channe！ management；products，services，pricing， promotions for organizational markets Course also develops students＇team building skills．Prerequisite： C or better in MKT 300.

MKT 455．International Marketing（3）Fall， Spring．Theory and practice of marketing across national borders as well as marketing within different foreign environments， highlighting the similarities and differences among various countries and regions． Special attention to the marketing structure and strategies of global coroporations． Prerequisites：BA 390 （BA 390 may be taken concurrently）and C or better in MKT 300.

MKT 460．Marketing Management（3）Fall， Spring，Summer．Capstone course in planning，integration，management of marketing functions．Customer analysis and segmentation；competitive analysis；design and management of pricing，product， distribution，promotion activities；tactical and strategic marketing decisions．Course develops students＇problem－solving skills． Prerequisites：C or better in MKT 300，MKT 302，MKT 320 and MKT 450，and admission to the BSBA program．

MKT 489．Marketing Internship（1－3）Fall， Spring，Summer．Work in approved business position；credit determined by quality and extent of work experience．Not open to freshmen and sophomores．No credit for students with credit for ACCT 489 or BA 489 or MGMT 489 or MIS 489．Prerequisites：Six hours of MKT coursework and permission of department．Graded S／U．

MKT 491．Special Studies in Marketing（1－ 3）Fall，Spring．Independent or small group study of selected topics not covered by existing courses but which are currently（or becoming）an important part of marketing． Prerequisite：permission of department chair． Graded S／U．

MKT 495．Reading for Honors in Market－ ing（1－3）Fall，Spring．For superior student who wishes individual reading program or independent research experience with
guidance from an appropriate adviser． Prerequisite：open only to marketing studert in BSBA with an overall GPA of 3.0 or bett． at time of registration．Letter grade only．

## Materials Science（MATS）

MATS 100．Materials in the Service of Society（3）Fall．Basic concepts of materials science and the role materials have played in history and in our daily lives．For students not majoring in science．Not counted toward a major in any of the natural sclences．No prerequisites．

MATS 401．Survey of Materials Science ！ （3）Fall．Basic concepts of materiais science． Crystalline materials，dislocations，elastic properties，polymers，ceramics and corro－ sion．For students majoring in science or technology．Two one－hour lectures and one three－hour laboratory．Prerequisites：college algebra and introductory course in physics or chemistry．

MATS 402．Survey of Materials Science II （3）Spring．Continuation of MATS 401. Electrical，electronic，magnetic and optical properties of materials，with specific focus on modern applications and instrumentation． Surface science and its application in the assessment and development of novel materials．Prerequisite：MATS 401，

MATS 470．Independent Study in Materials Science（1－3）On demand．Research in materials science；projects chosen in consultation with adviser and will include library and laboratory work．Prerequisite： consent of instructor．

## Mathematics and Statistics（MATH）

## Entry Level Courses

The selection of a mathematics course should reflect the student＇s college require－ ments，major requirements，mathematics preparation and interests．Flexibility to meet a variety of program requirements should be added to the criteria since changing majors or colleges is a common occurrence．The information below provides an overview of the 100 －level mathematics courses to assist the student in making an informed course selection．Students are encouraged to contact a representative of the Department of Mathematics and Statistics or their academic adviser if they need additional information

MATH 131，the first course in the standard calculus sequence，is required for all students in the Bachelor of Science degree program．In addition，it satislies the mathematics requirement for the B．S．in Business Administration degree and is required or recommended for a variety of
additional majors. MATH 131 provides a high degree of flexibility in meeting requirements is prerequisite to the higher-level athematics curriculum and courses in other areas.

The MATH 134-35 sequence includes all the topics from MATH 131. Completion of this sequence is equivalent to completion of MATH 131 in terms of requirements and prerequisites.

MATH 126 includes topics from differential calculus, integral calculus and some matrix theory. It satisfies the mathematics requirement for most specializations in the B.S in Business Administration degree and some majors in other degree programs. This course does not satisfy the mathematics requirement for the Bachelor of Science degree nor does it satisfy some major or program requirements in other areas, including some in the College of Business Administration.

Students who complete this course and subsequently change to a program of study in statistics, operations research, computer science, mathematics or the natural sciences may be required to take MATH 131 and possibly MATH 129 or MATH 130.

MATH 131 satisfies all requirements met by MATH 126 so the department recommends that qualified students take MATH 131 since it provides greater flexibility in meeting requirements and prerequisites.

MATH 120, 128 and 130 satisfy some aram or degree requirements and serve ds preparatory courses for calculus students. MATH 130 is an accelerated version of MATH 128 for students with better placement scores. MATH 128 and 130 satisfy the prerequisites for both MATH 126 and 131 while MATH 120 satisfies only the prerequisites for MATH 126. In general MATH 128 and MATH 130 will satisfy any requirement or prerequisite satisfied by MATH 120 so qualified students are advised to take MATH 128 or MATH 130 instead of MATH 120.

MATH 115 is an introductory statistics course and is taken by students in various colleges to satisfy programmatic requirements or for general background purposes.

The department offers MATH 095 and MATH 098 for students not prepared to enter higher level mathematics courses. These courses are offered without credit toward any degree program. Students are placed into MATH 095 and 098 through the Mathematics Placement Examination.

## Mathematics Placement

The department administers placement examinations to aid students in selecting an appropriate entry point or to determine if remedial work is necessary. Placement testing and advice on course selection are available at orientation and registration, and pther times in the department office (450 ithematical Sciences Building). The department recommends that students use their placement test results and consult with their adviser when selecting an initial course
in mathematics. It is important to understand that placement decisions are intended to provide reasonable expectation of successfully completing the recommended course. Students who elect to ignore placement recommendation do so at their own risk.

## Advanced Placement

Students who have taken a calculus course in high school may be eligible to enter the calculus sequence (MATH 131, 232, 233) at MATH 232 or 233, level and may be eligible for credit for one or more calculus courses. These students are advised to take the Calculus $A B$ or Calculus $B C$ advanced placement examinations from the College Entrance Examinations Board given at their high school.

## Prerequisite Policy

Prerequisites are strictly enforced with exceptions made only by the instructor. Admission to 300 - and 400 -level courses require that a grade of $A, B, C$ or $S$ has been earned in the prerequisite course(s).
$\triangle$ MATH 090. Elementary Algebra (3) Fall, Spring, Summer. Fundamental topics of beginning algebra. Intended for students having no previous algebra experience. Credit for this course cannot be applied toward any degree program. Graded A, B, C/ No Record.
$\triangle$ MATH 095. Intermediate Algebra (3) Fall, Spring, Summer. Number systems, fundamentals of algebra, graphs and equations of straight lines, exponents, polynomial expressions, factoring, rational expressions, roots, the quadratic formula; applications. Credit for this course cannot be applied toward any degree program. Additional fee. Graded A, B, C/No Record.
$\Delta$ MATH 098. Algebra Review (3) Fall, Spring. A review of topics in algebra to prepare students for further course work. Intended only for those students who have already studied algebra. Credit for this course may not be applied toward any degree program. Additional fee. Graded S/No Record.

MATH 111. Topics in Modern Mathematics (3) Language of sets, introductory logic, number systems, other topics. Not intended for improvement of algebra skills. Students needing additional preparation in algebra should take MATH 095. Not open to students with credit for any college mathematics course. Prerequisite: one year of high schoool algebra.
$\triangle$ MATH 115. Introduction to Statistics (3) Fall, Spring, Summer. Description of data, binomial and normal distributions, estimation and testing hypotheses for means and proportions. Prerequisites: Two years high school algebra, one year of geometry and a satisfactory placement exam score.

MATH 116. Introduction to Statistics il (3) MATH 115 continued. Nonparametric methods; linear regression and correlation; analysis of variance. Prerequisite: grade of C or higher in MATH 115 or consent of instructor.
$\triangle$ MATH 120. College Algebra (5) Fall, Spring, Summer. Polynomials, factoring, rational exponents, linear and quadratic equations and inequalities, applications; polynomial, exponential and logarithmic functions and their graphs, systems of equations, theory of equations. Not to be taken if credit for MATH 128 or 130 has been received. Prerequisites: Two years of high school algebra, one year of geometry AND a satisfactory placement exam score.
$\Delta$ MATH 126. Basic Calculus (5) Fall, Spring, Summer. Differential and integral calculus, multivariate differential calculus and matrix theory; applications. Not open to students with a grade of C or higher in MATH 131 or 135. Prerequisites: a grade of C or higher in MATH 120, 128, or 130; or two years of high school algebra and one of geometry AND a satisfactory placement exam score.
$\triangle$ MATH 128. Precalculus Mathematics (5) Fall, Spring, Summer. Basic algebra; inequalities; functions and graphs; logarithmic and exponential functions; trigonometric functions and identities; applications and other topics. Not to be taken if credit for MATH 120, 129, or 130 has been received. Prerequisites: Two years of high school algebra, one of geometry AND satisfactory. placement exam score.
$\triangle$ MATH 129. Trigonometry (2) Fall, Spring. Trigonometric functions, graphs, identities, equations, inverse functions, solution of triangles, complex numbers. Intended for students who have good preparation in algebra and geometry but lack knowledge of trigonometry. Not to be taken if credit for MATH 128 or 130 has been received. Prerequisite: C or higher in MATH 120, or consent of instructor.

MATH 130. Precalculus Mathematics (3). Fall, Spring, Summer. Theory of equations, coordinate geometry, exponential, logarithmic and trigonometric functions, applications. Overlaps with content of MATH 128 and 129. Not to be taken if credit for MATH 128 or 129 has been received. Prerequisites: two years of high school algebra, one year of high school geometry and a satisfactory placement exam score.
$\triangle$ MATH 131. Calculus and Analytic Geometry (5) Fall, Spring, Summer. Differential and integral calculus including applications. The MATH 131-232-233 sequence is a traditional calculus course for well-prepared students and is prerequisite for
all advanced mathematics and statistics courses. Prerequisites: (1) two years of high school algebra, one year of geometry, onehalf year of trigonometry, ACT math score of 24 or higher and satisfactory score on depariment placement test; or (2) grade of C or higher in MATH 128, 129, or 130.

MATH 134. Calculus and Analytic Geometry IA (3) Fall, Spring. Limits, the derivative, differentiation techniques and applications of the derivative. MATH 134 and 135 is a twosemester sequence which includes all the topics from MATH 131. Not open to students with a grade of C or higher in MATH 131 or MATH 126. Prerequisites: same as MATH 131.

MATH 135. Calculus and Analytic Geometry is (3) Fall, Spring, Summer. The definite integral; the fundamental theorem; indefinite integrals; integration by parts, by substitution and using tables; and applications of definite and indefinite integrals. Prerequisite: a grade of $C$ or higher in MATH 134, or satisfactory placement exam score.

MATH 222. Discrete Mathematics (3) Fall, Spring. Sets, functions, relations, algorithms, induction, elementary combinatorics, graph theory and propositional calculus. A student cannot receive credit for both MATH 222 and 322. Prerequisite: MATH 126, 131 or 135.

## AMATH 232. Calculus and Analytic

 Geometry 11 (5) Fall, Spring, Summer. MATH 131 continued. Techniques of integration, sequences and series, vector valued functions, analytic geometry, partial derivates. Prerequisite: grade of C or higher in MATH 131.AMATH 233. Calculus and Analytic Geometry ill (3) Fall, Spring. MATH 232 continued. Partial derivatives, multiple Integrais, vector fields, power series, introduction to differential equations, applications. Prerequisite: grade of C or higher in MATH 232.

## $\triangle *$ MATH 241. Mathernatics for Elementary

Teachers I (3) Fall, Spring, Summer. Numeration systems, set theoretic development of the whole number system, systems on integers and rationals, number theory. Open only to elementary and special education majors. Prerequisite: placement in MATH 241 by competency examination and permission of instructor.
$\triangle^{* *}$ MATH 242. Mathematics for Elementary Teachers il (3) Fall, Spring, Summer. MATH 241 continued. The real number systems, informal geometry, basic probability. Open only io elementary and special education majors. Prerequisite: grade of C or higher in MATH 241.

[^3]**MATH 243. Mathematics for Elementary Teachers (4). Fall. A fast-paced treatment of MATH 241 and 242 for well-prepared mathematically inclined students only. Open only to elementary and special education majors. Prerequisite: placement in MATH 243 by competency examination and permission of instructor. Not open to students who have taken MATH 241 or 242.

MATH 247. Fundamentals of Statistics (3). Fall, Spring. Discrete probability models, sampling theory, solving problems in statistical inference using nonparametric techniques. Prerequisite: MATH 126 or 131.

MATH 295H. Honors Course in Mathematics (1). Series of lectures by various department members surveying major areas of mathematics. To be taken after completion of MATH 232. Prerequisite: invitation of department.

MATH 311. History of Mathematics (3) Spring. History of mathematics through calculus. Prerequisite or corequisite: MATH 332.

MATH 313. Elementary Mathematical Logic (3) Fall. Propositional and predicate logic; nature of mathematical proof; applications to mathematics and computer science. Prerequisite: MATH 131. Not open to students with credit for CS 313.

MATH 322. Discrete Mathematics (3) Fall, Spring, Summer. Sets, functions, relations, algorithms, induction, elementary combinatorics, graph theory, the propositional calculus and other topics. A student cannot receive credit for both MATH 222 and 322. MATH 322 is recommended for majors or minors in mathematics. Prerequisite: MATH 232 or consent of instructor.

MATH 332. Elementary Linear Algebra (3) Fall, Spring, Summer. Systems of linear equations, vectors, matrices, determinants, linear transformations, vector spaces and applications. Techniques and some proofs. Prerequisite: MATH 232.

MATH 337. Differential Equations (3) Fall, Spring. Introduction to ordinary differential equations: general equations of low order, higher order linear equations with constant coefficients, series solutions, qualitative theory, and systems of differential equations. Prerequisite: MATH 233.

MATH 339. Fundamental Concepts of Modern Algebra (3) Fall, Spring, Summer odd years. Elementary topics from rings, fields and groups: divisibility properties of the integers; integral domains; construction of the rational, real and complex number systems; polynomial rings. MATH 339 should not be used as an elective for students in the College of Arts and Sciences. Prerequisite: MATH 322 or consent of instructor.

MATH 341. Principles of Probability and Statistics (3). Fall, Spring, Summer even years. Summary and display of data; basic probability concepts; discrete distributions; continuous distributions; computer-aided probabilistic and statistical modelling of real problems; estimation; tests of statistical hypotheses. Not open to students who have credit for MATH 441. Prerequisites: MATH 232 and 322, or consent of instructor.

MATH 395. Honors Course in Mathematics (1). A choice of two experiences: (1) a problem-solving seminar, or (2) use of the mathematics library to conduct a search for articles related to a selected topic. Prerequisite: invitation of department.

MATH 400. Topics in Mathematics (3). Selected topics in mathematics not included in existing courses. May be taken twice for credit. Prerequisite: consent of instructor.

MATH 401. Number Theory (3) Spring odd years, Summer of odd-numbered years. Divisibility, prime numbers, linear congruences, Chinese Remainder Theorem, quadratic residues, quadratic reciprocity law, numerical functions, factorization of integers, Fibonacci numbers, elementary diophantine equations, and applications. Prerequisite: MATH 322 or MATH 332 or consent of instructor.

MATH 402. Modern Geometry (3) Fall, Spring, Summer odd years. Axiomatic development of neutral and Euclidean geometry; introduction to non-Euclidean geometry. Prerequisite: MATH 339, or MATH 403 or consent of instructor.

MATH 403. Modern Algebra 1 (3) Fall, Summer even years. Topics from groups and rings; normal subgroups, homomorphisms, cyclic groups, permutation groups, Lagrange's and Cayley's theorems, factor groups, abelian groups, direct products; integral domains, ideals and facter rings, fing isomorphisms, polynomial rings. Prerequisites: MATH 233, MATH 322 and MATH 332 or consent of instructor.

MATH 404. Modern Algebra II (3) Spring. Continuation of topics from MATH 403; vector spaces, extensions of fields, finite fields. Prerequisite: MATH 403 or consent of instructor.

MATH 405. Topics in Geometry (3). Organized around one or more areas from geometry such as projective geometry, nonEuclidean geometry or differential geometry. Prerequisite: consent of instructor.
**MATH 414. Advanced Mathematics for Elementary Teachers (5) Fall, Spring. Consumer mathematics, non-Euclidean
geometry, matrices and vectors, proof and axiomatic systems, number theory, and other pelected topics. Prerequisite: grade of C or better in MATH 242 or 243.

MATH 421. Foundations of Mathematics
(3). Fall, Summer even years. Logic; set theory (including informal discussion of infinite sets and cardinals); axiomatic method (including models, consistency and independence). Prerequisite:. MATH 339 or MATH 403 or consent of instructor.

MATH 425. Theory of Interest (3) Spring even years. General theories of interest, annuities, yield rates, amortization schedules and sinking funds, bonds and other securities and additional topics in financial analysis. Prerequisite: MATH 232 or consent of instructor.

MATH 426. Actuarial Mathematics I (3) Fall. Brief introduction to annuities, certain survival distributions and life tables, life insurance, life annuities, net premiums, net premium reserves. Intended to prepare students for actuarial examinations. Prerequisite: MATH 441.

MATH 427. Actuarial Mathematics II (3) Spring. Multiple life functions; multiple decrement models; valuation theory for pension plans; insurance models including expenses, nonforfeiture benefits and bividends. Prerequisite: MATH 426.

MATH 432. Linear Algebra with Applications (3) Spring. Matrices and vector spaces, eigenvalues; orthogonal matrices, positive definite matrices, quadratic forms. Applications to differential equations, Markov chains, least squares. Prerequisite: MATH 332 or consent of instructor.

MATH 434. Advanced Calculus (3) Fall. Advanced topics from the differential and integral calculus of functions of several variables including: curvilinear coordinates, Jacobian matrices, Lagrange multipliers, gradient fields, divergence and curl of a vector field. Prerequisites: MATH 233 and 332 , or consent of instructor.

MATH 437. Qualitative Theory of Differential Equations (3). Existence theorerns for linear and nonlinear equations, systems of first order linear equations, nonlinear equations and stability, applications. Prerequisite: MATH 337.

MATH 439. Boundary Value Problems of Differential Equations (3) Fall. Boundary value problems, Sturm-Liouville theory, singular boundary conditions, Fourier series, partial differential equations of mathematical physics, e.g., heat, wave, and Laplace's equation in one and several dimensions. Applications. Prerequisite: MATH 337.

[^4]MATH 441. Probability and Statistics I (3). Fall, Spring. Axiomatic probability; conditional probability; random variables/vectors; distribution functions; expectations; momentgenerating functions; special distributions; functions of random variables/vectors; random sampling and sampling distributions; central limit theorem; weak law of large numbers. Prerequisite or corequisite: MATH 233

MATH 442. Probability and Statistics II (3) Spring. Statistical models; point estimation; interval estimation; tesing statistical hypotheses; analysis of discrete data; nonparametric methods. Prerequisite: MATH 441.

MATH 445. Applied Probability (3) Fall even years. Probability models for applications, finite Markov chains, queueing systems, Poisson process, applications to genetics, diffusion, computer systems. Prerequisites: MATH 332 and 441.

MATH 447. Exploratory Data Analysis (3)
Fall odd years. Introduction to modern techniques in data analysis, including stem-and-leafs, box plots, resistant lines, smoothing and median polish. Prerequisite: MATH 441 or 247 or STAT 315 or permission of instructor.

MATH 451. Numerical Analysis (3) Fall. Study of numerical methods for interpolation and approximation, integration and differentiation, solution of non-linear equations and systems of linear and non-linear equations. Prerequisites: MATH 332 and programming experience. Not open to students with credit for CS 451.

MATH 452. Numerical Analysis (3) Spring. Study of numerical methods for the algebraic eigenvalue problem; solutions of ordinary differential equations; and topics from approximation theory, numerical solution of partial differential equations, optimization techniques and sparse matrix computations. Prerequisites: MATH 337 and MATH 451 or CS 451. Not open to students with credit for CS 452.

MATH 461. Introduction of Complex Analysis (3) Spring odd years. Complex numbers, complex valued functions, differentiation of complex valued function, analytic functions, power series, integration, contour integrals, residues and poles, conformal mapping, applications. Prerequisites: MATH 233 and 332 or consent of instructor.

MATH 465. Introduction to Real Analysis I (3) Fall, Spring. Completeness and order axioms; limits of sequences; limits of functions and continuity; open, closed and compact sets; uniform continuity; differentiation and the mean value theorem; the Riemann integral. Prerequisites: MATH 233, 322 and 332, or consent of instructor.

MATH 466. Introduction to Real Analysis II (3) Spring. The Riemann-Stieltjes integral; sequences of functions; series of real numbers; series of functions; and optional topics selected from transcendental functions, special functions, Fourier series, and metric spaces. Prerequisite: MATH 465 or consent of instructor.

MATH 470. Readings in Mathematics (1-3) Independent study of a topic of particular interest to an advanced student under the direction of a faculty member. May be repeated. Prerequisites: consent of instructor and chair of department.

MATH 489. Internship (1-4). Internship for majors in mathematics or statistics in the cooperative education program: Written report required. May be repeated with permission. Does not apply towards major or minor. Prerequisite: permission of department. Graded S/U.

MATH 495H. Honors Course in Mathematics (1). Directed study in some field of mathematics; preparation and presentation of research topic. To be taken concurrently with two or more hours of MATH 470.
Prerequisite: invitation of department.

## Mechanical Design (DESN)

$\triangle D E S N$ 104. Design and Engineering Graphics I (3) Fall, Spring, Summer. Design as process and engineering graphics as vehicle to communicate problem solutions. Documented design analysis, free hand sketching, orthographic projection; shape, size and position dimensioning; isometric and oblique drawing, and auxiliary and section views as applied to technical design problems. Four hours of lecture and laboratory. Lab tee main campus.
$\triangle D E S N$ 131. CAD I: Basic Computer Assisted Drafting (2) Fall, Spring. Introduction to the construction of two-dimensional objects using a Computer-Assisted Drafting System. Prerequisites: DESN 104 or equivalent.
†DESN 202. Mechanical Design (5) Spring alternate years. Design and selection of mechanical elements, fasteners, power transmission devices, hydraulics systems, manuals, catalogs and publications utilized. Consideration of economy, loading conditions, stresses, deformation, fits and finishes in design. Three hours lecture, six hours laboratory. Prerequisites: DESN 104 and PHYS 201.
$\triangle D E S N$ 204. Design and Engineering Graphics I! (3) Fall, Spring, Summer. Application of design analysis and engineering graphics for design solutions in a variety
of technical disciplines. Analysis of point, line and plane problems using auxiliary views, revolution meihods and true length diagrams. Use of working drawings and graphic standards to communicate design solutions. Four hours of lecture and laboratory. Prerequisite: DESN 104. Lab fee main campus.
$\dagger$ DESN T205. Tool, Die, Jig and Fixture Design (4) Spring alternate years. Importance and economics of tooling designed for mass production; topics include jigs, dies, design and construction, emphasis placed on die design problems and solutions. Field visits to die-stamping plants. Two hours lecture, six hours laboratory. Prerequisite: DESN 104. Lab fee.

ADESN 231. Advanced Computer-Aided Design (2) Fall, Spring. Creation and display of 3-D objects as wire frames, surface models, solid models. Customization of menus and programming for productivity. Four hours lecture/lab. Prerequisite: DESN 131 or permission of instructor.
$\triangle D E S N$ 243. Statics and Strength of Materials (3) Fall, Spring, Summer. Fundamentais of siatics including vectors, centroids, moment of inertia, free body diagrams and structural systems. Strength of materials including simple and combined stress, bending, shear and torsional stress. Four hours lecture and laboratory. Prerequisite: Good math background in algebra and trigonometry or MATH 128. Lab tee main campus.
tDESN 290. Problems in Design Technology (1-3) On demand. For advanced students waniing to conduct intensive study of selected problems in design technology. May be repeated up to three hours. Prerequisites: Sophomore standing and consent of instructor.

DESN 304. Mechanical Design (3) Spring odd numbered years. Engineering graphics principles applled in design of structures, machines, production systerns. Selection and application of standard mechanical components. Four hours of lecture and laboratory. Prerequisites: DESN 204 and 243. Lab fee.

OESN 305. Technical Illustration (3) Spring on demand. Technical illustration for design presentation, assembly, repair and advertising. Variety of equipment, materials and techniques to accomplish various pictorial representations and design illustrations. Four hours of lecture and laboratory. Prerequisite: DESN 104. Lab fee.
$\triangle D E S N$ 404. Computer Aided Design (3) Fall, Spring, Summer. Study and application of computer graphics systems to the design process. Use of interactive methods using computers and commercial CAD software for design purposes. Development of two- and
three-dimensional views and complex surface generation. Emphasis on learning to draw with the computer and applying computer graphics technology to engineering graphics and design. Prerequisites: DESN 104 or DESN 105, and DESN 131 and DESN 231. Lab fee.

DESN 452. Design in Industry (3) Fall on demand. Systems approach applied to solution of one and two dimensional product design problems; emphasis of feasibility in production and use. Prerequisites: DESN 304 and 404. Lab fee.

DESN 455. Engineering Design (3) Spring, even numbered years. Problems in design requiring advanced engineering graphics and computation for solution. Emphasis on kinematics of mechanism, human factors, strength of materials and the design process. Four hours of lecture and laboratory. Prerequisite: DESN 304. Lab fee.
$\triangle$ DESN 490. Problems in Design Technology (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in design technology. Prerequisite: junior standing and consent of adviser. May be repeated. Materials fee. Graded S/U.

## Medical Technology (MEDT)

*Duration of these courses may vary slightly from hospital to hospital.

## MEDT 101. introduction to Health

 Professions (1) Fall. Survey of health and human service professions and the function of health care personnel within these professions.MEDT 201. Orientation to the Professions of Medicine/Medical Technology (1) Spring. Professional aspects of medical technology and the allied health fields; introduction to laboratory procedures and topics concerning direct and indirect patient care; tour of hospital facilities; review of current clinical practice issues. Time: one (1) two-hour laboratory/discussion session per week.
$\triangle$ MEDT 205. Acquired Immunodeficiency Syndrome (1) Fall, Spring. A comprehensive course on AIDS, discussing epidemiology, biology, socio-demography, safe sex, ethics, public policy, test sites \& support services. Bowling Green faculty, as well as community experts, will be brought in as instructors. Course is informative and practical. Graded S/U.

MEDT 301. Medical Terminology I (2) Fall, Spring. Vocabulary and terms used by medical personnel; prefixes, suffixes, word roots and their combining forms, usage and
spelling; specialized terms by body systems. Prerequisite: sophomore standing.

MEDT 370. HIV/AIDS: Scientific and Medical Aspects (2) Fall. Review of current. scientific literature regarding HIV infection and pathobiology with emphasis on immunological aspects of infection and diseases associated with AIDS. Prerequisites: BIOL 205 or equivalent; BIOL 313 or 314 ; MEDT 205 (may be taken concurrently).

MEDT 380. AIDS Education in the Schools (2) Spring. Review of current legislation, policies, procedures, educational materials and safety regarding AIDS/HIV in the classroom with emphasis on responsibillties of.teachers, administrators, school board. Prerequisites: EDCI 205 or EDFI 202; MEDT 205 (may be taken concurrently).

## MEDT 402. Orientation and Management

(1) Fall, Spring, Summer. Orientation to hospital departments and laboratory procedures. Laboratory supervision and management. Prerequisite: admission to hospital-based medical technology program.

## MEDT 403. Applied Clinical Microbiology

(9) Fall, Spring, or Summer according to sequence. Fourteen weeks of supervised practical experience. Prerequisite: Admission to hospital-based medical technology program.*

MEDT 404. Clinical Serology (2) Fall, Spring or Summer according to sequence. Three weeks of supervised experience in clinical applications of cellular and humoral immunity as diagnostic procedures. Prerequisite: Admission to hospital-based medical technology program.*

MEDT 405. Applied Clinical Hematology (5) Fall or Spring or Summer according to sequence. Eight weeks of supervised practical experience in hematologic methods, coagulation and blood cell morphology in a hospital laboratory setting. Prerequisite: Admission to hospital-based medical technology program.*

MEDT 406. Applied Clinical Chemistry (11) Fall or Spring or Summer according to sequence.Seventeen weeks of supervised practical experience in manual and automated methods in clinical chemistry. toxicology and endocrinology in a hospital setting. Prerequisite: Admission to hospitalbased.or equivalent and permission of instructor. Lab fee.

MEDT 407. Blood Bank (5) Fall or Spring or Summer according to sequence. Seven weeks of supervised practical experience in blood group serology with emphasis on preparation and testing of blood for transfusion in a hospital laboratory setting. Prerequisite: Admission to hospital-based medical technology program.*

MEDT 410. Applied Microbiology Practicum (10) Fall, Spring, Summer.One semester of full time training in the areas of medical or industrial microbiology, research, or public health learning procedures, policies, methods, and techniques used in the field. Prerequisites: Completion of major core in applied microbiology and permission of instructor. Corequisite: MEDT 470, Microbiology Project.

MEDT 411. Diagnostic Immunology I (3) Fall or Spring or Summer according to sequence. Theory of clinical immunology related to humoral and cellular immunity in health and disease states. Prerequisites: BIOL 439 recommended and permission of instructor.

## MEDT 412. Diagnostic Immunology |

 Laboratory (1) Fall or Spring or Summer according to sequence. Laboratory application and testing related to humoral and cellular immunity in disease states. One three-hour laboratory. Prerequisites: BIOL 439 recommended and permission of instructor. Lab fee.MEDT 413. Immunohematology I (4) Fall or Spring or Summer according to sequence. Theory of human blood groups, compatibility testing, detection and identification of antibodies, blood collection/storage,
management of transfusion service. Prerequisites: BIOL 439 recommended and permission of instructor.

MEDT 414. Immunohematology I Laboratory (2) Fall or Spring or Summer according to sequence. Laboratory application and testing of human blood groups, compatibility testing, detection and identification of antibodies. Two three-hour laboratories. Prerequisites: BIOL 439 recommended and permission of instructor. Lab fee.

MEDT.415. Immunohematology II (3) Fall, Spring or Summer. MEDT 413 and MEDT 414 continued; emphasis on a clinical application of current practice in Blood Banking. Prerequisites: MEDT 413 and 414 with a grade of $C$ or better and permission of instructor. Lab fee.*

MEDT 416. Clinical Immunology II (2) Fall, Spring or Summer. Clinical laboratory experience regarding testing and application of diagnostic immunology (MEDT 411 and 412). Prerequisites: grade of $C$ or higher in MEDT 411 and 412 and permission of instructor. Lab fee.*

MEDT 421. Hematology I (3) Fall, Spring or Summer according to sequence. Origin, regulation, morphology and function of blood cells in health and disease. Congenital and acquired hematologic aberrations. Prerequisite: BIOL 332 or equivalent and permission of instructor.

MEDT 422. Hematology 1 (2) Fall or Spring or Summer according to sequence. Diagnostic laboratory procedures applied to qualitative and quantitative evaluation of blood cells. Prerequisites: BIOL 332 or equivalent and permission of instructor. Lab fee.

MEDT 423. Hematology II (2) Fall or Spring or Summer according to sequence. Mechanism of hemostasis in health and hemorrhagic and thrombotic disease. Blood cell morphology. Lecture and laboratory. Prerequisite: MEDT 421 and 422. Lab fee.

MEDT 424. Hematology III (3) Fall or Spring or Summer. Continuation of Phase I hematology sequence with emphasis on clinical application and hospital laboratory instrumentation. Full-time clinical instruction and practice. Prerequisites: grade of C or better in MEDT 421, 422 and 423 and permission of instructor. Lab fee.*

MEDT 431. Clinical Microbiology I (3) Fall, Spring or Summer according to sequence. Isolation identification and detailed description of clinically important bacteria. Microbial etiology of disease; methods of prevention and control. Prerequisites: BIOL 313 or. equivalent and permission of instructor.

## MEDT 432. Clinical Microbiology I

Laboratory (2) Fall or Spring or Summer according to sequence. Diagnostic microbiology laboratory procedures. Methods of isolation and identification of clinically significant bacteria. Prerequisites: BIOL 313 in identification of bacteria, fungi and parasites in a hospital laboratory setting. Prerequisite: admission to hospital-based medical technology program.*

MEDT 433. Clinical Bacteriology II (4) Fall or Spring or Summer. MEDT 431 and 432 continued; emphasis on clinical application and identification of clinically significant bacteria. Full-time clinical instruction and practice. Prerequisites: Grade of $C$ or better in MEDT 431 and 432 and permission of instructor. Lab fee.*

MEDT 434. Clinical Parasitology (3) Fall or Spring or Summer according to sequence. Parasitic diseases of man; methods of detection, isolation, and identification of clinically significant human parasites. Lecture and lab. Prerequisites: BIOL 313 and permission of instructor. BIOL 405 recommended. Lab fee.

MEDT 435. Clinical Mycology (2) Fall or Spring or Summer according to sequence. Clinically significant fungi; methods of detection, isolation and identification. Lecture and lab. Prerequisites: BIOL 313 or equivalent and permission of instructor. Lab fee.

MEDT 436. Clinical Virology (1)
Spring.Study of clinically important human viruses, emphasizing structure, classification,
and pathogenicity. Methods of isolation, identification, prevention and vaccination will also be discussed. Prerequisite: BIOL 313. Corequisite: MEDT 431 and MEDT 432.

MEDT 441. Clinical Chemistry I (4) Fall or Spring or Summer according to sequence. Theoretical principles of analysis of chemical constituents of blood and body fluids in normal and disease states. Prerequisites: CHEM 308, 309 or CHEM 341, 342; CHEM 201 and PHYS 201 recommended and permission of instructor.

MEDT 442. Clinical Chemistry I Laboratory (2) Fall or Spring or Summer according to sequence. Methods, instrumentation and techniques of clinical chemistry through experiments, problems and demonstrations. Prerequisites: CHEM 308, 309 or CHEM 341, 342; CHEM 201 and PHYS 201 recommended and permission of instructor. Lab fee.

MEDT 443. Clinical Chemistry II (5) Fall or Spring or Summer. Continuation of MEDT 441 and 442; emphasis on clinical application. Prerequisites: Grade of $C$ or better in MEDT 441, 442 and 451 and permission of instructor. Lab fee.*

MEDT 451. Analysis of Body Fluids (2) Fal or Spring or Summer according to sequence. Physiology of urinary system and related diseases. Methods of detection of chemical and cellular elements of urine, cerebrospinal fluid, amniotic fluid and other body fluids. One lecture and one three-hour laboratory. Prerequisites: BIOL 332 or equivalent. Lab fee.

MEDT 465. Laboratory Management and
Education (1) Fall, Spring or Summer. Laboratory supervision and management; principles of education and laboratory instruction; seminars or case histories on selected topics of clinical interest. Prerequisite: Completion of pre-clinical MEDT courses or permission of instructor.

MEDT 470. Research and Special Topics (1-3) Fall or Spring or Summer according to sequence. May be repeated to maximum 3 credits. Research techniques, literature search, experimental design, critical reading Paper required on selected problem. Prerequisite: permission of instructor. Graded S/U.

MEDT 480. Introduction to Clinical Research (1-3) Fall or Spring or Summer. Research techniques, literature search, experimental design. Term paper required. For university-based students during clinical training at clinical site. Prerequisites: completion of pre-clinical courses and permission of instructor. Lab fee.

## Military Science (MILS)

MiL S 100 . Lifetime Leadership Skills (2) Skills needed to be successful in wide range of environments to include academic, corporate and military. Subjects include but not limited to time management, memory comprehension, effective and efficient reading and effective note taking. Extensive leadership studies of both corporate and military seltings focuses on interpersonal skills, professional ethics and officership. No military obligation or prerequisites. Freshmen only.

Whis q01. ROTC and the National Defense Organization (2) Background, programs, benefits and objectives of Army ROTC. Organization and functions of national defense establishment, with emphasis on the role of the U.S. Army. Extensive discussion of the fole and responsibility of the military officer. Presentation of detailed information concerning career opportunities as an Army oficer. :

MiLS 201. Survival (2). Discussion and application of knowledge and skills needed in besic human survival situations in wilderness environmonts. Topics include land navigation, first aid, map reading, adverse weather conditions, finding shelter, water and food. No military obligation. Freshmen and sophomores only. Prerequisite: MILS 101 or permission of instructor.

Mils 202. Military Tactics (2).Army tactics, principles of engagement and usage of military maps. Simulation exercises and war games will be utilized in class highlighting military tactics. No military obligation. Fresimen and sophomores only. Prerequisite: MILS 201 or permission of instructor.

Mil. 5 301. Professionalism/Leadership (3) Professionalism and leadership required of the U.S. Arrny Officer; application of : leadership principles and styles through case studies and role-playing exercises with emphasis on military situations. Participation in leadership labs, physical training program and fisld training exercises required. Prerequisites: department permission and completion of one of the following:.ROTC basic course at BGSU; ROTC Basic Camp at Fork Khox, KY; prior active duty service; Army Feserve or Army National Guard basic . training.

Mhls 302. Small Unit Operations (3).Orga"nization and employment of basic military teams, Squad and platoon level tactical operations. Progressive leadership development through application of tactical principles. Participation in leadership labs, physical training program and field training - exercises required. Prerequisite: department pernission.

MILS 401. Unit Management and Officer Development (3).Concepts and fundamentals of Army unit administration, supply and material readiness. Professional officership techniques and military ethics. Management at the small unit level. Organizing, planning and participating in field training exercises, participation in physical training and leadership labs. Prerequisite: department permission.

MiLS 402. Unit Management, Military Writing and Correspondence (3).Organization and concepts of the U.S. Army judicial system including court martial, nonjudicial and nonpunitive actions. Development of military writing techniques, preparation of staff papers and staff actions. Discussions of various administrative details pertinent to newly commissioned lieutenants. Participation in field training exercises, physical training and leadership labs. Prerequisite: department permission.

MILS 470. Studies in Military Science (13). On demand. Detailed study of selected military subjects. Offered on lecture basis in seminar or independent study depending on students' needs and nature of material. May be repeated to six hours. Prerequisite: consent of instructor.

## Music Composition and History (MUCH)

MUCH 100E. Small Ensembles (1) Fall, Spring. Collegium Musicum of College of Musical Arts offered under supervision of Composition/History Department. For freshmen or sophomores. May be repeated. Following small ensembles offered: AfroCaribbean Ensemble, Balinese Gamelan Ensemble, Early Music Ensemble, New Music Ensemble.

T $\triangle$ MUCH 101. Exploring Music (2) Fall, Spring, Summer. Focus on three types of contexts important to appreciating music: the composer, the place and the time.

MUCH 110. Elements of Music (3) Spring. Musical literacy in scales, intervals and triads in two clefs, as demonstrated by singing, hearing, reading and writing. Not open to bachelor of music degree students.

MUCH 112. Survey of Jazz Styles (2) Spring. Examines diverse styles of American jazz and its African roots; emphasis on individual musicians who pioneered various styles of jazz. Not open to Bachelor of Music degree students.

MUCH 113. Basic Musicianship I (2) Fall, Summer. Thorough study of music fundamentals; basic ear training and sight singing; introduction to diatonic harmony and melodic organization, with examples from a variety of music literature. Open only to music majors
and minors with low scores on placement exam.

MUCH 114. Basic Musicianship H (2) Spring, Summer. MUCH 113 continued. Prerequisite: MUCH 113.

MUCH 115. Acclerated Fundamentals of Music (1) Fall (first 8 weeks), Summer. Intense study of reading and writing music notation for scales, keys, intervals, triads, rhythm and meter. Open only to music majors and minors. Prerequisite: middle score on placement exam. Corequisites: MUCH 141 and 151.

MUCH 116. Fundamentals of Composition
(2) Fall, Spring. Basic compositional techniques for students not yet admitted to baccalaureate program in music composition. May be repeated. Cannot be substituted for MUCH 216 or 416. Prerequisite: High score on placement exam or $\mathrm{M} U \mathrm{UCH} 110$ or 114 or 115 or consent of instructor.

IDMUCH 125. Music of World Cuitures (3) Fall. Musical systems of major non-Western art musics: Africa, Near East, Pacific and Asia. Theoretical, analytical and cultural concepts related to music. Not open to Bachelor of Music degree students.

MUCH 132. Western Art Music il (4) Fall. Music of Classical and Romantic periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 131.

MUCH 141. Aural Skills I (2) Fall, Spring, Summer. Basic skills in sightsinging; rhythmic, melodic and harmonic dictation of diatonic and triadic materials. Prerequisite: middle or high score on placement exam or MUCH 110 or 114. Corequisite: MUCH 151.

MUCH 142. Aural Skills II (2) Fall, Spring, Summer. MUCH 141 continued. Prerequisite: MUCH 141.

MUCH 151. Theory I (2) Fall. Knowledge and skills in diatonic harmony, melodic organization, form-creating aspects, with examples from a variety of music literature. Prerequisite: middle or high score on placement exam. Corequisite: MUCH 141 and, for those with middle score on placement exam, MUCH 115.

MUCH 152. Theory II (2) Spring. Knowledge and skills in diatonic and chromatic harmony, melodic organization, part forme, with examples from a variety of music literature. Prerequisite: MUCH 151. Corequisite: MUCH 142

MUCH 210. Jazz Aural Skills (2) Spring alternate years. Development of skills in recognition, dictation and singing of harmonic and melodic material characteristic
of the jazz idiom. Familiarity with jazz nomenclature recommended. Open to inmajors, minors and music majors. Prerequisite: MUCH 241 or permission of instructor.

MUCH 211. Jazz Improvisation and Repertoire I (2) Fall alternate years. Techniques of jazz improvisation and related repertoire; application of basic scales, arpeggios, melodic construction to blues and standard pop tunes. Prerequisite: MUCH 151 or consent of instructor.

MUCH 212. Jazz Improvisation and Repertoire II (2) Spring alternate years. Advanced techniques of jazz improvisation and related repertoire; application of modes, altered scales, chord extensions, chromatic harmony to jazz compositions. Prerequisite: MUCH 211.

MUCH 213. Jazz Piano Fundamentals (3) Fall alternate years. Analysis of jazz piano accompaniment styles; techniques of letthand voicing and rhythmic accompaniment; scale repertoire; piano arranging from lead sheets. Prerequisites: MUED 151, and either a high score on placement exam or MUCH 110 or 114 or 115.

MU̇CH 216. Composition (1-4) Fall, Spring, Summer. Private composition lessons for reshmen and sophomores. May be jpeated. Limited enrollment course, with registration priority given to composition majors. Others accommodated on a spaceavailable basis by audition.

TI MUCH 221. Masterpieces of Music (2) Fall, Spring. Music of important composers from various periods; directed listening of selected works. Not open to Bachelor of Music degree students.

MUCiH 231. Western Art Music III (3) Spring. Music of the 20th century viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 132, MUCH 142.

MUCH 232. Western Art Music IV (2) Fall, Spring. Music of the Medieval and Renaissance periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 141.

7MUCH 233. Music in African Culture (2) Spring alternate years. The study of music in various groups of sub-Sahara Africa with emphasis on its relation to individual cultures, its structure and performance. Prerequisite: High score on placement exam or MUCH 110 or 114 or 115.

MUCH 234. Music in Japanese Culture (2) Spring alternate years. The study of music in Japanese religious ritual, historical court music, and music for theater and
concert, with emphasis on its socio-historical context. Prerequisite: High score on placement exam or MUCH 110 or 114 or 115.

TMUCH 235. Music in Indonesian Culture (2) Fall. The study of music in Java, Bali and the Sunda in its historical and cultural contexts. Music of the outer islands is compared to the principal groups. Prerequisite: High score on placement exam or MUCH 110 or 114 or 115.

MUCH 236. Introduction to Jazz and Commercial Music (2) Fall. Analysis of theoretical and historical evolution of American popular music, focusing on Broadway musical theater, rock'n roll and contemporary jazz-rock. Prerequisite: High score on placement exam or MUCH 110 or 114 or 115.

TMMUCH 237. Jazz (3) Spring. The music of various styles of jazz from around 1900 to the present. Theoretical, analytical, cultural and performance concepts will be related to the music.

MUCH 241. Aural Skills III (2) Fall, Spring, Summer. Intermediate skills in sightsinging; rhythmic, melodic and harmonic dictation of chromatic material including seventh chords. Prerequisite: MUCH 142.

MUCH 242. Aural Skills IV (2) Fall, Spring, Summer. MUCH 241 continued. Prerequisite: MUCH 241.

MUCH 300E. Small Ensembles (1) Fall, Spring. Collegium Musicum of College of Musical Arts offered under supervision of Composition/History Department. For juniors and seniors. May be repeated. Following small ensembles offered: Afro-Caribbean Ensemble, Balinese Gamelan Ensemble, Early Music Ensemble, New Music Ensemble

MUCH 308. Keyboard Harmony I (2) Fall alternate years. Use of keyboard skills related to score reading, transposition, extemporization and accompanying.

MUCH 309. Keyboard Harmony II (2) Spring alternate years. Continuation of keyboard skills developed in MUCH 308. Prerequisite: MUCH 308.

MUCH 311. Jazz Arranging and Analysis I (3) Fall alternate years. Swing repertoire, typical chord progressions, formal structure, melodic construction, compositional devices. Basic arranging techniques common to. traditional big-band music. Prerequisite: MUCH 212 or consent of instructor:

MUCH 312. Jazż Arranging and Analysis II (3) Spring alternate years. Harmonic trends of bop period; substitute chords, altered chords, melodic and rhythmic treatment. Addition of double reeds, French horns and strings to the big-band. Contemporary trends
in jazz and commercial music, including small group and rock styles. Prerequisite: MUCH 311.

MUCH 315. Orchestration (2) Fall. Score analysis; arranging and/or composing for various families of orchestra (woodwinds, brass, percussion, strings), and scoring for full symphonic orchestra. Prerequisite: MUCH 231.

MUCH 318. Symphonic Literature (2) Fall alternate years. Listening to and analyzing works tracing development of symphony and symphonic poem to modern period. Prerequisite: MUCH 231.

MUCH 320. Band Scoring (2) Fall, Spring. Scoring for band instruments, from small ensembles to concert band and marching band. Prerequisite: MUCH 231.

MUCH 325. Choral Arranging (2) Spring. Text analysis; arranging for men's voices, treble voices, mixed voices; A Cappella and accompanied ensemble arranging techniques; calligraphy, reproduction and copyrighting; dealing with publishers. Prerequisite: MUCH 232.

MUCH 341. Aural Skills V (2) Spring alternate years. Advanced skills in sightsinging; rhythmic, melodic and harmonic dictation of chromatic and atonal material. Prerequisite: MUCH 242.

MUCH 345. Survey of Music Technology (3) Spring. Overview of music technology; use of computers in music (yesterday, today and tomorrow). Philosophical implications of technology and musical expression. Literature of music technology in pop, jazz and the avant-garde. No prerequisites.

MUCH 395. Workshop on Current Topics (1-4). Summer and on demand. Intensive educational experience on selected topics in music related to skill development, content update or materials development. Prerequisite: As announced for each workshop. May be repeated on approval of adviser.

MUCH 401. History and Literature of Jazz (2) Fall. Jazz from African influences through present developments; personalities involved in stylistic change.

MUCH 403. Counterpoint I (2) Fall alternate years. 16 th-century counterpoint. Prerequisites: MUCH 231 and 232.

MUCH 404. Counterpoint II (2) Spring : alternate years. 18 th-century counterpoint: tonal counterpoint in three and four voices; canon, invention, fugue, chorale-prelude. Prerequisite: MUCH 231.

MUCH 406. Problems in Music History (3) On demand. Research of topics and problems in music history. Prerequisite: consent of instructor. May be repeated to 12 hours.

MUCH 407. Performance Practice (2) Fall alternate years. Performance practice in music, improvisation, ornamentation, accompaniment, instrumentation, rhythm and tempo. Prerequisite: MUCH 231.

MUCH 408. Chamber Music Literature (2)
Fall altemate years. Selected major chamber works of various periods. Reading on all forms and media. Prerequisite: MUCH 231.

MUCH 410. Contemporary Music ProSeminar (2) Fall, Spring. Musical styles and techniques of 20th century. Compositional and analytical approach, considering various influences of past. May be repeated to 8 hours. Open automatically to composition majors, to others by consent of instructor. Prerequisite: MUCH 231 with $C$ or better.

MuCH 411. Jaxz Pedagogy (2) Spring altemate years. Prepares student to teach fundamentals of jazz improvisation, arranging, jazz ensemblo techniques. Prerequisite: MUCH 312.
muCM 412. Opera Literature (2) Fall alternate years. Styles, interpretation, traditional performances of various schools. Prerequisite: MUCH 231.

MUCH 416. Composition (1-4) Fall, Spring, Summer. Private composition lessons for juniors and seniors. May be repeated. timited enrollment course, with registration priority given to composition majors. Others accommodated on a space-available basis by audition.

MUCH 420. Problems and Techniques of Ethnomusiciology (2) Spring alternate years. Topics and techniques in ethnomusiciology. Open to students interesied in all music as aspects of culture.

71 MUCH 431. Aesthetics of Black Music (3) Spring. West African and AfricanAmerican concepts of music; modifying effects America has had from slavery to present.

MUCH: 436. Audio Recording Techniques (2) Fall, Spring. Concert and studio multitrack recording methods culminating with an actual recording session. Students will gain some hands-on experience. Prerequisite: experience with audio hardware. Lab fee.

MUCh 437. Advanced Recording Techniques (2) Spring. Advanced studio multitrack techniques and stereo concert hall recording. Emphasis placed on applied recording techniques, in-depth understanding of peripheral hardware and microphone
choice and placement. Prerequisite: MUCH 436. Lab tee.

MUCH 438. Commercial Music Industry Practices (2) Spring alternate years. Computer music and MIDI-applications; studio recording for the professional musician; technology and its role in professional music.

MUCH 444. Music Technology I (3) Fall. Basic audio techniques (with no electronic background assumed and no math beyond basic algebra needed). Study of analog classical and voltage control techniques. History and literature of electronic music. Learn to use analog hardware. Prerequisite: none. Lab fee.

MUCH 445. Music Technology II (3) Spring. Introduction of MIDI computer-music techniques. Use of computer music software, including sequencers and music editors for printing music. Study of schematics of analog hardware. Prerequisite: MUCH 444. Lab fee.

MUCH 446. Music Technology III (3) Fall. Programming of MIDI voice modules. Extended study of computer music MIDI techniques and audio sampling. Introduction to videographic techniques and multi-media. Prerequisite: MUCH 445. Lab fee.

MUCH 447. Music Technology IV (3) Spring. Students work independently to produce multi-media computer compositions under faculty supervision. Prerequisite: MUCH 446. Lab fee.

MUCH 470. Reading and Research (2-4) Fall, Spring. Directed independent reading and research in history, philosophy, theory or aesthetics of music. Prerequisites: 16 hours of music theory and history, and consent of instructor.

## Music Education (MUED)

For music education majors or minors only unless otherwise noted. Questions concerning eligibility for MUED courses should be directed to the chair of music education prior to enrollment.

MUED 125. Percussion Class (1) Fall, Spring. Prerequisite: MUED 145. (Elective).

MUED 130. Trumpet-French Horn Class (1) Fall, Spring, alternate summers.

MUED 136. Trombone-Euphonium-Tuba Class (1) Fall, Spring, alternate summers.

MUED 140. Clarinet-Saxophone Class (1) Fall, Spring, alternate summers.

MUED 145. Flute-Percussion Class (1) Fall, Spring.

MUED 146. Oboe-Bassoon Class (1) Fall, Spring, alternate summers.

## MUED 147. Bassoon Reed Class (1)

Spring.(Elective).
MUED 150. Class Piano (1) Fall, Spring. Class piano instruction for beginners and those with minimal keyboard experience. Placement into MUED 150 and 151 is determined on the basis of an audition. Only open for credit to music majors and minors. Grade of $C$ of better required for admittance into MUED 151. Lab fee.

MUED 151. Class Piano (1) Fall, Spring. MUED 150 continued. Grade of C or better required for admittance into sophomore level group piano courses. This course includes Piano Proficiency I. Lab fee.

MUED 154. Class Piano (1) Fall, Spring. Intermediate class study. A more advanced approach to the acquisition of functional skills for those with advanced keyboard facility who need class instruction in order to pass functional proficiency requirements. A grade of $C$ or better required for admittance into sophomore level group piano courses; includes Piano Proficiency I. Lab fee.

MUED 156. Beginning Plano for the Nonmusic Major 1 (2) Fall, Spring. Class piano course for beginning work in music reading, pop/jazz chords, keyboard technique. improvisation and elementary piano literature. Not open to music majors or minors.

MUED 157. Beginning Piano for the Nonmusic Major II (2) Spring. MUED 156 continued. Class plano course for beginning work in music reading, pop/jazz chords, keyboard technique, improvisation and easy piano literature. Not open to music majors or minors. Prerequisite: MUED 156 or equivalent.

MUED 170. Voice Class (1) Fall, Spring. Beginning study of voice production, breathing, posture and diction through vocalises and songs in English. Open to nonmajors.

MUED 177. Voice Class (1) Fall, Spring. MUED 170 continued. Prerequisite: MUED 170. Open to non-majors.

MUED 180. String Class (2) Fall, Spring.
MUED 190. Troubadour Harp Class (i) Fall, Spring. (Elective).

MUED 195. Guitar Class (1) Fall, Spring. (MUED majors and minors only.)

MUED 240. Introductory Music Field Experience (3) Fall, Spring. Introduction to e music education profession and a wide ariety of teaching situations at all levels. Prerequisites: sophomore standing in music; 2.5 GPA; grade of C or above in each course with MUED prefix; pass both history and theory in MUCH 131; grade of $C$ or above in MUCH 141. $C=10$ hours; $F=32-40$ hours. Required of all sophomores. Lab fee.
$\triangle$ MUED 248. Music Teaching Skills for the Classroom Teacher (3) Fall, Spring. Emphasis on the development of skills necessary for planning and implementing children's musical experiences. $\mathrm{C}=20$ hours. Not open to credit for music education majors or minors. Prerequisites: ENG 112, EDCI/FI 202.

## MUED 250. Class Piano: Instrumental

 Harmonization and Score Reading I (2) Fall, Spring. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and sight-reading of piano and instrumental scores. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.
## MUED 251. Class Piano: Instrumental

 Harmonization and Score Reading II (1) Fall. Class piano course for students with advanced keyboard facility; intermediate svel work in melody harmonization, pop/jazz fords, and sight-reading of piano and instrumental scores. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.MUED 252. Class Piano: Choral Harmonization and Score Reading I (2) Fall, Spring. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and sight-reading of choral scores. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.

MUED 253. Class Piano: Choral Harmonization and Score Reading II (2) On demand. Class Piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, pop/jazz chords, and sight-reading of choral scores. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.

MUED 254. Class Piano: Classroom Harmonization, Transposition and Improvisation I (2) On demand. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, transposition and improvisation. Prerequisite: Piano Proficiency I. Grade of C or better required admittance into accompanying course.

MUED 255. Class Piano: Classroom Harmonization, Transposition and
Improvisation II (1) On demand. Class
piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, accompaniment transposition and improvisation. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.

MUED 256. Class Piano: Accompanying as a Teaching Tooll (1) Fall, Spring. Class piano course for music education students who are not advanced pianists; provides introductory work in accompanying skills. Prerequisite: Piano Proficiency II. Grade of C or better required of music education majors for graduation.

MUED 257. Class Piano: Accompanying as a Teaching Tool II (1).Spring. Class piano course for music education students with advanced keyboard facility; provides work in accompanying skills. Prerequisite: Piano Proficiency II. Not for keyboard emphasis majors. Grade of C or better required of music education majors for graduation.

MUED 340 and 341. Junior Methods Project in Music (4 courses)
Consists of MUED 340 (2); MUED 341 (3) and 2 of the following according to the student's option:

Band Option: MUED 342 (2) and MUED 343 (2);
Choral Option: MUED 344 (2) and MUED 345 (2);
Classroom Option: MUED 346 (2) and MUED 347 (2);
String Option: MUED 348 (2) and MUED 349 (2)
The prerequisites for any of the four courses in the Junior Methods Project in Music include: MUED 240 and permission of chair; 2.5 GPA; grade of C or above in each course with MUED prefix; instrumental majors must have successfully completed two techniques classes and the voice class with grades of C or above; pass both history and theory in MUCH 132; grade of C or above in MUCH 142; pass piano proficiency I. (The four courses in the Junior Methods Project in Music should be taken simultaneously along with conducting, applied study, one ensemble, and an evening section or either EDFI 302 or EDAS 409.) (Consult the department adviser for scheduling of the Junior Methods Project in Music.)

MUED 340. Elementary Music Methods (2) Fall, Spring. Concentrated study of organization, administration and teaching of music in the elementary general music grades; emphasizes correlation of methods seminars with clinical and field activities. $\mathrm{C}=10$ hours. Prerequisites: Note prerequisites above for all MUED 340-349 courses. (Was MUED 340A)

MUED 341. General/Junior High Methods (3) Fall, Spring. Concentrated study of
organization, administration and teaching of general music in junior high and secondary grades; emphasizes correlation of methods seminars with clinical and field activities. $\mathrm{C}=10$ hours. Prerequisites: Note: prerequisites above for all MUED 340-349 courses. (Was MUED 340J)

MUED 342. Band Methods (2) Fall, Spring. Concentrated study of organization, administration and teaching of band music in the public schools; emphasizes correlation of methods seminars with clinical and field activities. To be taken with MUED 343. Prerequisites: Note prerequisites above for all MUED 340 : 349 courses. (Was MUED 340)

MUED 343. Band Field Experience (2) Fall, Spring. Field component of MUED 342. Fall semester - students are assigned to the University Cooperative schools, MN mornings. Spring semester: Option 1 , assigned to the University Cooperative schools; MW mornings or Option 2 (by permission), assigned to an area school, Fridays. Includes observation and teaching. To be taken with MUED 342. Spring students must meet with the music education adviser for.placement selection during the preceding Fall semester $F=$ minimum 48 hours.
Prerequisites: Note prerequisites above for all MUED 340-349 courses. Graded S/ U.(Was MUED 341).

MUED 344. Choral Methods (2) Fall. Concentrated study of organization, administration and teaching of choral music in the public schools; emphasizes correlation of methods seminars with clinical and field activities. To be taken with MUED 345.
Prerequisites: Note prerequisites above or all MUEd 340-349 courses. (Was MUED 340 M ).

MUED 345. Choral Field Experience (2) Fall. Field component of MUED 344. Students are assigned to the University Lab schools and/ór area schools. Includes observation and teaching. To be taken with MUED $344 \mathrm{~F}=$ minimum 48 hours. Prerequisites: Note prerequisites above for all MuED 340 - 349 courses. (Was MUED 341). Graded S/U.

MUED 346. Classroom Methods (2) Concentrated study of organization, administration and teaching of classroom music in the public schools; emphasizes correlation of methods seminars with clinical and field activities. To be taken with MUED 347. Prerequisites: Note prerequisites above for all MUED 340-349 courses. (Was MUED 340 D - Spring).

MUED 347. Classroom Field Experience
(2) Spring. Field component of MUED 346. Students are assigned to the University Lab schools and/or area schools. Includes observation and teaching. To be taken with

MuED 346.F = minimum 48 hours. Prerequisites: Note prerequisites above for all MUED 340-349 courses. (Was MUED 341). Graded S/U.

MUED 348. String/Orchestra Methods (2) Fall. Concentrated sludy of organization administration and teaching of string/ orchestra music in the public schools; emphasizes correlation of methods seminars with clinical and field activities. To be taken with MUED 349. Prerequisites: Note prerequisites on page 215 for all MUED 340 349 courses. (Was MUED 340 D - Fall).

MUED 349. String/Orchestra Field Experience (2) Fall. Field component of MUED 348. Students are assigned to the University Lab schools and/or area schools. Includes observation and teaching. To be taken with MUED $348 . F=$ minimum 48 hours. Prerequisites: Note prerequisites on page 215 for all MUED $340-349$ courses. (Was MUED 341). Graded S/U.

MUED 359. Examination and Performance of Choral Repertoire (2) Fall. Material suitable for use in secondary schools; related petformance problems and their solutions $\mathrm{C}=5$ hours.

MUED 360. Musical Theatre Production Survey (2) Spring. On demand. Overview of considerations necessary in production of music theatre at public school level.

MUED 395. Workshop on Current Topics (1-4). On demand. Intensive educational experience on selected topics related to skill development, content update or materials development. Typically, an all day or similar concentrated time format used. Requirements usually met within time format.

MUED 402. Beginning Wind and Percussion Instrument Repair (1) Spring. Basic practices and techniques of instrument repair. Lab fee.

WIED 450. Adult Group Plano Teaching (2) Spring. A survey of materials, supervised teaching and program development appropriate for adult level class. Open to students with a strong piano background. Consent of instructor required. Available for graduate credit also. Alternate years beginning 1984 or on demand.

MUED 451. Advanced Methods for Classroom Music (2) Fall. Examination of methods, instructional hardware, organizational patterns and curricular models. Available for graduate credit also. Prerequisite: MUED 340 or consent of instructor. Required for classroom option. Should be completed prior to student teaching. $C=10$ hours.

MUED 458. Marching Band Techniques (2) Spring. Techniques in planning, charting and rehearsing marching band shows and administering public school marching bands. Prerequisite: junior standing.

MUED 470. Readings in Music Education (1-3) Fall, Spring. Special topics in music education. Admittance by consent of instructor.

MUED 491. Teaching Practicum (1-2) Fall, Spring. Supervised teaching in University laboratory schools for junior level classroom, choral or instrumental option music education majors. Prerequisite: consent of instructor. Graded S/U.

MUED 497. Student Teaching (1-10) Fall, Spring. Supervised teaching in area schools, supplemented by conferences and seminars Ten semester hours required of all music education majors. Meets student teaching requirement for special teacher's certification in music. Lab fee. Graded S/U.

## Music, General (MUS)

frus 099. Recital Attendance (0) Fall, Spring. Required of all music majors for six semesters. Successful completion of course requires attendance at minimum of 15 oncampus music performances. Graded S/U.

MUS 190. Beginning Guitar (2) Fall, Spring. Introduction to the guitar, fundamentals of technique and music notation reading. Open to non-music majors only.

MUS 191. Intermediate Guitar (2) Fall, Spring. MUS 190 continued. Open to nonmusic majors only. Prerequisites: MUS 190 or previous experience and consent of instructor.

## Music Performance Studies (MUSP)

MUSP 100E. Small Ensembles (1) Fall, Spring. For freshmen and sophomores. May be repeated. Formed under supervision of College of Musical Arts and offered on demand. Open to any University student who qualifies on the basis of audition. Designed to foster independent listening and performance skills and the investigation of appropriate literature. For audition informafion and other particulars, consult with the department chair. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser. The following small ensembles are offered:

## MUSP 100E. Brass

MUSP 100E. Classical Guitar
MUSP 100E. Electric Guitar
MUSP 100E. Euphonium-Tuba

MUSP 100E. Harp
MUSP 100E. Horn Club
MUSP 100E. Jazz
MUSP 100E. Jazz Lab !
MUSP 100E. Jazz Lab It
MUSP 100E. Mixed Chamber
MUSP 100E. Music Theater Productions
MUSP 100E. Percussion
MUSP 100E. Pianc Accompaniment
Practicum
MUSP 100E. Saxophone
MUSP 100E. String
MUSP 100E. Trombone Choir
MUSP 100E. Trumpet Guild
MUSP 100E. Varsity Quariet
MUSP 100E. Vocal Chamber Lab
MUSP 100E. Vocal Jazz Ensemble MUSP 100E. Woodwind
(See also MUCH 100E.)
MUSP 160. Sight Reading I (1) Fall. Development of visual comprehension of intervallic patterns and basic rhythmic patterns for the keyboard player. Prerequisite: consent of instructor.

MUSP 195. Pedal Harp Class (1) Fall, Spring. Prerequisite: one semester of Troubadour Harp (MUED 190) or permission of instructor. Fee: $\$ 22.50$.

MUSP 201. Guitar Lab (1) Fall, Spring. May be repeated. Practical applications of concepts covered in MUS 191, Intermediate Guitar class; continued study of chords, scales, reading and repertoire. Prerequisites: MUS 191 or equivalent and consent of instructor.

MUSP 210. Piano Repertoire I (3) Fall alternate years. Literature from early keyboard music through classical. Prerequisite: consent of instructor.

MUSP 211. Piano Repertoire II (3) Spring alternate years. Literature from Romantic era to present. Prerequisite: consent of instructor.

MUSP 214. Singer's Diction I (2) Fall. Fundamentals and application of the International Phonetic Alphabet (IPA) to selected English and Italian song texts. Instruction and drill in the rules of pronunciation as applied to the singing of these languages. Prerequisite: none.

MUSP 215. Organ Repertoire I (2) Fall alternate years. Literature from 1325 to the present, excluding the music of J.S. Bach. Prerequisite: consent of instructor.

MUSP 216. Organ Repertoire II (2) Spring alternate years. Organ music of J.S. Bach. Prerequisite: consent of instructor.

MUSP 224. Singer's Diction II (2) Spring. Application of the International Phonetic Alphabet (IPA) to selected German and

French song texts. Instruction and drill in the rules of pronunciation as applied to the inging of these languages. Prerequisite: UUSP 214.

MUSP 221, 231-235, 241-245, 261-263, 271272, 281-286. Applied Instruction. For freshmen and sophomores. May be repeated. A limited enrollment course, with registration priority given to students for whom applied study is a degree requirement. Others accommodated on a space-available basis, by audition. One credit hour entitles students to weekly half-hour lessons or equivalent instructional experience; two through four credit hours entitles students to weekly one-hour lessons or equivalent instructional experience, with three and four credits available to performance majors only. Students enrolled for applied instruction have access to practice rooms and equipment with schedules and regulations determined by the College of Musical Arts. Fee for each applied course: $\$ 45$ for one credit hour; $\$ 90$ for two or more credit hours. Lesson times arranged through instructor.

MUSP 221. Applied Percussion (1-4) Fall, Spring, Summer.
MUSP 231. Applied Trumpet ( $1-4$ ) Fall, Spring, Summer.
MUSP 232. Applied French Horn (1-,4) Fall, Spring, Summer.
MUSP 233. Applied Trombone (1-4) Fall, jpring, Summer.
NiUSP 234. Applied Euphonium (1-4) Fall, Spring, Summer.
MUSP 235. Applied Tuba (1-4) Fall, Spring, Summer.
MUSP 241. Applied Flute (1-4) Fall, Spring, Summer.
MUSP 242. Applied Oboe (1-4) Fall, Spring, Summer.
MUSP 243. Applied Clarinet (1-4) Fall, Spring, Summer.
MUSP 244. Applied Saxophone (1-4) Fall, Spring, Summer.
MUSP 245. Applied Bassoon (1-4) Fall, Spring, Summer.
MUSP 261. Applied Piano (1-4) Fall, Spring, Summer. (Permission of instructor required for 2 or more credits)
MUSP 262. Applied Harpsichord (1-4) Fall, Spring, Summer.
MUSP 263. Applied Organ (1-4) Fall, Spring, Summer.
MUSP 271. Para Voice (2) Fall, Spring. No audition required. Fee: $\$ 45$.
MUSP 272. Applied Voice (1-4) Fall, Spring, Summer.
MUSP 281. Applied Violin (1-4) Fall, Spring, Summer.
MUSP 282. Applied Viola (1-4) Fall, Spring, Summer.
MUSP 283. Applied Cello (1-4) Fall, Spring, Summer.
USP 284. Applied Double Bass (1-4) Fall, Spring, Summer.
MUSP 285. Applied Harp (1-4) Fall, Spring, Summer.

MUSP 286. Applied Guitar (1-4) Fall, Spring, Summer.

All students registered for applied instruction are subject to the following regulations:

Jury examinations occur at selected times once each semester of each academic year. All music majors are expected to perform jury examinations. In addition, some areas have special requirements for non-music majors, music minors and music majors and minors in secondary performance media. (See Area Coordinators for details.) Failure to meet expected standards in weekly applied lessons or in jury examinations will be reflected in the course grade. A grade lower than $C$ will result in probationary status in applied instruction for the following semester. The appropriate chair will send a letter to the student indicating the reason(s) for the probationary status, its duration and recommended action for its removal. If the student overcomes the identified deficiencies within the stated period, the probationary status will be lifted and permission will be granted to continue applied instruction as required by the student's degree program. If conditions for removal of the probationary status are not met, the student will be denied registration in applied instruction within the degree program. After one semester, the student may audition for reinstatement.

Jury examinations are appropriate times for students to be evaluated for change of emphasis or degree programs within the College of Musical Arts.

MUSP 238E-239E, 277E-279E, 288E-289E. Large Ensembles (1-2) Fall or Spring. For freshmen and sophomores. May be repeated. Open to any University student who qualifies on the basis of audition. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser.
MUSP A238E. Fall Concert Band (1) Fall. MUSP A238E. Symphonic Band (2) Spring. MUSP B238E. Fall Wind Ensemble (1) Fall. MUSP B238E. Concert Band (1) Spring. MUSP C238E. University Band (1) Spring. MUSP F238E. Athletic Band (1) Spring. MUSP 239E. Marching Band (2) Fall. MUSP 277E. A Cappella Choir (1) Fall, Spring.
MUSP 278E. Collegiate Chorale (2) Fall, Spring.
MUSP A279E. University Women's Chorus (1) Fall, Spring.

MUSP B279E. University Men's Chorus (1) Fall, Spring.
MUSP 288E. Chamber Orchestra (1) On demand.
MUSP 289E. Philharmonia (2) Fall, Spring.

MUSP 264E. Accompanying Techniques I (1) Fall, Spring. Problems involving musical comprehension of solo part together with accompaniment and general introduction to vocal and instrumental accompaniment literature. Prerequisite: MUSP 160 or consent of instructor.

MUSP 265E. Piano Four-Hand Class (1) Fall, Spring. May be repeated. Appropriate four-hand literature. Prerequisite: MUSP 160 or consent of instructor.

MUSP 275. Introduction to Opera Theater (2) Fall. Basic terminology and practices ofopera theatre.

MUSP 300E. Small Ensembles (1) Fall, Spring. For juniors and seniors. May be repeated. Formed under supervision of College of Musical Arts and offered on demand. Open to any University student who qualifies on the basis of audition. Designed to foster independent listening and performance skills and the investigation of appropriate literature. For audition information and other particulars, consult with department chair. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser. The following small ensembles are offered:

## MUSP 300E. Brass

MUSP 300E. Classical Guitar
MUSP 300E. Electric Guitar
MUSP 300E. Euphonium-Tuba
MUSP 300E. Harp
MUSP 300E. Horn Club
MUSP 300E. Jazz
MUSP 300E. Jazz Lab I
MUSP 300E. Jazz Lab II
MUSP 300E. Mixed Chamber
MUSP 300E. Music Theater Productions
MUSP 300E. Percussion
MUSP 300E. Piano Accompaniment
Practicum
MUSP 300E. Saxophone
MUSP 300E. String
MUSP 300E. Trombone Choir
MUSP 300E. Trumpet Guild
MUSP 300E. Varsity Quartet
MUSP 300E. Vocal Chamber Lab
MUSP 300E. Vocal Jazz Ensemble
MUSP 300E. Woodwind
(See also MUCH 300.)
MUSP 305. Conducting I (2) Fall. Fundamental beat and cueing techniques; option of either instrumental or vocal emphasis. Prerequisite: passing grade on freshman placement exam or MUCH 110, or consent of instructor.

MUSP 306. Conducting II (2) Spring. Advanced study and analysis of baton techniques, score reading and rehearsal procedures; option of either instrumental or vocal emphasis. Prerequisite: MUSP 305 or consent of instructor

WUSP 310. Vocal Repertoire for the Young Singer (1) Fall. Designed for music education choral/musical theater majors only. Late 19th century to present with emphasis on British and American song literature for young singers.

MUSP 311. Vocal Repertoire i(2) Fall. Late 19th century to present British and American song literature; repertoire for high school vocal solo contest; Scandinavian and Russian song literature. Prerequisite: consent of instructor.

MUSP 312. Vocal Repertoire II (2) Spring alternate years. 19th and 20th century French and German art song literature. Prerequisite: consent of instructor.

PuSP 360. Sight Reading II (1) Spring. Rapid comprehension of complex intervallic and mythmic patterns; special attention to ensemble precision. Prerequisite: MUSP 160 oi consent of instructor.

MUSP 361. Styie and Interpretation (1) Fall, Spring. May be repeated. Supervised preparation and analysis of selected works from the piano repertoire; emphasis on style and interpretation. Prerequisite: Consent of instructor.

MUSP 364. Accompanying Techniques II (1) Spring. MUSP 264 continued, using more advanced literature. Prerequisite: MUSP 264. or consent of instructor.

MUSP 367. Piano Pedagogy 1 (3) Fall. Methods, materials and teaching techniques for the beginning pre-college student.
Prerequisite: consent of instructor.
MUSP 368. Piano Pedagogy II (3) Spring alternate years. Methods, materials and teaching techniques for the intermediate procollege student. Prerequisite: consent of instructor.

MUSP 370 . Vocal Pedagogy (3) Spring. Basie concepts of vocal pedagogy; methods, materials and terminology. Prerequisite: consent of instructor.

MUSP 378E. Opera Theater (2) Fail, Spring. May be repeated. Development of stage techniques for more advanced students in productions of scenes and complete operas.Prerequisite: MUSP 275 and consent of instructor.

Mige 396. Service Playing i (2) Fall alternate years. Hymn playing, transposition, modulation, improvisation and accompanying at the organ. Prerequisite: consent of instructor.

MUSP 397. Service Playing II (2) Spring alternate years. MUSP 396 continued. Prerequisite: MUSP 396 or consent of instructor.

MUSP 410. Harpsichord Repertoire I (3) On demand. Keyboard literature to 1700 based on original source material and contemporary editions; emphasis on performance. Prerequisite: consent of instructor.

MUSP 411. Harpsichord Repertoire II (3) On demand. Solo harpsichord literature from 1700 to the present, emphasis on performance. Prerequisite: MUSP 410 or consent of instructor.

MUSP 415. Organ Construction (2) On demand. History of the design and construction of the organ. Prerequisite: consent of instructor.

MaUP 416. Church Music (2) On demand.Music of the major Western churches; plainsong, hymnology, liturgies. Prerequisite: consent of instructor.

MUSP 421, 431-435, 441-445, 461-463, 471472, 481-486. Applied Instruction. For juniors and seniors. May be repeated. A limited enrollment course, with registration priority given to students for whom applied study is a degree requirement. Others accommodated on a space-available basis, by audition. One credit hour entitles students to weekly half-hour lessons or equivalent instructional experience, two through four credit hours entitles students to weekly onehour lessons or equivalent instructional experience, with three and four credits available to performance majors only. Students enrolled for applied instruction have access to practice rooms and equipment with schedules and regulations determined by College of Musical Arts. Fee for each applied course: $\$ 45$ for one credit hour; $\$ 90$ for two or more credit hours. Lesson times arranged through the instructor.

MUSP 421. Applied Percussion (1-4) Fall, Spring, Summer.
MUSP 431. Applied Trumpet (1-4) Fall, Spring, Summer.
MUSP 432. Applied French Horn (1-4) Fall, Spring, Summer.
MUSP 433. Applied Trombone (1-4) Fall, Spring, Summer.
MUSP 434. Applied Euphonium (1-4) Fall, Spring, Summer.
MUSP 435. Applied Tuba (1-4) Fall, Spring, Summer.
MUSP 441. Applied Flute (1-4) Fall, Spring, Summer.
MUSP 442. Applied Oboe (1-4) Fall, Spring, Summer.
MUSP 443. Applied Clarinet (1-4) Fall, Spring, Summer.
MUSP 444. Applied Saxophone (1-4) Fall, Spring, Summer.
MUSP 445. Applied Bassoon (1-4) Fall, Spring, Summer.
MUSP 461. Applied Piano (1-4) Fall, Spring, Summer. (Permission of instructor required for 2 or more credits hours.)

MUSP 462. Applied Harpsichord $(1,2,3,4)$ I, II.

MUSP 463. Applied Organ ( $1,2,3,4$ ) Fall, Spring, Summer.
MUSP 471. Para-Voice (2) Fall, Spring. No audition required. Fee: $\$ 45$.
MUSP 472. Applied Voice ( $1,2,3,4$ ) Fall, Spring, Summer.
MUSP 481. Applied Violin ( $1,2,3,4$ ) Fall, Spring, Summer.
MUSP 482. Applied Viola ( $1,2,3,4$ ) Fall, Spring, Summer.
MUSP 483. Applied Cello (1,2,3,4) Fall, Spring, Summer.
MUSP 484. Applied Double Bass (1,2,3,4) Fall, Spring, Summer.
MUSP 485. Applied Harp ( $1,2,3,4$ ) Fall, Spring, Summer.
MUSP 486. Applied Guitar ( $1,2,3,4$ ) Fall, Spring, Summer.

All students registered for applied instruction are subject to the following regulations:

Jury examinations occur at selected times once each semester of each academic year. All music majors are expected to perform jury examinations. In addition, some areas have special requirements for non-music majors, music minors and music majors and minors in secondary performance media. (See Area Coordinators for details.) Failure to meet expected standards in weekly applied lessons or ir: jury examinations will be reflected in the course grade. A grade lower than C will result in probationary status in applied instruction for the following semester. The appropriate chair will send a letter to the student indicating the reason(s) for the probationary status, its duration and recommended action for its removal. If the student overcomes the identified deficiencies within the stated period, the probationary status will be lifted and permission will be granted to continue applied instruction as required by the student's degree program. If conditions for removal of the probationary status are not met, the student will be denied registration in applied instruction within the degree program. After one semester, the student may audition for reinstatement.

Jury examinations are appropriate times for students to be evaluated for change of emphasis or degree programs within the College of Musical Arts.

MUSP 438E-439E, 477E-479E, 488E-489E. Large Ensembles (1-2) Fall or Spring. For juniors and seniors. May be repeated. Open to any University student who quallfies on the basis of audition. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser.

MUSP A438E: Fall Concert Band (1) Fall. MUSP A438E. Symphonic Band (2) Spring MUSP D438E. Fall Wind Ensemble (1) Fall. MUSP D438E. Concert Band (1) Spring. MUSP J438E. University Band (1) Spring. MUSP M438E. Athletic Band (1) Spring. MUSP 439E. Marching Band (2) Fall.
MUSP 477E. A Cappella Choir (1) Fall, Spring.
MUSP 478E. Collegiate Chorale (2) Fall, Spring.
MUSP A479E. University Women's Chorus (1) Fall, Spring.

MUSP D479E. University Men's Chorus (1)

## Fall, Spring.

MUSP 489E. Philharmonia (2) Fall, Spring.
MUSP 453. Brass Pedagogy (2) Fall. Teaching techniques and materials for brass instruments. Prerequisite: consent of instructor.

MUSP 454. Woodwind Pedagogy (2) Spring. Teaching techniques and materials for woodwind instruments. Prerequisite: consent of instructor.

MUSP 458. String Pedagogy (2) Spring. Upper and lower strings. Principles of teaching string instruments. Investigation of related literature and materials. Prerequisite: consent of instructor.

MUSP 459. Organ Pedagogy (2) Spring Iternate years. On demand. Principles, techniques and literature applied to various levels of organ study. Prerequisite: consent of instructor.

MUSP 466. Piano Pedagogy Practicum (1) Fall, Spring. May be repeated. Laboratory in supervised piano teaching, both private and classes. Prerequisite: MUSP 367 or consent of instructor.

MUSP 470. Readings, Research and Performance in Music (1-4) Fall, Spring, Summer. May be repeated. Directed independent readings, research and/or performance related to performance studies. Prerequisites: consent of instructor and department chair.

MUSP 473. Vocal Pedagogy Practicum (1) Fall, Spring. May be repeated. Supervised teaching of both private and class voice. includes participation in designated segments of MUED 240 and/or 340. Prerequisite: MUSP 370 or consent of instructor.

MUSP 495. Senior Recital (2) Fall, Spring, Summer. May be repeated. For performance studies majors only. Required full recital for all degree options. Repertoire requirements determined by respective areas/studios. Prerequisite: satisfactory completion of ecital jury and consent of department chair.

## Nursing (NURS)

NURS 100. Orientation to Nursing (1) Fall. Assists freshmen in choosing nursing as major and career goal; professional nurse's role, history of nursing, future trends in relation to current U.S. health care delivery system.

NURS 255. Human Anatomy (3) Fall. This course considers all anatomical structures related to all organs and body systems.

NURS 257. Human Physiology (3) Fall. Function of various body systems. Prerequisite: NURS 255.

NURS 259. Microbiology and Infectious Disease Processes (3) Spring. Structure and function of bacteria and viruses; antigenantibody reactions, immunology, serology, growth and inhibition of microorganisms Pathologic responses to infection; pathogenesis and disease, principal infectious diseases of man. Prerequisite: NURS 257.

## NURS 301. Introduction to Nursing

Agency (2) Summer. This course provides opportunities for the acquisition of knowledge of basic nursing concepts, principles and the development of selected psychomotor nursing skills. Students learn in a laboratory setting with simulated patients. Prerequisite: Admission to major. Lab fee.

NURS 311. Nursing Agency I (3) Fall. Continuation of nursing skill development on an intermediate level. Introduction to health assessment, beginning communication strategies, holism, and self-care deficit theory of nursing. Skills are experienced within college laboratory. Prerequisite: NURS 301. Lab fee.

NURS 312. Nursing Care of the Adult I (6) Fall. care of adults with common nursing problems using Orem's Self-Care Deficit Theory of Nursing. Clinical includes gerontological and rehabilitation concepts and skills. Prerequisites: NURS 301. Pre or Corequisite: NURS 311 and 314. Lab fee.

NURS 313. Gerontological \& Rehabilitation Nursing (3) Fall. Focus on aging and rehabilitation theories, including Orem's SelfCare Deficit Theory of Nursing and concepts related to older adults. Prerequisites: NURS 301. Pre or Corequisite: NURS 311 and 314.

NURS 314. Introduction to Pathophysiology \& Pharmacology (4) Fall, Spring. Basic concepts of pathophysiology and pharmacology. Preparation for critical thinking in application of concepts to nursing practice. Prerequisites: NURS 301; Admission to major for RN's.

NURS 321. Nursing Agency II (2) Spring. Health assessment, nursing and advanced communication skills are practiced within the laboratory setting. Assertiveness skills, group dynamics and assessment of self-care agency and self-care requisites are explored. Prerequisites: NURS 311. Lab fee.

NURS 352. Foundational Nursing Technologies (2). Students learn selected nursing technological skills in college laboratory with simulated clients. Self-paced modular learning experiences help students develop beginning cognitive knowledge and psychomotor skills.

NURS 362. Women's Health Nursing (5) Fall, Spring. Focus on knowledge needed in nursing care of women within a self-care framework. Clinical experiences provide for holistic care across the life span with emphasis on childbearing. Prerequisites: NURS 311, 312, 313, 314. Pre- or corequisite: NURS 321. Lab fee.

NURS 363. Mental Health Nursing (5) Fall, Spring. Psychosocial influences on self-care agency are presented within the context of culturally competent nursing care. These concepts are interpreted within self-care deficit theory and applied in clinical experience. Prerequisites: NURS 311, 312, 313 314. Pre- or Corequisite: NURS 321. Lab fee.

NURS 364. Parent-Child Nursing (5) Fall, Spring. The student has opportunities to gain experience in designing, implementing and evaluating nursing systems for infants, children and adolescents within families and groups. Experiences are in class and clinical laboratories. Prerequisites: NURS 31.1, 312, 313, 314. Pre- or Corequisite: NURS 321. Lab fee.

NURS 401. Community Health Nursing (5) Fall, Spring. Design and implementation of nursing care for aggregates and communities. Individual and family care is provided within the context of population health. Prerequisites: NURS 311, 312, 313, 314 for basic students; NURS 376, 377, 378 for RN/ BSN students. Pre- or Corequisites: NURS 321 for basic students; NURS 314 for RN/ BSN students. Lab fee.

NURS 402. Leadership and Management in Nursing (3) Spring. Principles and theories of managementlieadership as a basis for provision of nursing care. Prerequisites: NURS 321, 362, 363, 364, 401.

NURS 403. Adult Health Nursing II (7) Spring. Leadership/management principles are applied in design and implementation of nursing systems for individuals and families with complex problems. Prerequisites: NURS 321, 362, 363, 364, 401. Pre- or Corequisites: NURS 402, 495, 496. Lab fee.

NUPS 404. Interdisciplinary Ethics (1) Fall, Spring. Interdisciplinary dialogue among health professionals. Explores potential conflicts among nurses, physicians and other health care providers. Includes conflict resolution, truth telling, withdrawing nutrition and hydration, whistle blowing and assisted suicidc. Prerequisites: First semester nursing courses or RN, or permission of instructor. Elective course.

NUAS 405. Oncology Nursing (3) Fall, Spring. Focuses on concepts, knowledge and skills necessary to assist individuals who have cancer and their families. Emphasizes helping people to care for themselves throughout their illness. Prerequisite: First semester nursing courses or RN, or permission of instructor. Elective course.

NURS 407. Emergency Nursing Elective: Concepts of Practice (2) Fall, Spring. Designed to stiudy nursing systems related to episodic, primary and acute care in the emergency care seting. Prerequisite: completion of junior level nursing courses. Elective course.

NURS 408 . intraoperative Nursing Elective (2) Fall, Spring. Designed to enhance the student's knowledge base and clinical competence in developing nursing agency in the operating room. Prerequisite: completion of junior-level nursing courses.

NUPS 410. Computer Trends in Nursing and Health Care (2) Spring. Focuses on varlous trends and uses of computers in nursing and health care including hospital informetion sysiems, health care research and computer-assisted instruction, and related legal ethical issues. Elective course.

NuRS 417. Hearth Care Aspects of Human Sexuality (3) Fall, Spring. Impact on health care of selected components of human sexuality. Aspects include sexual assessmont, changes during the life span and disturbances in sexuality due to health conditions. Prerequisites: First semester nursing courses or RN. Elective course.

NURS 460. Gritical Care Nursing (3) Fall, Spring. Dilinical elecilive. The student works with a preceptor in a critical care unit to design and implement nursing systems for clients with critical health states. Prerequisites: NURS 311, 312, 313, 314, 321, or RN. Lab fee.
$\triangle$ UURG 470 . Independent Study in Nursing (1-3) Fall, Spring, Summer. Pesearch or project designed with guidance of a faculty member. Open to seniar students with consent of a faculty member. May be repeated.

ANURS 485, Nursing Research (3) Fall, Spring. Introduction to concepts, issues and processes in nursing research. Emphasis on
the research role, critical analysis and evaluation of published research for use in nursing practice. Prerequisites: NURS 311, $312,313,314$, statistics for basic students; NURS 376, 377, 378, 314, statistics for RN/ BSN students.

## $\operatorname{ANURS}$ 496. Professional Perspectives (3)

Fall, Spring. Current professional issues facing nursing are explored. Political, socioeconomic, ethical, legal and professional perspectives are critically examined and discussed. Prerequisites: NURS 321 for basic students; admission to major for RN/ BSN students.

## THE FOLLOWING COURSES IN THE

 NURSING MAJOR ARE COMPLETED BYTHE RN/BSN STUDENTS. (Note: NURS $314,401,495$ and 496, described above, are taken both by the basic students and by those in the RN/BSN track.)
$\triangle$ NURS 376. Theoretical Foundations in Nursing (2) Fall. Focuses on the registered nurse student's professional transition to baccalaureate education and theory-based practice.
©NURS 377. Health Assessment (3) Fall. Focuses on the continued development of health history, physical and psychosocial assessment skills across the life span. Prerequisite: Admission to nursing major. Lab fee.

ANURS 378. Therapeutic Interpersonal Strategies (3) Fall. Focuses on personal development of self-care agency, development of therapeutic communication strategies and effective group process skills. Prerequisite: admission to nursing major.

## NURS 379. Aging and Biopsychosocial

 Nursing of the Adult (5) Spring. Focuses on application of the Self-Care Deficit Nursing Theory with the integration of biopsychosocial, aging, rehabilitation and family theories in development of a nursing system for individuals and families. Prerequisites: NURS 376, 377, 378. Pre- or Corequisite: NURS 314. Lab fee.NURS 388. Health Assessment 1 (2) Fall, Spring, Summer. Focus on development of physical and psychosocial assessment skills as part of the nursing process with emphasis on the adult client. Lab fee.

NURS 398. Interpersonal Strategies (3). Assessment and dveelopment of therapeutic communication skills in dyads and in groups for the RN student.

NURS 399. Professional Nursing II (3) Use of Self-Care Deficit Theory of Nursing in nursing practice, relationship of theories and relevant concepts from other disciplines to the nursing process. Writing intensive course.

NURS 412. Nursing Leadership \&
Management (5) Fall. For RNs. Focus on design and management of nursing systems for individuals, families, and groups and development of leadership and management skills. Clinical application in various settings. Prerequisites: NURS 376, 377, 378. Pre or Corequisite: NURS 314. Lab fee.

## Operations Research (OR)

The availability of summer classes and electives is subject to demand.
$\triangle O R$ 380. Introduction to Management Science (3) Fall, Spring, Summer. Introduces various quantitative approaches for modeling and solving business problems. Topics include linear programming modeis and solution methods, problem formulation via integer and goal programming, decision analysis under uncertainty, and simulation. Prerequisites: MIS 200 and STAT 211.

OR 480. Linear and Integer Programming (3). Modeling industrial and public administration problems via linear, goal and integer programming: L.P. solution techniques, sensitivity analysis, dual, parametric programming; cutting-plane and branch and bound method; current topics in integer programming. Prerequisite: OR 380 or CS 440 or consent of instructor.

OR 482. Computer Simulation of Management Sysiems (3). Techniques of setting up stochastic models for inventory, production, queuing, scheduling, economic systems; implementing these models using computer simulation languages (e.g. GPSS). Prerequisites: STAT 212 or MATH 442, and at least one computer programming course.

OR 485. Probability Models for Decision Making (3). Problems of incorporating risk into decision models; queuing theory; stochastic inventory models; Markov chains, stochastic mathematical programming. Prerequisite: OR 380 or CS 440.

OR 487. Network Analysis (3). Network techniques for modeling and analysis of industrial management problems: project management and resource allocation with PERT/CPM; transportation, transshipment, assignment, shortest path and minimal spanning tree models; maximal flow problems in single and multi-commodity networks; out-of-kilter algorithm; advanced topics in network analysis. Prerequisite: $O R$ 480 or CS 440.

OR 489. Applied Nonlinear and Dynamic Programming (3). Modeling decision problems in business and public administration via nonlinear and dynamic programming. Topics include quadratic and separable programming, penalty function, search
methods; geometric programming, dynamic programming with discrete and continuous jariables. Prerequisite: OR 480 or CS 440.

OR 491. Studies in Operations Research (1-3) On demand. Investigation of selected areas of contemporary problems. May be offered individually and in classes, depending on student needs and nature of material.

## Philosophy (PHIL)

1/APHIL 101. Introduction to Philosophy (3) Fall, Spring. Systematic study of enduring human concerns about God, morality, society, the self and knowledge.

TAPHIL 102. Introduction to Ethics (3) Fall, Spring. Discussion of ethical concepts such as good and evil and right and wrong in the context of contemporary moral issues; major ethical theories as a basis for dealing with contemporary moral concerns.

9 $\triangle$ PHIL 103. Introduction to Logic (3) Fall, Spring. Basic concepts of logic; how to distinguish arguments from non-arguments, premises from conclusions. Methods for evaluating arguments, and how to recognize typical mistakes in reasoning.
PHIL 202. History of Ethics (3) Fall or Spring. A study of the classic moral philosofiers who have shaped modern thought on the subject, including Aristotle, Hume, Kant and Mill. Attention will be paid to the views of each on moral psychology.

PHIL 203. Philosophical Methods (3) Fall or Spring. Emphasis on developing skills in reading and writing philosophy. Required for majors and recommended for anyone else intending to take upper-level courses in philosophy.

9 $\triangle$ PHIL 204. Aesthetics (3) Fall, Spring: Meaning of "beauty" or aesthetic value in art and nature, approached problematically and applied to present-day experiences.

PHIL 210. Philosophy of Development of Persons (3) Fall, Spring. Self-development and criteria for evaluating life plans. Concepts of self-esteem and social responsibility applied to personal and counseling situations.

TPHIL 211. History of Ancient Philosophy (3) Fall. Progress of Greek philosophy from its earliest origins in Greece through the Presocratics, Plato and Aristotle, concluding with main themes of Hellenistic, Roman and medieval philosophy. PHIL 211 can function as an excellent introduction to philosophy.

PHIL 212. History of Modern Philosophy (3) Spring. Focus on rationalists (Descartes and Leibniz), empiricists (Locke, Berkeley, and Hume) and Kant. Attention to the
emergence of skepticism and the rise of modern science as influences on modern philosophy; can function as an excellent introduction to philosophy.

PHIL 216. Introduction to the Philosophy of Mind (3) Fall or Spring. The nature of persons, the relation of mind and body, free will, language and thought, thought and action, the nature of mental phenomena and the problem of other minds (humans, animals and machines).
$\triangle$ PHIL 217. World Religions (3) Fall or Spring. Fundamental tenets of major world religions--Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam, with the cultural backgrounds of lands of their development.

PHIL 218. Legal Reasoning (3) Fall or Spring. The logic of judicial decision making, from "mechanical jurisprudence" to various forms of judicial discretion. The role of definition in legal reasoning; and several theories of statutory interpretation.

PHIL 225. Contemporary Moral Issues (3) Fall or Spring. Study of contemporary moral problems. Topics may include abortion, affirmative action, the right to die, and animal rights.

ПPHIL 230. Scientific Reasoning (3) Fall or Spring. Study of the scientific method which develops skills for interpreting scientific findings and evaluating theories, tests and causal and statistical claims. One component deals with decision-making procedures based on these evaluations. No prerequisites.

PHIL 235. Decision and Game Theory (3)
Fall or Spring. A survey of decision theory covering basic issues in utility theory, decision making under risk or uncertainty, game theory and social choice theory.

PHIL 240. Topics in Philosophy (3) Fall, Spring. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.

PHIL 245. Philosophy of Feminism (3) Fall or Spring. Philosophical presuppositions and specific proposals of feminists; views on sex roles, human welfare, justice and equality, rights, self-actualization, self-respect, autonomy, exploitation, oppression, freedom and liberation, reform and revolution.

PHIL 303. Symbolic Logic (3) Fall or Spring. Notation and proof procedures used by modern logicians to deal with special problems beyond traditional logic; propositional calculus, truth tables, predicate calculus, nature and kinds of logical proofs.

PHIL 311. History of Medieval Philosophy (3) Fall alternate years. Major philosophical positions of Middle Ages; St. Augustine through Renaissance philosophers.

PHIL 312. Political Philosophy (3) Fall or Spring. Some of the classics of political thought, including works by Hobbes, Locke, Rousseau, Smith and Marx. Topics include liberty and authority, justice and equality.

PHIL 315. American Thought (3) Fall or Spring. Philosophical thought in America; emphasis on pragmatists (Peirce, James, Dewey); Natural Rights philosophy, transcendentalism, other major figures such as Royce, Santayana, Whitehead.

PHIL 316. Philosophy of Psychology (3) Fall or Spring. Study of philosophical underpinnings and implications of major movements in psychology, including the discovery of the unconscious, behaviorism, cognitive science, artificial intelligence and sociobiology.

APHIL 317. Philosophy of Religion (3) Fall or Spring. Nature of religion; gods and/or God; faith, revelation and religious belief; evil and righteousness; meaning of life. Readings from variety of sources, largely contémporary.

PHIL 318. Philosophy of Law (3) Fall, Spring. Philosophical foundations of legal system; essential nature of law and relation to morality; liberty, justice and legal responsibility (intention, human causality, negligence, mens rea, fault, etc.) and punishment. Prerequisite: for philosophy major section, PHIL 102 or 312.

APHIL 319. Philosophy of Death and Dying (3) Fall, Spring. Conceptual, metaphysical and epistemological issues related to nature of death; existential issues related to human significance of death for individual and community; normative issues related to care of dying.
$\triangle$ PHIL 320. Business Ethics (3) Fall, Spring. Value conflicts that arise in business situations and philosophical ways of resolving them including issues involving the social responsibility of business people. Prerequisite: for philosophy major section, PHIL 102 or 312.

PHIL 321. Indian and Chinese Philosophy (3) Fall or Spring. Some non-Western philosophical traditions. Possible topics include Taoism, Confucianism, Buddhism and Vedanta; epistemology, formal inference, causality, metaphysics, mind-body relationships.

PHIL 322. Philosophy Across Cultures (3) Fall or Spring. Philosophical dimension of the structure and content of "culture," including examination of the presuppositions of major
word cultures, and a philosophical examination of the relationships between cultural perceptions and the purported evidence for南em.

TPHIL 325. Socialism, Capitalism and Democracy (3) Fall or Spring. Theory behind modern capitalism, socialism and democracy. Topics include individualism, community, freedom, justice and democratic representation.

PHH 327. Philosophy of Punishment (3) Fall, Spring. Basic theories of punishment and whether punishment is justified. Issues include punishment versus rehabilitation, capifal punishment, the insanity defense and related issues.

PHI 330. Theory of Knowledge (3) Fall or Spring. Theories of knowledge, truth, belief and evidence.

PNIL 331. Existentialism (3) Fall or Spring. Various existential themes, including the meaning of life, human freedom, the limits of reason, the meaning of death, and the individual vs. society. Kierkegaard, Nietzsche, Dostoevsky, Camus, Sartre, Jaspers, Buber and others comprise the reading.
$\Delta$ PHil 332. Environmental Ethics (3) Fall, Spring. Critical evaluation of prevalent standards used in responding to longstanding and emerging environmental problems.

Phin 334. Mhilosophy in Literature (3) Fall or Spring. Death, perception of self, conflict of values occurring in novels, plays and poetry from various cultures. Content may vary from instructor to instructor, and from semester to semester. May be taken only once for credit.

DHil. 335. Phifosophy of Film (3) Fall or Spring. Aesthetic theories concerning definition of film as distinctive art form; criterie for ovaluation of films. Popular, documentary, ant and experimental films shown in class.

PHIL 340. Probiems in Philosophy (3) Fall, Spring. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.

APHIL 342. Medical Ethics (3) Fall, Spring. Selected topics such as genetic engineering, euthanasia, honesty with the dying, and human experimentation viewed from perspective of representative ethical theories. Prerequisite: for philosophy major section, PHIL 102 or 312.

PHIL 344. Computers and Philosophy (3) Fall, Spring. Philosophical dimensions of the impact oi computers on society with emphasis on the issues of ethics and
artificial intelligence. Prerequisite: CS 101, its equivalent or permission of the instructor.

PHIL 395. Workshop on Current Topics (14) Fall, Spring on demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format is used. Requirements are usually completed within this expanded time format. May be repeated if topics differ and adviser approves.

PHIL 406. Philosophy of Language (3) Fall alternate years. Historical and contemporary theories of meaning; their use in resolving traditional philosophical controversies and in providing foundation for contemporary analytic philosophy; various interdisciplinary connections.

PHIL 411. History of Contemporary AngloAmerican Philosophy (3) Fall or Spring. Major twentieth century movements in the analytic tradition, including ideal language philosophy, ordinary language philosophy, and naturalized, holistic philosophy, including such philosophers as Russell, Austin, Wittgenstein, Quine, Davidson, Putnam and Rorty. Prerequisite: six hours of philosophy including PHIL 212 or 312.

PHIL 412. Contemporary Continental Philosophy (3) Fall or Spring. Major twentieth century movements in France and Germany, beginning with the phenomenology of Husseri, proceeding through Sartre and Heidegger and including philosophical hermeneutics, critical theory, the theory of communication and genealogies of values, with attention to such philosophers as Gadamer, Ricoeur and Derrida, Adorno, Habermas and Foucault. Prerequisite: six hours of philosophy including PHIL 212 or 312.

PHIL 414. Metaphysics (3) Fall or Spring; Alternate years. Survey of traditional metaphysical issues and concepts combined with in-depth treatment of some metaphysical problem(s). Prerequisites: two philosophy courses from PHIL 245, 316, 317, 330, 344, 406, 431, 433.

PHIL 415. Topics in American Philosophy (3) Fall or Spring. Theme or themes central to American philosophy. Prerequisite: one course in PHIL (excluding PHIL 103) or consent of instructor.

PHIL 417. Skepticism and Faith (3) Fall or Spring. In-depth examination of modern challenges to religious faith and religious responses. Topics such as evolution, societal secularization, the autonomy of morals and naturalistic explanations of religion and religious experience. Prerequisites: PHIL 217 and $317 ; 412$ is recommended. May be repeated with different topics.

PHIL 418. Topics in the Philosophy of Law (3) Fall or Spring. In-depth examination of such topics as the nature and analysis of law, legal reasoning, judicial decision, hard cases, responsibility, causation and fault, the mental element in crime, formal and material principles of justice and the legal enforcement of morality. Prerequisites: PHIL 318 and one of PHIL 102, 320, 325, 332, 342, 425. May be repeated with different topics.

PHIL 425. Moral and Social Philosophy (S) Fall or Spring. An in-depth treatment of some theme(s) in social philosophy combined with a survey of traditional ethical theories as a background to social philosophy. Prerequisites: PHIL 102 and PHIL 318 or 320 or 325 or 332 or 342.

PHIL 431. Topics in Philosophy of Science (3) Fall or Spring. Content varies from year to year. Topics include: nature of scientific expianation, causality, contemporary empiricism, philosophy of biology, methods, presuppositions, concepts of behavioral sciences. May be repeated for credit. Prerequisite: three hours in PHIL and/or coursework in sciences or consent of instructor.

## PHIL 432. Philosophy of Social Science

(3) Fall or Spring. Methods, ideals and politics of social inquiry. Topics include the very idea of a social science, explanation, prediction and laws, problems of interpretation and meaning, the nature of rationality, reductionism, individualism and holism, and objectivity and values.

PHIL 433. Philosophy and Physics of Space and Time (3) Spring. Physical theories of space and time from philosophical, scientific and historical points of view. Topics include Zeno's paradoxes, Greek concepts of space and time, classical Newtonian world view, general ideas of modern theory of relativity and cosmology. Course presupposes high school level mathematics only. Cross-disciplinary; crosslisted as PHYS 433.

PHIL 440. Senior Seminar (3) Fall or Spring. Intensive investigation of a single philosophical problem from a number of different perspectives. Topics vary from year to year. Open to philosophy majors with junior or senior standing, or others by permission of the instructor.

PHiL 442. Philosophy of Miedlcine (3) Fall or Spring. In-depth examination of selected issues in medical epistemology, philosophy of science and the philosophy of mind, drawing on the continental philosophical tradition to examine professional and social constructs and their impact on the therapeutic relationship. Prerequisites: PHIL 342 and 412. May be repeated with different topics.

PHIL 445. Topics in the Philosophy of Business and Economics (3) Fall or Woring. In-depth examination of such oncepts as profit and the profit motive, egoism in economic activity, the moral limits of markets and market behavior, ethical problems arising in nonprofit organizations and socialist economies, as well as truth in advertising, cover-ups and whistleblowing. Prerequisite: PHIL 312. May be repeated with different topics.

PHIL 470. Readings and Research (1-3) Fall, Spring. Supervised independent work in selected areas. Prerequisites: twelve hours of PHIL and consent of chair of department. May be repeated to six hours.

PHIL 480. Seminar in Philosophy (3) Fall, Spring. In-depth examination of one specific philosopher, philosophical movement or problem. Determined by need and interest of student. Prerequisite: three hours in PHIL (excluding PHIL 103) or consent of instructor.

## Physical Education, General (PEG)

APEG 100. Physical Education General (1) Fall, Spring, Summer. Each activity course develops the knowledge, understanding and skills pertinent to the activity. Most activities re coeducational. Offerings each term will Ary. Graded S/U.

PEG 101. Aclapted Physical Education. For students with physical limitations. Department permission required.
$\triangle P E G$ 104. Aerobic Dance.
$\triangle P E G$ 105. Intermediate Aerobic Dance.
PEG 106. Archery.
PEG-107. Baidminton.
$\triangle$ PEG 108 Basketball.
PEG 109. Billiards. $\$ 20$ fee required.
$\triangle P E G$ 111. Bowling. $\$ 25$ fee required. Shoe rental fee extra.
PEG 112. Intermediate Bowling. \$25 fee required. Shoe rental fee extra:
PEG 113. Canoeing. $\$ 85$ fee required.
PEG 114. Cheerleading Gymnastics.
PEG 115. Colorado Ski Weekend. Extra fee of approximately $\$ 300$ required.
PEG 117. Cycling.
PEG 118. Curling. $\$ 15$ fee required.
PEG 121. Ballroom Dance II.
PEG 122. Classical Ballet I.
PEG 123. Classical Ballet II.
PEG 124. Classical Ballet III.
PEG 130. Modern Dance I.
PEG 131. Modern Dance II.
PEG 132. Modern Dance III.
PEG 134. Tap Dance II.
PEG-136. Diving-Introduction.
PEG 137. Intermediate Diving.
PEG 139. Downhill Skiing. $\$ 92$ fee squired.
PEG 140. Exercise and Conditioning.
PEG 141. Fencing.
$\triangle P E G$ 142. Intermediate Fencing.
$\triangle$ PEG 143. Fitness Walking.
$\triangle$ PEG 144. Coed Flag Football.
$\triangle$ PEG 146. Golf. $\$ 5$ fee required.
PEG 147. Intermediate Golf. $\$ 10$ fee required.
PEG 148. Advanced Golf. $\$ 20$ fee required.
PEG 149. Beginning Gymnastics Apparatus 1.
PEG 150. Intermediate Gymnastics
Apparatus II.
PEG 151. Handball.
PEG 153. Basic Hockey. $\$ 15$ fee required. Skate rental extra fee.
PEG 154. Advanced Hockey. $\$ 15$ fee required. Skate rental extra fee.
PEG 156. English Horsemanship. $\$ 135$ fee required.
PEG 157. Western Horsemanship. $\$ 135$
fee required.
PEG 158. Water Aerobics.
PEG 160. Beginning Ice Skating. $\$ 15$ fee required. Skate rental extra fee.
PEG 161. Figure Skating. $\$ 15$ fee required.
Skate rental extra fee.
PEG 162. Precision Skating. $\mathbf{\$ 2 0}$ fee
required. Skate rental.extra fee.
PEG 163. Jogging.
PEG 164. Karate.
PEG 165. Racquetball.
PEG 166. Intermediate Racquetball.
PEG 167. Advanced Racquetball.
PEG 168, Self Defense.
PEG 169. Sailing. $\$ 85$ fee required.
PEG 170. Skin Diving/Snorkeling. $\$ 10$ fee required.
PEG 171. Soccer.
PEG 172. Intermediate Soccer.
PEG 173. Softball - Men.
PEG 174. Softball - Women.
$\triangle P E G$ 175. Softball - Coed.
PEG 176. Squash.
PEG 177. Intermediate Squash.
PEG 178. Life Guard Training.
PEG 180. Beginning Swimming.
PEG 181. Intermediate Swimming.
PEG 182. Advanced Swimming.
$\triangle P E G$ 183. Tennis.
PEG 184. Triathalon Training.
PEG 185. Tumbling and Gymnastics.
$\triangle P E G$ 186. Volleyball.
$\triangle P E G$ 187. Weight Training.
PEG 188. Intermediate Weight Training.
PEG 189. Whitewater Rafting. $\$ 104$ fee
required.
$\triangle$ PEG 191. Tension Management.
$\Delta$ PEG 200. Physical Education General (1)
Fall, Spring, Summer. Develops knowledge, understanding and skills pertinent to the activity. Most activities are coeducational. Offerings vary each term. May be taken for grade or S/U. See Kinesiology (KNS) and
Dance (DANC) for additional activity offerings.

PEG 201. Adapted Physical Education. For students with physical limitations. Department permission required.
PEG 202. Adaptive Instructor's Clinic. $\triangle$ PEG 204. Aerobic Dance.
$\triangle P E G$ 205. Intermediate Aerobic Dance.

PEG 206. Archery.
PEG 207. Badminton.
$\triangle$ PEG 208. Basketball.
PEG 209. Billiards. $\$ 20$ fee required.
$\triangle$ PEG 211. Bowling: $\$ 25$ fee required. Shoe rental extra fee.
PEG 212. Intermediate Bowling. $\$ 25$ fee
required. Shoe rental extra fee.
PEG 214. Cheerleading Gymnastics.
PEG 217. Cycling.
PEG 218. Curling. $\$ 15$ fee required.
PEG 221. Ballroom Dance II.
PEG 222. Classical Ballet I.
PEG 223. Classical Ballet II.
PEG 224. Classical Ballet III.
PEG 230. Modern Dance I:
PEG 231. Modern Dance II.
PEG 232. Modern Dance III.
PEG 234. Tap Dance II.
PEG 236. Diving-Introduction.
PEG 237. Intermediate Diving.
PEG 240. Exercise and Conditioning.
PEG 241. Fencing.
PEG 242. Intermediate Fencing.
$\triangle$ PEG:243. Fitness Walking.
$\triangle$ PEG 244. Coed Flag Football.
$\triangle$ PEG 246. Golf. $\$ 5$ fee required.
PEG 247. Intermediate Golf. $\$ 10$ fee required.
PEG 248. Advanced Golf. $\$ 20$ fee required.
PEG 249. Beginning Gymnastics Appara-
tus II.
PEG 250. Intermediate Gymnastics
Apparatus II.
PEG 251. Handball.
PEG 253. Basic Hockey. $\$ 15$ fee required.
Skate rental extra fee.
PEG 258. Water Aerobics.
PEG 260. Beginning Ice Skating. $\$ 15$ fee required. Skate rental extra fee.
PEG 261. Figure Skating. $\$ 15$ fee required.
Șkate rental extra fee.
PEG 262. Precision Skating. $\$ 20$ fee
required. Skate rental extra fee.
PEG 263. Jogging.
PEG 264. Karate.
PEG 265. Racquetball.
PEG 266. Intermediate Racquetball.
PEG 267. Advanced Racquetbsil.

## PEG 268. Self Defense.

PEG 270. Skin Diving/Snorkeling. $\$ 10$ fee required.
PEG 271. Soccer.
PEG 272. Intermediate Soccer.
PEG 273. Softball - Men.
PEG 274. Softball - Women.
$\Delta$ PEG 275. Softball - Coed.
PEG 276. Squash.
PEG 277. Intermediate Squash.
PEG 278. Life Guard Training.
PEG 280. Beginning Swimming.
PEG 281. Intermediate Swimming.
PEG 282. Advanced Swimming.
$\triangle$ PEG 283. Tennis.
PEG 284. Triathalon Training.
PEG 285. Tumbling and Gymnastics.
$\triangle$ PEG 286. Volleyball.
PEG 287. Weight Training.
$\triangle$ PEG 291. Tension Management
Water. Safety Instructor (see KNS 322)

## Pinssical Therapy (PHYT)

Courses are currently under revision

## PHYT 300 . introduction to Physical

 Therapy (2) Fall. Introduction to physical therapy practice. Primary focus on professional terminology, the problem-solving process, and principles of: body mechanics, client-positioning, transfers, gait training, infection control and management of clinical emergencies. One hour of lecture, two hours of laboratory.PHYT 301. Anatomy and Physiology I (3) Fail. integrated study of structure and function of the musculoskeletal and connective tissues systems of the back and lower extremities, including basic embryology and histology: Laboratory session to include cadaver dissection and prosected materials. Two hours of lecture, one 3-hour laboratory.

PHVT 302. Anaaiomy and Physiology II (4) Spring. Integrated study of the structure of the musculoskeletal (upper extremity, chest and neck), circulatory, respiratory, endocrine and gastrointestinal systems. Laboratory sessions include cadaver dissection and prosected materials. Four hours of lecture, one three-hour laboratory.

PHYT 307. Neurosciences and Clinical Corpelations (5) Spring. Integrated study of the structure and function of the central and peripheral norvous systems. Principles of neurophysiological and neuropathological motor and sensory function and related basic assessments skills. Two two-hour lectures, one two-hour laboratory.

PHYT 300 . Kinesiology I (3) Fall. Normal and abnormal static and dynamic human posture through the examination of internal and external forces acting on the trunk and tower limbs. Special emphasis on human locomotion. Two hours of lecture, one twohour laboratory.

PHYT 310. Kinesiology II (2) Spring. Normal and abnormal static and dynamic human posture through the examination of internal and external forces acting on the upper limbs. One hour of lecture, one twohour laboratory.

PRYT Sit. Pathophysiology I (1) Spring. hitroduction to cellular level pathophysiology. Clinical correlations of circulatory, infectious and collagen diseases, genetic and metabolic defects. One and one-half hours of lecture.

Pivi 312. Pathophysiology II (1) Summer. Pathophysiology and clinical correlations in inematology, toxicology, dermatology, gastrointestinal diseases and renal diseases. Basic pharmaceutical principles and nutritional principles and management. One and one-half hours lecture.

PHYT 321. Theory and Procedures of Physical Therapy I (3) Fall. Physiological and bioelectrical principles and application of conduction and convection modalities used in treating clients. Two and one-half hours of lecture, one three-hour laboratory.

PHYT 322. Theory and Procedures of Physical Therapy II (3) Spring. Physiological and bioelectrical principles and applicafion techniques of conversion and radiation modalities used in treating clients. Basic therapeutic massage/soft tissue mobilization techniques. Two hours of lecture, two hours laboratory.

PHYT 323. Theory and Procedures of Physical Therapy III (2) Summer. Theory and applications of electrical currents, compression and heat in the assessment and/or treatment of clients. One and one-half hours lecture, one two-hour laboratory.

PHYT 331. Therapeutic Exercise I (2) Fall. Introduction to the types and application of therapeutic exercise-includes passive, resistive coordination. Principles of relaxation training and posture correction. One hour of lecture, one two-hour laboratory.

PHYT 340. Foundations of Physical Therapy 1 (1) Fall. Introduction to concepts and principles forming the cultural orientation for physical therapy practice and behaviorprofessional ethos. Includes ethics and therapeutic communication skills. Two hours of discussion.

## PHYT 341. Foundations of Physical

 Therapy II (1) Fall. PHYT 340 continued. includes advanced communication skills, developing support systems, dealing with difficult clients, such as the dying client, family of severely disabled children, and older clients. Two hours of discussion and recitation.
## PHYT 342. Foundations of Physical

 Therapy III (1) Spring. Introduction to conceptual basis for the health care delivery system in the United States. Critical issues in the health care system and physical therapy as a subsystem will be presentedprevention/health promotion, legislative process, quality assurance. One and onehalf hours discussion/recitation sessions.PHYT 350. Musculoskeletal Problems I (3) Spring. Theories and principles of basic musculoskeletal screaning. Biomechanical gait analysis and correction will be covered. Introduction to the pathophysiology of the musculoskeletal system with pertinent assessment and treatment principles. Two hours of lecture, two two-hour laboratories.

PHYT 360. Computer Applications in Physical Therapy (2) Fall. Microcomputers and the Computer Learning Resource Center at Medical College of Ohio. Tutorials in word
processing, Medline database, clinical decision making. Two hours of tutorial/selfinstruction. Graded S/U.

PHYT 381. Clinical Practicum (4) Summer. Five weeks of clinical observation and supervised application of appropriate assessment and treatment skills/procedures. Forty hours per week for five weeks. Arranged. Graded S/U.

PHYT 401. Early Development (3) Summer. Principles of development from conception to adolescence. Includes congenital problems, high risk neonate assessment and intervention, developmental assessment tools, and common pediatric disorders. Three hours of lecture, one hour labcratory.

## PHYT 406. Management of Physical

 Therapy Services (3) Spring. Introduction to theory and principles of management. Includes programmatic planning, organizational change, motivation, cost analysis and budgeting. Workshops, case studies and group projects are methods used. Three hours of lecture.PHYT 410. Scientific Inquiry (2) Fall. Introduction to elements of basic research design, reliability and validity, and critical review of research literature. Pertinent statistical knowledge required to critically analyze published research. Two hours of lecture.

PHYT 415. Research Topics (1) Fall. Discussion of current research topics and their implications and relevance to the practice of physical therapy. One and onehalf hours of discussion/recitation.

PHYT 421. Principles of Exercise Physiology (3) Fall. Principles of exercise physiology as they relate to healthy and temporarily or permanently disabled clients. Also includes pathophysiology, assessment and treatment of cardiopulmonary dysfunction. Two hours of lecture, one three-hour laboratory.

PHYT 422. Princlples of Rehabilitation (3) Spring. Theories, philosophies and principles of rehabilitation for the chronically disabied with emphasis on spinal cord injuries and amputations. Three hours of lecture, one two-hour laboratory

## PHYT 426. Psychology of Physical

 Disability (3) Fall. Review of basic principles and major theoretical approaches to understanding personality and human behavior as it relates to illness and physical disability. Special emphasis on hemiplegia, burns, eating disorders, sexuality and the disabled, and chronic pain. Three hours of lecture.PHYT 428. Gerontology in Physical
Practice (2) Spring. Age-related anatomical, ysiological and biomechanical change and psychosocial problems of the aged.
Emphasis on pharmaceutical, exercise, nutritional and political concerns. Clinical case studies will be discussed. Two hours of lecture/discussion.

## PHYT 430. Principles of Therapeutic

Exercise II (2) Fall. Principles and theories of therapeutic exercise as they relate to the neuro-muscular dysfunctional client. Includes theories of motor control, normal and abnormal movement, client assessment and treatment. One and one-half hours of lecture, one two-hour laboratory.

## PHYT 431. Principles of Therapeutic

 Exercise III (2) Spring. PHYT 430 continued. Selected theories include neurodevelopmental, and sensóry integration. Assessment and treatment planning for adult and pediatric clients, with pediatric components to be conducted as clinical laboratories. Other topics to traumatic train injury and oral motor control. One hour of lecture, three hours laboratory.PHYT 440. Clinical Problem Solving I (1)
Fall. Presentation of selected clinical cases. Discussion and planning of appropriate assessment and treatment procedures. One d one-half hours of discussion/recitation ssions.

PHYT 441. Clinical Problem Solving II (1)
Spring. Presentation of selected clinical cases. Discussion and planning of appropriate assessment and treatment procedures.
One and one-half hours of discussion/ recitation sessions.

PHYT 444. Fundamentals of Teaching and Learning in Physical Therapy (3) Spring. Introduction to basic principles of teaching and learning as they relate to health promotion and patient, family and community education, in-service education and instruction of physical therapy students.
Students will design and conduct educational activities. Two hours of lecture, two hours laboratory.

PHYT 446. Professional Issues (1) Spring. Indepth exploration of current issues affecting the practice of physical therapy. One and one-half hours of discussion.

PHYT 450. Musculoskeletal Problems II (3)
Fall. Theory and principles of advanced musculoskeletal evaluation of trunk and peripheral joints. Topics to include sports related injuries, peripheral joint mobilization. Isokinetic protocols, introduction to work hardening/ergonomics. One hour of lecture, o $21 / 2$-hours laboratory.

PHYT 470. Independent Study (2) Spring. Indepth study of clinically related problems or topic of interest. Consent of faculty required.

PHYT 480. Seminar (1-3) Spring. Indepth exploration of selected clinical topics. Arranged.

PHYT 481. Clinical Practicum II (2) Fall. Clinical observation and supervised application of appropriate assessment and treatment skills/procedures (120-160 hours); 40 hours per week for $3-4$ weeks arranged. Graded S/U.

PHYT 489. Clinical Internship (5-7) Summer, Fall. Observation and orientation to physical therapy departments including supervised application of assessment and treatment procedures. Forty hours/week for 10-14 weeks. Arranged. May be repeated for a maximum of 12 credits. Graded S/U.

## Physics (PHYS)

$\triangle$ PHYS 100. Physics of Natural World (3) Summer. Survey course for non-science majors. Elementary description of major physics concepts and principles with contemporary applications. Not acceptable toward physics major or minor.

TIPPHYS 101. Basic Physics (3) Spring. Laboratory course for non-science majors. Emphasis on scientific data analysis and the meaning of scientific knowledge. Not acceptable toward physics major or minor. Two lectures and one two-hour laboratory. Lab fee.

## $\triangle$ PHYS 104. Physics for Elementary

Teachers (2) Fall, Summer. Introductory treatment of physics concepts and principles applicable to materials appearing in elementary school science courses. Not acceptable toward physics major or minor.

7 $\Delta^{* *}$ PHYS 201. College Physics I (5) Fall, Spring, Summer. First term of an introductory physics sequence intended for students without calculus. Motion, forces, energy, fluids, heat and wave motion. Four lecturerecitations and one two-hour laboratory. Prerequisites: algebra and trigonometry. Lab fee.

7 $\Delta^{* *}$ PHYS 202. College Physics II (5) Fall, Spring, Summer. PHYS 201 continued. Sound, electricity, magnetism, electrical measurements, optics; atomic, nuclear and solid-state physics. Four lecture-recitations and one two-hour laboratory. Prerequisite: PHYS 201. Lab fee.

ID*PHYS 211. University Physics I (5) Fall. Introductory calculus-based physics sequence for science and engineering majors. Kinematics in one, two and three dimensions; Newtonian mechanics; gravitation; heat and thermodynamics. Four lecturerecitations and one two-hour laboratory. Corequisite: MATH 131. Lab fee.

T $\Delta^{*}$ PHYS 212. University Physics II (5)
Spring. PHYS 211 continued. Wave motion, sound, optics, electricity and magnetism. Four lecture-recitations and one two-hourlaboratory. Prerequisite: PHYS 211. Corequisite: MATH 232. Lab fee.

PHYS 270. Independent Study (1-3) On demand. Introduction to research in physics and astronomy; projects chosen in consultation with adviser. May include library and laboratory work. For lower-division students only. Prerequisite: consent of instructor.
*PHYS 301. Modern Physics (3) Fall. Topics from relativity; quantum physics; nuclear, atomic and molecular physics. Three lecturerecitations. Prerequisites: MATH 232 and PHYS 202; or PHYS 212. Student must also register for PHYS 311.
*PHYS 303. Electronics (3) Spring. Discussion and laboratory practice in networks, transistors, integrated circuits and associated circuitry. Two lecture-recitations and one three-hour laboratory. Prerequisite: PHYS 202 or PHYS 212. Lab fee.

PHYS 306. Thermodynamics and Statistical Physics (3) Fall alternate years. Thermodynamic laws, entropy, specific heat, kinetic theory; classical and quantum statistics. Three lecture-recitations. Prerequisites: MATH 232 and PHYS 202; or PHYS 212.

## PHYS 307. Mechanics and Wave Motion

(3) Spring. Mechanics of periodic systems including: the driven harmonic oscillator; and coupled oscillators. Fundamentals of wave motion and the propagation of waves in elastic media. Three lecture-recitations. Prerequisites: PHYS 202 or 212 and MATH 232.

PHYS 308. Optics (3) Spring. Alternate years. Propagation of electromagnetic radiation in vacuum and in optically isotropic media; geometrical optics; interference, diffraction and polarization of light with selected classical applications. Selected topics in modern (quantum) optics. Three lecture-recitations. Prerequisite: PHYS 301. Student must also register for PHYS 318.

PHYS 309. Atomic and Nuclear Physics (3) Fall alternate years. Phenomenological basis of our understanding of atomic phenomena, fundamental ideas of atomic structure, structure of nuclei and basic decay processes, elementary particles. Three lecture-recitations. Prerequisite: PHYS 301.
"PHYS 211, 212, 301 for science students with calculus.
**PHYS 201 and 202 for students without calculus.

PHYS 311. Modern Physics Laboratory (1) Fall. Laboratory work designed to accompany material presented in PHYS 301. One three-hour laboratory. Prerequisite: PHYS 202 or PHYS 212. Corequisite: PHYS 301. Lab fee.

PHYS 3 亿7. Wave Laboratory (1) Spring. Infroduction to advanced experimental techniques and data analysis; faboratory investigation of wave phenomena. One three-hour laboratory. Prerequisites: PHYS 212; or PHYS 202 and MATH 232.
Corequisite: PHYS 307. Lab fee.
Fhys 378. Optics Laboratory (1) Spring alternate years. Laboratory experiments in optics to accompany material in PHYS 308. One three-hour laboratory. Corequisite: PHYS 308.

PHYS 32t. Recent Progress in Astronomy
(2) Fall allernate years. Pulsar dynamics, gravitational collapse and black holes, galaxies, large-scale structure in the universe, active galaxies and quasars, cosmology. Two lecture-recitations. Prerequisites: PHYC 212; of PHYS 202 and MATH 232. Not open to students with credit for ASTR 324.

PHYS 350. Musical Acoustics (3) Spring athemate years. Nature of vibration; sound waves; sources of musical sounds-strings, air columns, percussion, voice and noise; acoustics of rooms; recording, reproduction and synthesis of sound. Not open to students majoring in physical sciences.

PHYS 360 . Environmental Physics (3) Spring. Applications of physics concepts to probloms in the natural world. Topics such as greerhouse effect, acid rain, ozone depletion, olectromagnetic fields, solar power, nuciear energy and radiation are examined from both environmental and scientific perspectives. Prerequisites: junior standing and ENVS 101 or consent of instructor. Not acceptable toward physics major or minor in Atts and Sciences.

PRYs 395. Workshop on Current Topics (1-3) On demand. May be repeated to 6 hours. Special topics in physics or astronomy of current or unique interest to students. Does not apply to first 22 hours of minor or first 3 e hours of major.

APHYS 400. Seiected Topics in Physics (13) On demand. Selected topics not included in existing courses. Scheduling of course may be initlated by department staff or by students. May be repeated as different subjocts are offered. Prerequisite: consent of instructor.

PHVS 401. Methods of Mathematical and Computational Physics I (4) Fall. Survey of basic mothods of mathematical techniques applisd to physics, including linear algebra, ordinay differential equations, and vector
calculus with emphasis on how these concepts are used in physics. Parallel development is given to numerical methods used to solve physical problems. Use of an appropriate scienctific programming language is included. Four lecture-recitations. Prerequisites: PHYS 212; or PHYS 202 and MATH 232.

PHYS 402. Methods of Mathematical and Computational Physics II (3) Spring alternate years. Survey of mathematical and computational techniques for solving partial differential equations, including the wave equation, Poisson's equation, and the heat equation. Introduction to the Fourier analysis with applications and the Fast Fourier Transform algorithms and their implementation. A rudimentary treatment of special functions, as they arise in solving physical problems, will be given. Prerequisite: PHYS 401 or permission of instructor.

PHYS 403. Stellar Structure and Evolution (3) Spring alternate years. Basic data, stellar interiors, theoretical models; advanced evolutionary states: red giants, white dwarfs, neutron stars, supernovas, black holes. Prerequisites: PHYS 301 and consent of instructor. Not open to students with credit for ASTR 403.

PHYS 410. Solid State Physics (3) Spring alternate years. Continuum and atomic theories of solids, lattice vibrations, specific heat of solids, electron theory of metals and semi-conductors. Superconductivity. Three lecture-recitations. Prerequisites: PHYS 301 and 307.

PHYS 411. Physics of Materials (3) Spring on demand. Structure and physical properties of ceramics, composites and metallurgically important alloys. Principles and methods of modern materials analysis. Three lecture-recitations. Prerequisites: PHYS 301 and 307.

PHYS 412. Infrared Molecular Spectra (2) Spring on demand. Origin of spectra of simple molecules. Prerequisite: PHYS 301 or course in physical chemistry.

PHYS 416. Classical Mechanics (3) Fall. Newtonian particle mechanics in one, two and three dimensions; non-inertial reference frames. Central forces and celestial mechanics. Dynamics of a system of particles; rigid body motion. Lagrangian and Hamiltonian formulations of dynamics. Theory of small oscillations. Three lecture/ recitations. Corequisite: PHYS 401.

PHYS 417. Quantum Mechanics (3) Spring.
Duality of matter and radiation, state functions and interpretation. Heisenberg uncertainty principle, wave equations and principles of wave mechanics, elementary applications of Schroedingerís equation, operator methods and approximation techniques. Prerequisites: PHYS 301 and 401.

PHYS 418. Electricity and Magnetisn I (3) Fall. Electric and magnetic fields; Maxwellis theory of electromagnetic field with applica tions in propagation, absorption, reflection and transmission of radiation. Prerequisites: PHYS 401 and MATH 233.

PHYS 419. Electricity and Magnetism il (3) Spring alternate years. PHYS 418 continued with applications to guided waves and physical optics. Relativity. Prerequisite: PHYS 418.

PHYS 428. Microcomputer Interfacing (3) Fall. Medium- and large-scale integrated circuits such as peripheral interface adapters. Integrated circuits such as UARTS and A/D converters are used to interface a microcomputer to the external world of the laboratory. One class period and two threehour laboratories. Prerequisites: CS 307 and PHYS 212 or 202, or permission of instructor. Lab fee.

PHYS 429. Selected Topics in hinicroelectronics (1-3) On demand. An individual, indepth study of a microelectronic project. Designed to integrate the introductory knowledge gained in PHYS 303 and PHYS 428 into a complete microelectronic system. Arranged. Prerequisites: PHYS 303 and 428.

PHYS 433. Philosophy and Physics of Space and Time (3) Spring. Physical theories of space and time from philosoph1. cal, scientific and historical points of view. Topics include Zenoís paradoxes, Greenis concepts of space and time, classical Newtonian world view, general ideas of modern theory of relativity and cosmology. Cross-listed as PHIL 433.
$\triangle$ PHYS 470. independent Study (1-3) On demand. Introduction to research in physics and astronomy; projects chosen in consultation with adviser, may include library and laboratory work. Preroquisite: consent of instructor.

PHYS 489. Cooperative Education in Physies (1-4) On demand. Work and study in physics in an industrial, commercial or government laboratory setting in an approved cooperative position. May be repeated to six hours. Written technical report required. By permission of departmental co-op director. Only three hours may be applied toward physics major or minor.

PHYS 490. Special Problems in Physics (1-3) On demand. Readings and researci on recently developing topics chosen to fit needs of students.

## Political Science (POLS)

TIDPOLS 110. American Government: Processes and Structure (3) Fall, Spring, Summer. Constitutional basis and develop-
ment, political processes (parties, nomina-f-tions and elections, interest groups and lic opinion), federalism and institutions of ional government.

TIDPOLS 171. Introduction to Comparative Government (3) Fall, Spring, Summer. Basic concepts, approaches to and comparisons of different political systems, including political cultures, participation, interest groups, institutions and processes; essential tools and methods for the study of political systems in the world.

IPOLS 172. Introduction to International Relations (3) Fall, Spring, Summer. Historical and contemporary overview of the modern international system; governmental and nongovernmental actors influencing international relations; major issues of the post-war period. No prerequisite.

POLS 290. Introduction to Political Inquiry (3) Fall, Spring. Concepts and theories used by political scientists; traditional- and behavioral-political science; how political scientists establish and evaluate concepts and theories. Required of all majors; should be taken before any 300 -level course. Nonmajors must receive permission of instructor.

TPOLS 301. Modern Political Ideologies Spring. Nature of political power, edom, authority and terrorism as seen in weologies of democracy, capitalism, liberalism, conservatism, communism, anarchism, socialism and fascism.

## POLS 302. American Domestic Public

 Policy (3) Fall, Spring, Summer. Description and analysis of environment, education, defense, civil rights, criminal justice, health, welfare and other selected contemporary policy areas and issues.
## $\triangle$ POLS 303. Introduction to Public

 Administration (3) Fall, Spring, Summer. American administrative system: emphasis on adminstrative structures and processes; relationship between elected offices and bureaucracy, notion of civil service, modes of managing adminstrative system. Prerequisite: POLS 110.POLS 304. American Political Thought (3) On demand. As reflected in colonial, Federalist, Civil War and late 19th century political thought.

POLS 325. Black Politics (3) Fall. Political behavior (such as voting and other forms of political participation) and political leadership (elected and unelected) of African Americans.
bls 331. State and Local Government (3) Fall, Spring. Influence of culture and socioeconomic factors on state-local politics; state constitutions, municipal corporations
and charters; political participation; institutions and processes; intergovernmental relations; policy issues and outcomes in state/local government with special reference to Ohio.

TPOLS 335. Global Resource Politics (3) Spring. Resource-related global political problems dealing primarily with energy and food questions for policymakers and citizens concerned with political determinants of energy and food security in an interdependent world.

POLS 336. Environmental Politics and Policies (3) Fall, Spring. Environmental policy process primarily in the U.S. including agenda setting, formulation, adoption, implementation and evaluation. Political interests, governmental institutions and actors involved in environmental policy making. Focus on key environmental issues and policies.

POLS 341. Public Opinion (3) Fall.
Processes of opinion formation and change, political attitudes, belief systems, socialization and the operation of public opinion processes in democracy; models of linkages between public opinion and public policies.

POLS 345. Legislative Process (3) Fall. Legislative behavior and decision making; forces involved in formation of public policy; proposed reforms of Congress. Prerequisite: POLS 110 or consent of instructor.

## POLS 346. Presidency and Executive

Process (3) Spring. Organization, functions and powers of office of president and vice president; roles and presidential leadership psychology.
$\triangle$ POLS 347. Judicial Process (3) On demand. American judiciary, particularly Supreme Court, as political institution; decision-making process and interaction of courts with rest of political system.

TiPOLS 351. Western European Politics (3) - Spring. Political systems and major policy problems of selected European countries. Political culture, governmental structures, political parties and interest-group roles in policy development. Prerequisite: POLS 171 or permission of instructor.

POLS 354. Governments and Politics of Eastern Europe (3) On demand. Representative, contemporary Eastern and Central European states undergoing political change and economic restructuring in the context of resurgent ethnic nationalism.

POLS 355. Governments and Politics of Latin America (3) Fall. Influence of cultural and socio-economic factors on politics; violence and revolution; role of major interest groups such as the military, labor, the Catholic Church; political parties and
elections; institutions; focus on selected nation-states.

IPOLS 361. Governments and Politics of Middle East (3) Spring. Governmental and political processes of Turkey, Iran, Israel, Arab Republic of Egypt, other selected Middle Eastern and North African political systems; major developmental problems of the area.
$\triangle$ POLS 366. Governments and Politics of Asia (3) On demand. Representative contemporary Far Eastern and Southeast Asian political systems; how ideology, religion, militarism and other social forces (both endogenous and exogenous) have influenced the development of these policies.

POLS 368. African Political Systems (3) On demand. African struggles for independence; problems of development of selected post-independence political systems and guerilla movements in nonindependent territories.

9|APOLS 372. Contemporary World Politics (3) Fall, Spring. Current giobal issues and problems such as the arms race, population control, disarmament and EastWest, North-South rivalries are discussed and analyzed.
$\triangle$ POLS 374. American Foreign Policy Process (3) Fall. Nature and conduct of contemporary U.S. foreign policy, with particular emphasis on the roles that the executive and legislative branches play in the process. Secondary foci of analysis are how domestic political problems, interest groups, military alliances, technological and economic forces help shape foreign policy formation and articulation.

POLS 400. Topics in Political Science (13) Fall, Spring. On demand. Subject matter varies. New, one-time courses being offered experimentally. See schedule for listing. Prerequisite: POLS 110.

TPOLS 402. Western Political Thought I (3) On demand. Classics of political philosophy of ancient and medieval periods. Major ideas and concepts of western political tradition from Plato through Middle Ages to Machiavelli.

ๆPOLS 403. Western Political Thought II (3) On demand. Classics of political philosophy of modern period. Major ideas and concepts of Western political tradition from Hobbes to Marx.

POLS 404. 20th Century Political Thought (3) On demand. Contemporary classics of political philosophy. Theories of justice and right of Rawls, Nozick, Hayek and Strauss; Berlinís pluralism; existentialism; and/or democratic theory.

POLS 405. Hecent̂ American Political Thought (3) On demand. American political ideas, ideologies, movements with fundamental social and political philosophies from Civil War to contemporary period. Prerequisite: POLS 304 or consent of instructor.

POLS 476. Constitutional Law: Powers and Relationships (3) Fall. Supreme Court cases relating to U.S. governmental siructure, powers and relationships.

AFOLS 447. Constitutional Law: Proce-
dural Rights (3) On demand. Due process, right to counsel, search and seizure, olectronic surveillance and jury trial.

POLS 418. Constitutional Law: Substantive Rights (3) Spring. Freedom of speech, press and religion; equal protection of law, travel and privacy, and right to vote.

POLS 419. Jurisprudence (3) Spring. Leading theories and theorists of law; AngloAmerican thought and practice.

POLS 420. Administrative Law (3) Fall. Legal aspects of the administrative process and the effect of legal principles and processes upon administrative decision making. Emphasis on the limitation of administrative discretion and the judicial review of administrative decisions. Prerequisite: consent of instructor.

POL 3421 , Bureaucratic Politics (3) Spring. The role foderal bureaucracy plays in public policy process. Policy development; social and political factors that influence the adminisirative branch of government.
Prerequisite: POI.S 303 or permission of instructoi.
poss 423. Comparative Public Adminisgration (3) Spring. Comparative study of administrative structures and processes in selected modern and modernizing political systems. Analysis includes the consideration of cultural, legal and political factors influencing the operation of bureaucratic institutions, developmental goals, and the methods of establishing and administering programs of soclal, economic and political development.

POLS 424. Supreme Court and Contemporary lisues (3) Spring. Alternate years. Selected areas of current concern in constitutional law; substantive knowledge of reievant case law, scholarly legal journals which aftempt to predict outcome of future constitutional litigation. Prerequisite: POLS 817 or POLS 418.

POLS 425. Constitutional Law Advocacy
(3) Spring. Substantive knowledge of one area in constitutional law; practical skills nocessary for constifutional adjudication; techniques of legal research, writing appollato couri brieís and appellate court
advocacy. Prerequisites: POLS 416 and POLS 417, or POLS 418 and permission of instructor.

POLS 430. Local Government Management and Politics (3) Spring. Socioeconomic and political factors affecting local governments with an emphasis on governmental structure, problems, and administrative mechanisms, intergovernmental relations, service delivery, performance measures, and alternatives for improving governmental policy and management. Prerequisite: POLS 303 or permission of instructor.

POLS 431. Regulatory Policy (3) Fall. Development of regulation as an instrument for correcting deficiencies of the economic market, role in achieving societal purposes, problems of regulatory practice. Prerequisite: POLS 303 or permission of instructor.

## POLS 434. Gender Politics in Cross

 Cultura! Perspective (3) On demand. Socialization to, maintenance of and change in gender political roles; patterns of dominance and submission in cross-cultural perspective.
## POLS 440. Political Parties and Voter

 Behavior (3) Fall. Democracy and political parties, party organization, primaries and conventions for nomination, campaigns and elections, patterns of election participation and factors affecting the voter's decision making.POLS 443. Politics and the Mass Media (3) Spring. Political analysis of relationships between the media and the government and the effects on public policy issues and electoral campaigns.

POLS 452. Political Violence and Revolution (3) Spring. Seminar offered alternate years. Theories about causes, processes and consequences of violence as instrument of political competition and social change. Open to advanced social science undergraduate and graduate students or by consent of instructor.

POLS 454. Politics of the Commonwealth of Independent States (3) On demand. Analysis of institutions, parties and economic policies of the former Soviet republics within the context of ethnic conflicts and transitions to democracy and capitalism.

POLS 458. Foreign Policy of the Commonwealth of Independent States (3) On demand. Foreign policy of the states of the former Soviet Union in the post-cold war era; domestic and international causes and consequences of their relations with the West, Central Europe and developing countries.

POLS 459. Intergovernmental Relations (3) Fall. Vertical and horizontal relations among governments in the American feder system, models and theories of federalism and intergovernmental relations (IGR), constitutional issues, twentieth-century changes, recent developments in financing and managing federalism and IGR. Prerequisite: POLS 303 or permission of instructor.

POLS 460. Politics and issues of World Development (3) Spring alternate years. Political and economic modernization problems; equity versus development; hunger and population; foreign aid, technology transfer and other selected topics.

POLS 462. Japanese Politics and Foreign Policy (3) On demand. Political culture, institutions, processes and issues in contemporary Japanese politics; Japan's foreign relations with emphasis on relations with Pacific/Asian nations. Prerequisite: POLS 171 or permission of instructor.
$\triangle$ POLS 470 . Individual Readings (1-3) Fall, Spring. On demand. Supervised individual readings to meet student's need for extended reading in familiar areas or for exploration in fields not covered by courses. Prerequisite: consent of supervising instructor. May be repeated to nine hours.

POLS 473. International Law (3) On demand. History, nature, sources and applications; relationship between law and society at international level.

POLS 475. International Organization (3) Spring. History, organization and function of international organizations within the context of world politics. Major emphasis on United Nations and issues facing it. Prerequisites: POLS 172 and 372 or permission of instructor.

## POLS 476. International Political

Economy (3) Spring. Survey and annalysis of political economy on a global scale, including review of major Marxist, realist and liberal theories and policy issues of trade, debt, investment and aid.

POLS 478. International Conflict (3) Fall. Political theories and research on the causes of war and other forms of international conflict. Analysis of escalatory processes, ethics of warfare, techniques of conflict resolution.

POLS 491. Seminar for intern (3) Suggested for students planning internships. Survey and analysis of literature dealing with practice political experiences. Use of biographical material as sources.
$\triangle$ POLS 492. Fieid Study (1-3) Fall, Spring, Summer. For students working on political internship programs and political campaigns. May be repeated to six hours.

POLS 495. Honors Seminar in Contempo-
ary Political Science (1-8) On demand. tical science as discipline and profession; oms of political inquiry and research; scientific and methodological orientations toward values and scholarship; public and professional status of political science.
Prerequisite: permission of honors committee. May be repeated to eight hours.

## POLS 496. Workshop on Current Topics

(1-4) On demand. Intensive educational experience on selected topics in political science. May be repeated if topics differ, on approval of adviser. No more than 9 hours of POLS 496 (formerly POLS 395) will count toward a major or minor in political science.

## Popular Culture (POPC)

IIDPOPC 160. Introduction to Popular Culture (3) Fall, Spring, Summer. Basic theories of, approaches to and topics within popular culture; several selected topics and use of various theories and approaches.

TPOPC 165. Popular Culture and Media (3)
Fall, Spring, Summer. Some of the ways in which mass media (TV, film, recording industry, print, radio) have affected modern American culture. Media relationships and interactions.
bPC 170. Black Popular Culture (3) Fall, Spring. Basic theories of approaches to 20 th century African-American popular culture. Traces ways black popular culture has shaped and is shaped by American society. Examines relationship of race, ethnicity, gender and class.

TIAPOPC 220. Introduction to Folkiore and Folklife (3) Fall, Spring, Summer. Study and collecting of folklore; ballads, myths, tall tales, heroes, folk medicines, superstitions, proverbs and crafts.
$\triangle$ POPC 231. Studies in Popular Culture (13) Fall, Spring, Summer. Study of theme, era or issue in popular culture. Subject matter designated in class schedule. May be repeated once if topics differ.
$\triangle$ POPC 250. Introduction to Popular Film (3) Fall, Spring, Summer. Popular film as mass entertainment medium; Hollywood studios, popular film formulae, genres, relationships between popular films and movie-going audience; viewing of appropriate films.

POPC 260. Popular Culture Research (3)
Fall or Spring. Examines different methods of popular culture research and theories on thich they are based. Application of course oncepts to contemporary issues in popular culture. Prerequisites: major or minor in
POPC and POPC 160 or POPC 165.
Required for majors and minors.

POPC 270. Introduction to Contemporary Popular Literature (3) Alternate years. Popular literary formulae, publishing industry, relationship between popular literature and reading public, functions of popular literature in society.

POPC 280. Introduction to Popular Music (3) Fall, Spring, Summer. Relationship between music world and listening-viewing audience; musical styles, trends in popular music, popular performers and entertainers and what they reveal about popular culture; appropriate music listening.

POPC 290. Television as Popular Culture (3) Fall, Spring, Summer. Relationship between popular television programming and American society; viewing of appropriate television.

POPC 320. Folktale and Legend (3) Alternate years. Intensive examination and collecting of oral narratives; theory and methods of collecting, organizing and interpreting such material as folktales, urban belief tales, supernatural legends, narrative jokes, tall tales, etc.; analysis of folk mythology.

POPC 321. Folklife and Material Culture (3) Alternate years. Study and analysis of nonverbal folklife; theory and methods of analysis of such forms of expressive folk culture as arts, crafts, architecture, foodways, festivals, customs and folk rituals; emphasis on modes of description and analysis commonly used by folklorists to understand and explain such materials.

POPC 325. The Folk Group/Folk Region
(3) Alternate years. Intensive study of a single folk group or the folklore of a specific region (e.g., Women's Folk Culture, Folklore of the Great Lakes Region, etc.). Emphasis on the function of various types of folklore within the group or region. May be repeated once if content clearly differs:

POPC 350. Advanced Studies in Popular Film (3) Alternate years. Indepth study of particular aspect of popular film: single genre, particular director, specific studio, etc. May be repeated once if topics are different; viewing of appropriate films. Two-hour lecture, two-hour lab.

POPC 355. Studies in History of American Popular Film (3) Alternate years. Specific period in American popular film: silent era, films of Depression, films of post World War II, etc. May be repeated once if topics differ; viewing of appropriate films. Two-hour lecture, two-hour lab.

POPC 370. History of Popular Literature (3) Alternate years. Detective, science fiction, western, mystery, best sellers, poetry, magazine fiction. Prerequisite: any 200 -level literature course or permission of instructor.

POPC 380. Contexts of Popular Music (3) Alternate years. Indepth investigation into single aspect of popular music: specific popular music genres, specific musical themes, popular music industry, etc. May be repeated to nine hours if topics differ. Prerequisite: POPC 280.

POPC 395. Workshop on Current Topics (1-3). On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. Requirements usually completed within expanded time format. May be repeated if topics differ, on approval of adviser.
$\triangle$ POPC 424. Folklore Genres (3) Alternate years. Intensive study and collecting of a single folk genre or distinctive type of folk materials (e.g., American Folk Music, Ethnic Foodways in America, The Urban Belief Tale, etc.). Emphasis on theory and method of collection and analysis. May be repeated once if content clearly differs.

POPC 426. Popular Entertainments (3) Alternate years. Cultural significance of popular entertainments, past and present; circuses, carnivals, parades; vaudeville, professional and amateur sports, camping, etc.

## POPC 460. Popular Culture Advanced

 Studies (3) Spring. Indepth study of particular problem: development of hero in popular arts, cultural analysis of popular film, cultural analysis of popular music, etc. May be repeated once if subject matter is different.POPC 480. Senior Seminar in Popular Culture (3) Fall. Seminar for seniors in POPC program. Selected topics approached from several'points of view. Prerequisites: senior standing and major or minor in POPC, junior standing with permission of department.
$\triangle$ POPC 485. Fieldwork in Folklore Studies
(2) On demand. Supervised independent collecting project intended as a senior seminar. Advanced students, under close supervision of one or more faculty, develop and carry out intensive exercise in collecting a specific form of folk material. POPC 480 may be substituted when appropriate.

POPC 490. Problems in Popular Culture (1-3). For advanced student. Independent study. Prerequisites: six hours of POPC courses and consent of department chair and instructor by 12 th week of semester preceding the term in which the course is to be taken. May be repeated to eight hours.

## Psychology (PSYC)

\#APSYC 201. General Psychology (4) Fall, Spring, Summer. Scientific approaches to the study of behavior of organisms. Application to personal and social behavior.

APSYe 240 . General Seminar (1-3) Fall, Spring. Specific content areas offered depends on demand and interest of staff. May be repeated twice. Prerequisite: consent of instructor.

PSyc 270. Quantitative Methods I (4) Fall, Spring, Summer. Principles of measurement. Quantitative analyses of behavioral measures, including measures of typicality, individual differences, correlational methods and tests of significance. Three one-hour lectures and one two-hour lab. Prerequisites: PSYC 201 and MATH 120 (or its equivalent) or consent of instructor.

PSYC 290. Introduction to Laboratory Methods in Psychology (4) Fall, Spring. inftoduction to research methods used in laboratory and natural settings. Includes planning the research, collecting and interpreting tine data and communicating the results in both oral and written forms. Three one-hour lectures and one two-hour laboratory. Prerequisites: PSYC 201 and 270.

PSYE 304. Brain Mechanisms of Behavior (4) On demand. Brain structure and function in organization of consciousness, perception, motivation and learning, sleep, dreaming, memory, drugs, glands, personality, electrical stimulation of brain. Laboratory hours by arrangement. Prerequisites: PSYC 201 and 290 , or consent of instructor.

APSYC 303. Psychology of Child Development (3) Fall, Spring. Major concepts, Hegories and principles of child development. Coverage is from conception until adolescence. Prerequisite: PSYC 201.

PSYC 304. Adolescent Development (2) On demand. Major concepts, theories and principles of adolescent development. Prerequisite: PSYC 201.

APSYC 305. Psychology of Personality Adjustment (2) Fall, Spring. Problems of personal adjustment. Related problems of theory and measurement of personality. Prerequisite: PSYC 201.

PSYC 306. Psychology of Gender (3) On demand. Psychological characteristics of wornen and men: personality, adjustment, identity formation, intellectual processes, sexuality; theories and data on gender development.

PSYC 307. Human Sexuality (3) Fall, Spring, Summer. Survey of the relationship of biological, psychological, cultural, and historical factors to typical and atypical sexual attitudes and behaviors. Prerequisite: PSYC 201 or SOC 101 or BIOL 104.

PSYC 308. Introduction to Clinical Psychology (3) On demand. Models and roles associated with delivery of mental health services; major conceptions of psychological assessment and treatment. Prerequisite: PSYC 201.

PSYC 309. Psychology of Aging (3) On demand. Discussion of major theories of adult development; description of how biological, cognitive, personality and socialpsychological processes interact to produce development; emphasis on seeing how these processes occur in adults' everyday lives. Prerequisite: PSYC 201.
$\triangle$ PSYC 311. Social Psychology (3) Fall, Spring, Summer. Social behavior covering theoretical issues and recent empirical findings: social influence and conformity processes, attitudes and attitude change, interpersonal attraction, social perception, group processes, sexual behavior, environmental influences on social behavior. Prerequisite: PSYC 201 or SOC 101.

PSYC 313. Research in Social Psychology
(4) On demand. Field and laboratory research techniques in social psychology, attitude change, conformity, attraction, environmental effects on social behavior, aggression, group processes. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270, 290 and 311.

PSYC 320. Conditioning (4) On demand. Classical conditioning and instrumental learning from empirical and theoretical point of view. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270 and 290.

PSYC 321. Cognitive Psychology I: Learning and Memory (4) On demand. Principles and theories of human learning and memory, applied to the acquisition of knowledge and skills. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270 and 290.

PSYC 322. Cognitive Psychology II: Thinking and Problem Solving (4) On demand. Theory and research on the nature of human thinking, problem solving, reasoning, concept formation and language. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270 and 290.

PSYC 328. Psychophysiology (4) On demand. Laboratory course in psychophysiology; relationship between psychological states and physiological responses in humans; conditioning of autonomic re-
sponses, orienting responses, psychosomatic relationships and biofeedback, detection of deception. Four lecture hours, laboratory by arrangement. Prerequisites: PSYC 270 and 290.

PSYC 330. Psychoblology of Emotions and Motivation (4) On demand. Biological causes of motivated behaviors such as sleep, hunger, thirst, fear, aggression and sexual behavior; how motivated behaviors and related emotional states are organized in brain, as elucidated by electrical and chemical stimulation and ablation of living brain. Prerequisites: PSYC 270 and 290, or consent of instructor.

PSYC 340. Sensation and Perception (4) On demand. Historical introduction to the sensory and cognitive processes that underlie our experience of objects, events and their interrelationships. Emphasis on the visual and auditory perceptual systems. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270 and 290.

PSYC 350. Survey of Industrial and Organizational Psychology (3) On demand. Broad-based survey of the various content areas of industrial (e.g., selection, appraisal) and organizational (e.g., motivation, leadership) psychology. Underlying psychological principles that influence human behavior in the workplace are discussed.

PSYC 352. Quality of Work Life (3) On demand. Impact of organizational environments on individuals and individual behavior. Topics include job design, leadership, organizational climate, job satisfaction and work motivation. Prerequisite: PSYC 270 or consent of instructor.

## PSYC 354. Survey of Human Factors

 Psychology (3) On demand. Emphasis on the design, measurement and evaluation of human and machine performance and productivity. Assessment of factors related to training, efficiency and safety. Prerequisites: PSYC 270 and one other course in PSYC, or consent of instructor.PSVC 370. Quantitative Methods II (4) On demand. Analysis of variance and other multivariate methods for analyzing behavioral measurements. Prerequisite: PSYC 270.
$\triangle$ PSYC 395. Workshop on Current Topics (1-5) On demand. Intensive educational experience on selected topics. Typically an all-day or similar concentrated format. Requirements usually completed within time format. May be repeated on approval of adviser.

PSYC 403. Personality Theory (3) On demand. Scientific constructs in personality theory; contemporary theories with historical
antecedents; assessment of relationship to neral psychology. Prerequisite: eight hours PSYC.
$\triangle$ PSYC 405. Psychology of Abnormal Behavior (3) Fall, Spring, Summer. Data and concepts used in understanding, labeling and modifying deviant behavior. Prerequisite: PSYC 201.

## APSYC 406. Behavior Pathology in

 Children (3) On demand. Major behavioral disorders of childhood: description, etiological implications, treatment issues, approaches and problems, and related research. Prerequisite: PSYC 201 or consent of instructor.PSYC 415. Psychology of Religion (3) On demand. Religion from a psychological perspective. Religion and motivation, development, conversion, altruism, coping, mental health, psychotherapy. Prerequisite: PSYC 201.

PSYC 425. Community Mental Health (3) On demand. Development, concepts and current models in community mental health; individual and system-centered approaches that promote health and prevent psychological maladjustment; federal, state and county programs. Prerequisite: PSYC 201 or consent of instructor.

C 437. Field Study: Deafness and ASL (1) On demand. Orientation to deafness and on-site observation of educational approaches and communication methods used at elementary, secondary and post-secondary levels by programs for deaf children. Conducted at Gallaudet University, Washington, D.C., between semesters. Prerequisites: EDSE 324 or equivalent and consent of instructor.
$\triangle$ PSYC 440H. General Seminar (1-4) On demand. Specific content areas offered depends on demand and interest of staff. May be repeated three times. Prerequisite: consent of instructor.

PSYC 452. Personnel Selection (4) On demand. Methods of selection and assessment in industrial and other organizations. Includes recruitment, hiring, promotion, etc. Compliance with fair employment and equal employment opportunity regulations. Prerequisites: PSYC 201 and 270 or STAT 211 or equivalent.

PSYC 454. Interviewing (3) On demand. Laboratory exercises in administering and responding to interviews differing in structure, behavior, decisions and interrelationships within interviews, validity and refuction of bias. Prerequisite: PSYC 201.

PSYC 455. Stress Factors of Work (3) On demand. Sources and effects of psychological stress at work and research on stress reduction. Topics include perceived work
loads, role demands and ambiguities, job involvement and career stresses such as those in dual-career families. Prerequisite: PSYC 201.

PSYC 460. Introduction to Psychological Testing (3) On demand. Theory and methods of measuring human behavior. Basic measurement principles and applications; representative standardized tests of intelligence, interest, aptitude and personality. Prerequisites: PSYC 201 and 270 or equivalent.

PSYC 489. Internship (1-3) Fall, Spring, Summer. Supervised field experience in an applied psychology setling. Credit not applicable to psychology major or minor. May be repeated to six hours. Prerequisite: junior standing and departmental permission. Graded S/U.
$\triangle$ PSYC 490. Special Problems in Psychology (1-3) Fall, Spring, Summer. Supervised independent minor research or intensive reading on selected problems. No student may register for course without written approval of staff member concerned. May be repeated to six hours. Prerequisite: 7 hours of psychology. Graded S/U.

PSYC 495H. Senior Honors Seminar (3) Fall. Seminar in general psychology for senior major. Student required to plan and carry out research project under direction of faculty member. Prerequisite: senior major, approval by department undergraduate committee.

PSYC 496. Senior Honors Seminar (3) Spring. Seminar in general psychology for senior major. Student required to plan and carry out research project under direction of faculty member. Prerequisite: senior major, approval by department undergraduate committee.

## Recreation and Tourism (RTD)

URTD 190. Recreation Leadership (3) Fall, Spring. Recreation activity analysis and development; leadership theories, styles and techniques with application to the needs and interests of various populations.

## RTD 210. Major Concepts in Recreation

 (3) Fall, Spring. Philosophical concepts and historical foundations; personal values of recreation; economic impact; leisure service delivery system and professional leadership.$\triangle R T D$ 215. Introduction to Travel and Tourism (3) Fall. Overview of travel industry; employment opportunities, professional preparation; trends in travel; tourism data; issues in travel and tourism. Total clock hours: 45. Prerequisite: MKT 300 or consent of instructor.

RTD 260. Leisure Services for the Older Adult (3) Fall, Spring. Characteristics of older adults; therapeutic benefits of recreation; major services and settings; program planning and administrative concerns; field visits.

RTD 304. Outdoor Recreation (3) Fall. Outdoor recreation resources; government management policies; private organizations and enterprise; legal, economic and political impacts; human behavioral patterns.

RTD 315. Program Planning in Travel and Tourism (3) Spring. Program development in various tourism settigs; planning special events; tour packaging and escorting. Total clock hours: 45. Prerequisites: RTD 215, MKT 300 or consent of instructor.

RTD 325. Resort, Convention and Tourism Agency Administration (3) Fall. Exploration of analytical framework for management strategies unique to travel and tourism industry. Analysis of structure and function for integration of services. Total clock hours: 45. Prerequisites: RTD 215, MKT 300 or consent of instructor.

RTD 380. Concepts and Techniques in Outdoor Education (4) Spring. Outdoor education through school curricula, interpretive services, recreation agencies and community action; philosophical bases; identification and utilization of resources; the methods associated with the learning process; field-based experiences.

RTD 384. Organization and Administration of Leisure Services (3) Fall, Spring. Basic concepts of administration, personnel management, fiscal management, public relations techniques; motivation theory, grant writing and fund raising, marketing, legal aspects of administration; budget proposal preparation and development of employment seeking skills. Prerequisites: RTD 190, 210 and 30 hours.

RTD 385. Recreation Program Development (3) Fall, Spring. Principles of program planning, organization and administration; operation of areas and facilities; current. practices in publicity and public relations; supervision of program and staff; tournament scheduling; program budgeting. Prerequisites: RTD 190, RTD 210 and 30 hours.

RTD 386. Internship Preparation (1) Fall, Spring. Comparative analysis of leisure services and their roles in society with focus on personal and professional development. Prerequisites: recreation major and $60^{\circ}$ semester credit hours.

## RTD 387. Practicum: Leadership and

 Programming (1-3) Fall, Spring, Summer. Application of leadership and program theory to field setting. May be repeated to maximum of five hours. Prerequisites: recreation majoror dance major or dance minor and approval of adviser

RTD 415. Evaluation and Assessment of Planning Strategies for Destination Travel and Tourism (3) Spring. Conceptual framework for planning strategies unique to travel and tourism industry. Analysis of methods and techniques with emphasis on tracking and conversion studies. Total clock hours: 45. Prerequisites: RTD 215, MKT 300 or consent of instructor.

RTD 470. Independent Study (1-3) Fall, Sping, Summer. Indepth project of signiticance to the student. Credit allocation by project supervisor and approval by chair prior to registration. Prerequisite: permission of insíructor.

## F70 482. Evaluation of Recreation

 Services (3) Fall, Spring. Methods, techniques and application of evaluation processes. Prerequisites: RTD 384, RTD 385, recreation major or minor, or consent of instructorRTO 483. Recreation Areas and Facilities
(3) Fall, Spring. Planning and design principles; acquisition, development, construction and maintenance of specific types of recreation areas and facilities. Prerequisites: RTD 384, RTD 385, recreation major or minor, or consent of instructor.

## FTTD 484. Contemporary Issues in

 Recreation (2) Fall, Spring. Seminar in curront issues. Prerequisite: 90 hours.ATD 487. Practicum: Supervision and Administration (1-3) Fall, Spring, Summer. Application of program, supervision and administration theory to field setting; may be repeated to maximum of five hours.
Prerequisites: RTD 387, recreation major or dance major or dance minor, and approval of adviser.

RTD 488. Internship (i5) Fall, Spring, Summer. A concentrated professional experience for siudents preparing for a career in recreation. Prerequisites: 2.5 GPA; 90 hours; RTD 384, 385, 386, 387, 487; recreation major and consent of adviser.

## Rehabilitation Counseling (REHB)

REHB 401. Introduction to Rehabilitation
Counseling (3) Characteristics and principles of the rehabilitation process disabilities and agencies serving the disabled.

## Respiratory Care Technology (RT)

†RT 101. Basic Human Anatomy and Physiology for Allied Health (5) Fall. One semester course developed especially for students in allied health programs who have had no prior college course in introductory biology. Includes study of structure and function of cells and tissues, general body organization, and organ systems. Does not transfer as biology credit. Three hours of lecture, two hours of lab and one hour of recitation
†RT 120. Principles of Respiratory Care 1 (3) Spring. Basic scientific principles of gases, humidity, aerosols and fluid flow as applied to respiratory care. Devices for measuring oxygen levels and regulating pressure and flow of therapeutic gases, as well as equipment for delivering humidity and medical aerosols. Therapeutic application of respiratory care equipment. Basic patient care and assessment. Medical terminology. Two hours of lecture and three hours of lab. Prerequisite: Admission into program.

## $\dagger$ RT 121. Principles of Respiratory Care II

 (3). Introduction to cardiopulmonary disease. Patient assessment, hyperinflation therapy, bronchopulmonary hygiene. Isolation procedures. Pulmonary function testing. Sterilization and processing of respiratory equipment. Two hours of lecture and three hours of lab. Prerequisites: ENVT 110 or BIOL 314/315, and CHEM 109/110.
## $\dagger$ RT 140. Pharmacology for Respiratory

 Therapy (3) Spring. General pharmacological principles, including drug dosage calculations and dispensing systems. Major drug groups. Emphasis on drugs used in delivery of respiratory care. Three hours lecture. Prerequisite: RT 120.
## †RT 151. Respiratory Care Directed

 Practice I (2) Spring. Introduction to the hospital environment. Directed clinical practice including basic nursing skills, patient assessment, charting, oxygen therapy, aerosol administration, equipment processing. Twelve hours of field study per week. American Heart Association CPR certification required. Prerequisites: Must meet program matriculation standards. RT 120, ENVT 110 or BIOL 314/315, BIOL 331 or RT 101, and CHEM 109/110 required or permission of instructor. Corequisite: RT 121, BIOL 332 (if no credit for RT 101).†RT 202. Cardiopulmonary/Renal Anatomy and Physiology (3) Spring. Anatomy and physiology of respiratory, cardiovascular, renal systems in depth. Ventilatory mechanics, pulmonary functions, control of respiration, gas diffusion, transport and exchange, acid-based balance, fluid and electrolyte balance, blood gas interpretation.

Two hours lecture, fwo hours recitation. Prerequisite: RT 120, RT 101 or BIOL 331. and CHEM 109/110, or permission of instructor. Corequisite: BIOL 332 (if no credil for RT 101).
†RT 203. Pulmonary Pathophysiology (4) Fall. Disease terminology and basic pathophysiological processes common to organ system disease. Common cardiopulmonary disorders with respect to etiology, pathology, pathophysiology, clinical manifestations, diagnosis (including radiological assessment of the chest), treatment and prognosis. Prerequisite: RT 120, RT 101 or BIOL 331, and BIOL 332 or permission of instructor.

## tRT 221. Respiratory Critical Care

Procedures (4) Summer. Manual resuscita. tors, airway management, arterial sampling and analysis, quality control procedures, non-invasive gas monitoring. Mechanical ventilation. Prerequisite: RT 121, 151, RT 101 or BIOL 331 and 332 or permission of instructor. Corequisite: RT 252. Three hours lecture, three hours lab.
†RT 222. Principles of Respiratory Care III (3) Fall. Hemodynamic and other physiological monitoring, EKG interpretation, cardiopulmonary diagnostics, neonatal and pediatric respiratory care. Puimonary rehabilitation and home care. Two hours lecture, three hours lab. Prerequisite: RT 221 and 252 c permission of instructor. Corequisite: RT 253

## †RT 232. Advanced Cardiopulmonary Concepts and Procedures (3) Fail.

 Advanced techniques and equipment and selected pulmonary-related disorders not covered in previous courses. Introduction to basic principles of management and supervision, education and research as they relate to respiratory care. Prerequisite: Must meet program matriculation standards; RT 202, 252 and 221
## $\dagger$ RT 252. Respiratory Care Directed

 Practice II (2) Summer. RT 451 continued with addition of directed practice in clinical environment of hyperinflation modalities, bronchopulmonary hygiene, CPR. Twelve hours of field study per week. Prerequisites: Must meet program matriculation standards; RT 121 and 151. Corequisite: RT 221.
## TRT 253. Respiratory Care Directed

Practice III (4) Fall. Directed clinical practice at various clinical sites. Students gain handson experience in managing artificial airways and mechanical ventilators, performing arteriotomy and analyzing samples and interpreting and applying physiological data. Experience gained in cardiopulmonary diagnostics and other related areas of respiratory care practice. Twenty-four hours of field study per week. Prerequisites: Must meet program matriculation standards; RT 221 and 252. Corequisite: RT 222.

## fRT 254. Respiratory Care Directed

actice IV (4) Spring. Students rotate to fous clinical sites to gain exposure to specialized equipment and techniques which may be unique to that institution, while continuing to practice procedures from previous clinical assignments. Twenty-four hours of field study per week. Prerequisite Must meet program matriculation standards; all respiratory therapy courses.

## †RT 290. Special Topics in Respiratory

Care (1-3). Special topics or issues in respiratory care or cardiopulmonary-related topics which may be of current interest to practitioners. May be repeated to 6 hours if topics differ. Prerequisite: For practicing respiratory care professionals, or permission of instructor.

## Romance Languages (ROML)

ROML 200. European and Latin American Cinema (3) Films of cultural and literary significance from Mediterranean and Latin American countries seen through study of selected topics, themes or movements. Taught in English. Includes viewing of films with subtitles.

OML 262. African Literature in Transla(3). Literary masterpieces from or about frica, including negritude movement. Works originally written in romance languages. Does not count toward French or Spanish major or minor.

## ROML 470. Readings in Romance

 Languages and Literature (1-3). Independent reading for advanced students wishing to conduct comparative study in particular period, author or authors, problem or genre. Prerequisites: consent of chair of department and instructor.ROML 495. Literary Translation (3). Translation into English of poems and short prose works of studentsí choice, with advice and consent of instructor. From French, Spanish, Italian and Portuguese. Open to majors, minors and graduate students in French and in creative writing and graduate students in Spanish. Prerequisite: consent of instructor.

## Russian (RUSN)

Entering students who had Russian in high school should take the placement test during orientation and registration or prior to enroliment in a course.

UUSN 101. Elementary Language and
Culture I (4) Fall. Introduction to the Fussian language in its cultural and social context with emphasis on speaking, listening and reading skills. Four class periods and laboratory practice each week.

RUSN 102. Elementary Language and Culture II (4) Spring. RUSN 101 continued. Four class periods and laboratory practice each week. Increased use of authentic reading materials. Completion of elementary grammar study. Prerequisite: RUSN 101, or by placement.

RUSN 117. Conversation and Pronunciation 1 (1) Fall or Spring. Oral practice for beginning students. Concurrent enrollment in RUSN 101 or 102 required. May be repeated to three hours.

RUSN 118. Conversation and Pronunciation II (1) Fall or Spring. Oral practice for intermediate students. Concurrent enrollment in RUSN 201 or 202 required. May be repeated to three hours.

RUSN 200. Study Abroad I (2-6) On demand. Intermediate in-country Russian language training. Prerequisite: RUSN 102 or equivalent.

IRUSN 201. Intermediate Russian I (4) Fall. Further development in reading, narrating and describing. Writing common documents. Review of elementary grammar. Four class periods and laboratory practice each week. Prerequisite: RUSN 102, or by placement.

TIRUSN 202. Intermediate Russian II (4) Spring. RUSN 201 continued. Introduction to reading Russian fiction. Completion of basic grammar. Four class periods and laboratory practice each week. Prerequisite: RUSN 201, or by placement.

RUSN 215. Russian Culture (3) Fall. Culture and civilization of the Russian people from their origins to the recent past. Lectures, audio-visual presentations and readings in English

## RUSN 216. Contemporary Russian

 Society (3) Spring. Contemporary life in Russia, Russian culture and societal values. Reading of primary sources in translation, Rusian film, media and music. Interdisciplinary approach.RUSN 300. Study Abroad II (2-6) On demand. Advanced in-country Russian language training. Prerequisite: RUSN 202 or equivalent.

## RUSN 312. Introduction to Russian

Literature (3) Select 19th- and 20th-century Russian writers such as Dostoevsky, Chekhov, Bulgakov. In translation. Class discussion and writing in English.

RUSN 313. Contemporary Russian Literature (3) Exploration of themes, styles and genres of Russian writing since the 1950s. Includes Russian women and emigre writers. In translation. Class discussions and ample English writing practice.

RUSN 317. Composition and Conversa-
tion I (3) Fall. Intensive oral and written practice; emphasis on mastery of basic structural patterns employed in conversation and writing. Prerequisite: RUSN 202, or by placement.

RUSN 318. Composition and Conversa-
tion II (3) Spring. RUSN 317 continued.
Prerequisite: RUSN 317.

## RUSN 320. Readings in Russian Culture

(2). Readings selected to elucidate themes in Russian cultural and social thought. Guidance in advanced reading techniques. Prerequisite: RUSN 202 or consent of instructor.

RUSN 331. Workshop in Translation (1-3) On demand. Individualized and/or small group work in translation of scientific, technical or business writing, or other types of expository prose in the student's area of specialty. May be repeated to six hours. Prerequisite: RUSN 202.

RUSN 401. Russian Poetry (3) On demand. Russian lyric from the mid-18th century through contemporary Russian verse.
Prerequisite: RUSN 202.
RUSN 402. Russian Novel (3) On demand. Detailed study of the great tradition of the Russian novel. Primary readings consist of authors such as Karamzin, Pushkin, Gogol, Turgenev, Tolstoy, Dostoyevsky, Gorky, Solzhenitsyn. May be repeated for credit when offered with different content. Open to nonmajors who will read assigned works in translation.

RUSN 403. Russian Drama (3) On demand. Major works of Russian dramatic literature as exemplified by.Polotski, Fonvizin, Griboyedov, Pushkin, Ostrovski, Turgenev, Tolstoy; emphasis on Chekhov and Moderns. Open to nonmajors who will read assigned works in translation.

RUSN 415. Russian Film (3) Fall. Russian film art and history from its inception to present. Works of major directors (Dovzhenko, Eisenstein, Paradzhanov, Pudovkin, Tarkovsky) and other representative films in their cultural context. Fee.

RUSN 417. Advanced Composition and Conversation (3) Fall. Styles of speech and related advanced grammar. Conversation and composition practice. May be repeated to six hours. Prerequisite: RUSN 318.

RUSN 419. Journalistic Russian (2) Spring. Advanced skills for reading periodical literature in Russian. Prerequisite: RUSN 417 or consent of instructor.

RUSN 432. Russian Folklore (3) On demand. Survey of major genres of Russian folk literature and culture, and their influence on language and literature. Open to nonmajors who will read assigned works in translation.

RUSN 480. Selected Topics (1-3) On demand. Topic chosen to meet curriculum needs and siudenì requests. May be repeated to six hours. Prerequisite: RUSN 202.

RUSN 497 . Studies in Russian (1-3) On demand. Independent reading for the advanced student. Prerequisites: arrangement with instructor and consent of department chair prior to registration.

## Social Science (SOSC)

tSOSC 101. Introduction to the Social Sciences (3) Fall, Spring. Fundamental concepts and methods in the social sciences.
tSOSC 289. Human Services Practicum ( $3-\mu$ ) Spring. Supervised field experience in an approved agency combined with a seminar designed to integrate theory and practice. Capstone course to the human services curriculum; students must be near completion of the degree in human senvices and $b e$ in good standing academically. Prerequisite: SOWK 324 or consent of instructor.

## Social Work (SOWK)

ASOYV 110 . Introduction to Social Work Profession (3) Fall, Spring. Origins of the profession and its relationship to social welfare. Generalist knowledge base of social work and professional values which guide social work practice.
$\triangle$ SOWK 227. Ethnic and Cultural Diversity in Social Work (3) Fall, Spring. Issues and concepts important to undersianding probiems surrounding ethnicity and relationship to social work.

## SOWK 300. Social Work Research

 Methods (3) Fall, Spring. Includes content specific to the needs of the generalist social worker. Topics include single subject design, program evaluation, quantitative and qualitative methodologies, ethics and critical evaluation of existing research. Prerequisite: SOC 369, MATH 115 or PSYC 270.suwK 312. Social Welfare Institutions (3) Fall, Spring. The institutions of social welfare; basic concepts of social welfare as a response to unmet human need. Issues of diversity, growth of the profession and related values. Prerequisites: social work major, FOLS 110 and ECON 200, or consent of instructor.

SOWK 320. Human Behavior and the Social Environment I (3) Fall, Spring. Life span from conception to later adolescence utilizing an acological perspective. Impact of biological, psychological and socio-cultural systems on human growth and development.

Prerequisites: social work major, BIOL 104, SOC 101, PSYC 201 or consent of instructor.

SOWK 321. Human Behavior and the Social Environment II (3) Fall, Spring. Continuation of the life span which includes early adulthood, middle adulthood, aging process, death and dying. Theories and research on various systems (family, groups, organizations) which influence human growth and development. Prerequisites: social work major and SOWK 320, or consent of instructor.

## SOWK 322. Social Policy and Social

 Services (3) Fall, Spring. Social problems, social policy and social services as interrelated areas. Basic models for evaluating and influencing social policy. Prerequisites: social work major, SOWK 312, or consent of instructor.ASOWK 324. Interviewing and Observation, Practice I (3) Fall, Spring. Development of interviewing and observational skills used in working with diverse client populations. Client assessment skills based on strengths perspective within generalist social work mode. Includes 30 hours off-campus volunteer activity in human service agency. Prerequisites: social work major and junior standing or consent of instructor.

SOWK 325. Social Work Practice II (4) Fall, Spring. Components of generalist social work practice; needs and strengths identification, assessment, intervention strategies with emphasis on direct (micro) practice, evaluation. One credit lab hour is earned for a minimum of 45 hours off-campus experience in social work setting which integrates theory with practice assignments. Prerequisites: junior standing, social work major and SOWK 324, or consent of instructor.

SOWK 326. Social Work Practice III (3)
Fall, Spring. Course builds on previous practice courses covering material from mezzo through macro practice. Content includes social work treatment and task group, organizational and community practice. Community practice skills include: advocacy, fundraising, education, lobbying. Prerequisites: social work major, SOWK 320 and 324 or consent of instructor. Can be taken concurrently with SOWK 325.

SOWK 332. Law for Social Workers (3) Fall, Spring. Legal issues related to confidentiality, legal and legislative processes, family law, courts and adjudication process, role of social worker as witness, legal issues related to disenfranchised population. Prerequisites: junior standing, social work major.

SOWK 400. Topics in Social Work (1-3) On demand. Courses being considered for offering on regular basis. May be repeated.

SOWK 423. Field Instruction (12) Fall, Spring, Summer. Required social work capstone course, practice experience in selected social agency taught by field instructor and monitored by faculty liaison. Minimum of 448 hours. Field practice assignments are made via coordination with prospective social service agency, the field coordinator, and the faculty. Prerequisites: All core courses completed prior to field instruction, senior standing, social work major and 2.50 GPA in core and accumulative. Graded S/U.

SOWK 430. Practice Skills Seminar (3) Fall, Spring, Summer. Faculty and field instructors conjointly teach this course. Conceptual frameworks, precise techniques and practitioner siyles are considered as they underlie the student's problem solving in field instruction. Taken concurrently with SOWK 423.

SOWK 470. Independent Study (1-3) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisites: junior standing, social work major and faculty sponsor. May be repeated up to six hours.

## Sociology (SOC)

1/ASOC 101. Principles of Sociology (3)
Fall, Spring, Summer. Elements and concepts of social organization, social change and group relationships.
\$ $\triangle$ SOC 202. Social Problems (3) Fall, Spring, Summer. Sociological analysis of contemporary social problems. Prerequisite: SOC 101.

SOC 210. Sociology of Religion (3) On demand. Role of religion in society; influence of religion upon society and effects of social structure on religious beliefs. Prerequisite: SOC 101.
\#ASOC 231. Cultural Anthropology (3) Basic concepts and objectives in study of culture. Range of cultural phenomena and approaches to their study.

SOC 300. Topics in Sociology (1-3) On demand. Courses being considered for offering on regular basis. See class schedule for listing. May be repeated. Prerequisite: SOC 101.

SOC 301. Social Psychology (3) Fall, Spring, Summer. Social behavior; process of interaction and interpersonal influence. Prerequisite: SOC 101.

SOC 302. Introduction to Classical Sociological Theory (3) Fall, Spring. Major theories and concepts of sociology. Prerequisite: SOC 101.
$\therefore$ SOC 311. Community and Urban Sociolagy (3) On demand. Communal life from ginnings in folk society; contemporary urban-metropolitan communities, folk urban contrasts and community types. Prerequisite: SOC 101.

SOC 312. Population and Society (3) Fall, Spring. Population growth and distribution; bearing on current economic, political and social problems. Prerequisite: SOC 101 or consent of instructor.

SOC 313. Fertility and Family Planning (3)
Spring. Sociological causes and consequences of human fertility patterns with emphasis on trends and differentials in the United States, including: fertility decision making, value and costs of children, contraception and abortion, unplanned parenthood, voluntary childlessness, illegitimacy, sex education and related public policies. Prerequisite: SOC 101.

7 10 SOC 316. Minority Groups (3) Fall, Spring, Summer. Analysis of ethnic and minority groups in American society; conditions that favor and hinder acceptance of such groups as integral elements in national population. Prerequisite: SOC 101.

SOC 317. Social Stratification and Poverty (3) Spring. Inequalities in distributions of realth, power and prestige in societies. jpes of systems of inequality; caste, estate, Class. Consequences of inequalities for society as a whole and for segments of society; educational-occupational opportunities, racial-ethnic relations', social mobility, social change. Prerequisite: SOC 101.

SOC 318. Social Organization (3) On demand. Sociological concepts, theories and models of contemporary complex organizations; impact of social psychological factors on organizational effectiveness, relationship of systems theory to problems of organizational design and behavior. Prerequisite:
SOC 101.
SOC 319. Alcohol and Public Policy (3) Fall, Spring. The social psychology of alcohol abuse with respect to the incidence, causes and social control of problem drinking. Policy issues considered include those relating to alternative prevention, treatment and intervention strategies. Prerequisites: SOC 101 and 301.

SOC 320. Computers and Society (3) Fall. Impact of computers on society and the social forces prompting the rapid and widespread adoption of computer technology. Protection of personal privacy, changing labor force composition, the cashless society, Todification in beliefs and values, the future post-industrial society. Not a programming course.
$\triangle$ SOC 340. Deviance and Social Control-
(3) Fall, Spring, Summer. History of attempts to define and explain deviant behavior. Social conditions and processes associated with careers of deviants; relationship of deviancy to problems of social control. Prerequisite: SOC 101.
$\triangle$ SOC 341. Juvenile Delinquency (3) Fall, Spring, Summer. Analysis and processes of development, treatment, prevention and control of juvenile delinquency. Prerequisite: SOC 101.

SOC 352. Collective Behavior (3) Spring. How new social groupings and order arise from unstructured situations. Behavior of such collectivities as riots, mobs and crowds. Prerequisite: SOC 101.

7SOC 361. The Family (3) Fall, Spring, Summer. Traditional and contemporary family types; current similarities and differences of family organization in various cultural environments. Prerequisite: SOC 101.

SOC 368. Introductory Methodology (3) Fall, Spring. Survey course on research methods in sociology: nature of science, theory construction, operationalization of a research problem, alternative research designs (including evaluation), instrumentation, data collection and data analysis. Prerequisite: SOC 101 or consent of instructor.

SOC 369. Introductory Statistics (3) Fall, Spring, Summer. Data presentation, measures of dispersion, correlation, regression, probability, probability distributions, sampling distributions, hypothesis testing and analysis of variance. Prerequisite: SOC 101.

SOC 371. Applied Survey Research (3) On demand. Practical experience in survey research in an applied context: policy issues, problem formulation, measurement, questionnaire-interview design, sampling procedures, data collection, electronic data processing, interpretation and report writing. Prerequisites: SOC 101 and 368 and 369 or consent of instructor.

SOC 404. Social Gerontology (3) Spring. Problems of aged in contemporary society. Social gerontology as field of interest of interdisciplinary nature; emphasis on socioeconomic approach. Prerequisite: SOC 101.

SOC 414. Society and the Environment (3) Fall. Present issues and problems of human environment from a sociological perspective. Special emphasis on analysis of the present problems of resources, pollution, technology, population, consumerism and the use of energy.

SOC 415. Industrial Sociology (3) On demand. Industrialization as a social process, labor force dynamics, models of organization, human relations, nature of work and job satisfaction. Prerequisite: SOC 101.

SOC 416. Political Sociology (3) On demand. Political behavior in society from standpoint of both classical and contemporary sociology. Prerequisite: SOC 101.
$\Delta$ SOC 417. Sociology of Sport (3) Fall, Spring. Sociological concepts and theories to investigate sport as social institution and relationship to other social institutions; organizational theory and small group research applied to sport; social psychological aspects of sports. Prerequisite: SOC 101.

SOC 418. Social Change (3) On demand. Theories of social change, technology and social change, social trends and their consequences. Planning, predicting and adapting to social change. Prerequisite: SOC 101.

SOC 419. Population and Development (3) On demand. Sociological approaches to understanding relationship between population trends and poverty in developing societies. Issues include food supplies, birth control, urbanization.
$\Delta S O C$ 441. Criminology (3) Fall, Spring, Summer. Nature, causes, treatment and prevention of crime. Prerequisite: SOC 101.

SOC 442. Corrections (3) Fall, Spring. Socio-psychological approach to origins and development of federal; state and local penal institutions. Prerequisite: SOC 441.

SOC 443. White Collar and Organized Crime (3) On demand. Criminal behavior within and by organizations; analyses of employee theft, graft, corporate crime, governmental crime, professional crime,. syndicated crime. Prerequisite: SOC 340 or • 441.

SOC 444. Deviant Sexual Behavior (3). Spring. Sociological perspective on sexual behaviors stigmatized in U.S.; such aspects as prevalency, social contexts of occurrence, effects on society, sources and impacts of societal reaction, especially criminal law. Prerequisite: SOC 340 or 341 or 441.

SOC 460. Gender Socialization (3) On demand. Theoretical and empirical literature on family and sex roles; socialization, changing nature of women's and men's roles and prospects for future. Institutional sources of women's and men's roles in other cultures. Prerequisite: SOC 101.

SOC 461. Sociology of Family Violence (3) Fall, Spring. Current research and theoretical perspectives on family violence: spouse battering; marital rape; sibling violence;
incest; child abuse. Sex roles, family ideologies, social structures, power relations examined as constituting the basis of family confict and violence between family members. Prerequisite: SOC 101.

SOC 463. Lesisure, Work and Retrement (3) On demand. Sociological analysis of three aspects of life cycle. Crisis in personal Ilfe occasioned by each of these stages and by fransitions from one stage to another. Prerequisite: SOC 101.

SOC 470. Readings, Pesearch and Internship (1-8) Fall, Spring, Summer. Supervised independent work in selected areas. Extensive reading of more advanced therature, planned research or field placement in an approved sotting. May be repoated, but cannot exceed a total of 12 hours. Prerequisites: junior standing and a minimum of 12 hours of accumulated credit in regularly scheduled SOC courses. Prior writen permission of instructor and depart. ment chair required. Graded S/U.

SOC 480. Senior Seminar (3) On demand. selected topics in sociology. Recent seminars have included sociology of women, individual and sociology, contemporary social critics, the family, alternatives and critiques. May be repeated. Prerequisites: SOC 101 and consent of instructor.

SOc 489. Intemship (4-5) Fall, Spring, Summer. Provides practical experience in applied soclology such as criminology, human services, population studies, community planing and survey research. May be repeated, Only five hours may be applied to SOC major or minor. Prerequisite: 12 hous in SOC. Graded S/U.
$\triangle S O C$ 49E. Workshop on Current Topics (1-4) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. Fequirements usually completed within time format May be repeated if topics differ, on approval of aciviser.

## Fpanish (SPAN)

Sudente who had Spanish in high schol should attend the placement session during orentation and registration or contact the dopartment prior to enrollment in a course. Credit will not be given for coursework more then two levels lower than the highest level completed in high school, unless authorized by the chair of the department.

ASPAN 101. Elementary Spanish I (4) Fall, Spring. Communicative approach to beginning language use in the four skills: listening, speaking, reading, writing. Four class periods and scheduled laboratory practice sach weok.

ASPAN 102. Elementary Spanish II (4) Fall, Spring. SPAN 101 continued. Four class periods and scheduled laboratory practice each week. Prerequisite: SPAN 101 or one year of Spanish in high school.

SPAN 141. Conversational Spanish for Medical Personnel (3). Practice in speaking and understanding oral Spanish; essential expressions, questions and directions needed by medical personnel.

TISPAN 201. Intermediate Spanish I (3) Fall, Spring. Communicative approach to intermediate language use in the four skills: listening, speaking, reading, writing. Three class periods and scheduled laboratory practice each week. Prerequisite: SPAN 102 or two years of Spanish in high school.

TISPAN 202. Intermediate Spanish 11 (3) Fall, Spring. SPAN 201 continued. Three class periods and laboratory practice each week. Prerequisite: SPAN 201 or three years of Spanish in high school.

TISPAN 212. Spanish Cultural Series IV (3) Fall, Spring. Development of reading comprehension in Spanish using cultural materials concerning Spain and Spanish America. Conducted in English. Prerequisite: SPAN 201 or three years of Spanish in high school. Cannot be taken for credit if SPAN 202 credit has been received.

SPAN 221. Hispanic Songs (1). Traditional and popular songs from various Hispanic countries, sung in Spanish; emphasis on sludy of texts and pronunciation. May be repeated to maximum of three hours. Prerequisite or corequisite: SPAN 101 or consent of instructor.

SPAN 231. Hispanic Folk Dancing (1). Traditional dances of Spain and Spanish America, especially those of Mexico and Colombia. Learning and performance of dances accompanied by regional and historical background. May be repeated to maximum of two hours. No prerequisite.

SPAN 270 . introduction to Latin American Culture Studies (3) Fall. Introductory overview of Latin American culture from a variety of disciplinary perspectives. Topics may include racial, national, and regional idenities; urban and rural society; popular celebrations and political protest. Conducted in English.

## $\triangle$ SPAN 351 . Spanish Composition and

 Conversation 1 (3). Development of skill in speaking and writing, with appropriate grammar review. Prerequisite: SPAN 202.
## SPAN 352. Spanish Composition and

 Conversation II (3). Continued development of skill in speaking and writing, with appropriate grammar review. Prerequisite: SPAN 202.SPAN 367. Introduction to Spanish Peninsular Literature (3). Outstanding authors, works and movements of Peninsul literature from the Middle Ages to the present. Prerequisite: SPAN 351 or SPAN 352 or consent of instructor.

SPAN 368. Introduction to Spanish American Literature (3). Outstanding authors, works and movements from the time of discovery to the present. Prerequisite: SPAN 351 or SPAN 352 or consent of instructor.

SPAN 371. Spanish Civilization (3). Political, social, intellectual, artistic development of Spain. Prerequisite: SPAN 351 or SPAN 352.

SPAN 377. Civilization of Mexico and the Caribbean (3). Political, sociai, intellectual, artistic development of Mexico, Central America and Spanish-speaking islands of the Carribbean. Prerequisite: SPAN 351 or SPAN 352.

SPAN 378. Civilization of South America (3). Political, social, inteliectual, artistic development of Spanish-speaking countries of South America. Prerequisite: SPAN 351 or SPAN 352 or consent of department.

SPAN 382. Spanish Business Correspon dence (2). Spanish for commercial purposes business letter writing. Prerequisite: SPAN 351 or SPAN 352.

SPAN 401. Latin American Culture Siudies Seminar (3) Spring. Investigation and discussion of cultural topics from a number of different perspectives. Topics may vary from year to year. Open to Spanish majors with LACS emphasis or others by permission of instructor. Prerequisite: SPAN 270.

SPAN 431. Spanish American Fiction (3). Major authors and works from literary movements of the 19th and 20th centuries, with emphasis on either regionalism or the contemporary novel. Prerequisite: SPAN 368.

SPAN 441. Medieval and Golden Age
Literature (3). Representative masterpleces of Spanish literature from the Middle Ages and the Siglo de Oro: Epic, poetry, novel and theater. Prerequisite: SPAN 367.

SPAN 442. Spanish Literature of the Nineteenth Century (3). Outstanding works of the 19th century; romanticism, realism, naturalism, prose and poetry. Prerequisite: SPAN 367.

SPAN 444. Contemporary Spanish
Literature (3). Outstanding works from the generation of 1898 to the present; poetry and prose. Prerequisite: SPAN 367.

SPAN 450. Advanced Grammar and mposition (3). Grammar and composiespecially appropriate for future +uachers of Spanish. Prerequisites: SPAN 351 and 352.

SPAN 455. Applied Linguisitics (3). Phonological, morphemic, syntactical, semantic aspects of Spanish; application to language learning and teaching. Prerequisites: SPAN 351 and 352 or consent of instructor.

SPAN 463. Career Spanish (3). Development of translation skills (Spanish to English and English to Spanish) on materials representing a wide range of technical, professional and business careers. Prerequisites: SPAN 351 and 352.

SPAN 470. Readings in Hispanic Literature (1-3). Independent reading for the advanced student who wishes to study a particular period or author. Prerequisites: consent of department chair and instructor.

SPAN 481. Spanish-American Literature I: Discovery to Modernism (3). Representative authors from the Chroniclers through the Romanticists; prose and poetry. Prerequisite: SPAN 368 or consent of instructor.

SPAN 482. Spanish-American Literature II: dernism to the Present (3). Representaauthors from Modernism and subsequent Zoth century literary developments; prose and poetry. Prerequisite: SPAN 368 or consent of instructor.

SPAN 488. Contemporary Mexican Literature (3). Outstanding works of the 20th century. Prerequisite: SPAN 368 or consent of instructor.

SPAN 489. Hispanic Studies (3). Intensive study of an author, literary school, genre or selected theme. May be repeated if topics clearly differ. Prerequisite: SPAN 367 or 368.

## Special Education (EDSE)

$\triangle$ EDSE 311. The Exceptional Child in the Regular Classroom (2) Fall, Spring, Summer. Teaching exceptional handicapped children in alternative settings. C/F hrs.: 10.

EDSE 324. American Sign Language of Deaf (3) On demand. Basic vocabulary and grammatical structure of the visual language system used by deaf persons in North America. Implications of deafness for language and communication, psycholinguistic studies of Sign.

TSE 395. Workshop on Current Topics -3) On demand. Intensive educational experience on selected topics related to skill development, content update, materials development. Typically, an all-day concen-
trated time format used. Requirements usually met within format. May be repeated on approval of adviser.

AEDSE 421. Young Children With Special Needs in Early Childhood Programs (3) Fall. Understanding of infant, toddler and preschool children with special needs in integrated learning environments. Awareness of specific disabilities and their impact on development, family life and education.

## $\triangle E D S E$ 431. Education of Exceptional

Students (3) Fall, Spring, Summer.
Problems of exceptional school children with developmental disabilities, specific learning disorders, speech/hearing/visual disabilities, or multiple disabilities or students who are gifted; etiology, diagnosis, personal-social problems and prognosis. C/F hrs.: 11. Prerequisite: sophomore standing or higher.

EDSE 432. Principles and Purposes of Special Education (2) On demand. Functions of public school and governmental agencies in providing educational services for exceptional children. Prerequisite: EDSE 431 or concurrently.

EDSE 433. Education of Students with Mental Retardation (3) Fall, Spring, Summer. Understanding and teaching of students with mental retardation: etiology, diagnosis, theory, educational procedures. $\mathrm{C} /$ Fhrs.: 20. Prerequisite: EDSE 431.

EDSE 437. Occupational Orientation and Job Preparation for Individuals with Disabilities (3) Fall, Spring, Summer. Responsibilities of teachers of students with disabilities for developing employability skills. Prerequisites: EDSE 431, 433 and 451. C/F hrs.: 25.

EDSE 440. Curriculum Development and Methodology for Teaching Students with Multiple Disabilities (3) Fall. Materials and techniques emphasizing development and appropriate skills with practical applications. Must be taken concurrently with EDSE 443. Prerequisites: EDSE 431 and 433; or consent of instructor. C/F hrs.: 25.

## EDSE 441. Education of the Gifted and

Talented Child (3) On demand. Nature and needs of gifted/talented; identification techniques, curriculum planning and development, teaching strategies and techniques, resources and materials available to teachers; program evaluation for gifted/talented. C/F hrs.: 10.

EDSE 442. Applied Behavior and Classroom Management (3) Fall, Spring, Summer. Strategies for analyzing and modifying classroom behavior to facilitate learning. Application to elementary and secondary special and regular education settings. Prerequisites: junior standing, EDSE 311 or 431 or core equivalent or consent of instructor. C/F hrs.: 15.

EDSE 443. Practicum with Exceptional
Students (1) Fall, Spring. Individual participation, and supervised practicum experiences. May be repeated to nine hours. Prerequisite: Must be taken concurrently with EDSE 440, 445, 447, 448, 453, 463, 465, 467 or 470 . C/F hrs.: 44 . Graded S/U.

EDSE 445. Adult Service Options for Persons with Multiple Disabilities (2) Fall. Employment options for students with multiple disabilities. Techniques for job analysis, analyzing skills, specific jobs and job areas. Must be taken concurrently with EDSE 443. Prerequisites: EDSE 431 and 433, or consent of instructor. C/F hrs.: 25.

EDSE 447. Language Arts Methods for Students with Mild to Moderate Disabilities (3) Fall, Spring. Methods and materials for teaching reading, writing and other language arts for students with mild to moderate disabilities. Must be taken concurrently with EDSE 448, 453 and three sections of 443. Prerequisites: EDSE 484, senior status and department permission. C/ Fhrs.: 8. Lab fee.

## EDSE 448. Mathematics, Science and

 Social Studies for Students with Mild to Moderate Disabilities (3) Fall, Spring. Methods and materials for instruction in mathematics, science and social studies, for students with mild to moderate disabilities. Must be taken concurrcently with EDSE 447, 453 and three sections of 443. Prerequisites: EDSE 484, senior status and department permission. C/F hrs.: 14. Lab fee.$\triangle E D S E$ 451. Education of Students with Specific Learning Disabilities (3) Fall, Spring, Summer. Characteristics, multiple origins and educational significance of specific learning disabilities. Prerequisite: EDSE 431 or concurrently. C/F hrs.: 15.

EDSE 453. Educational Evaluation of Exceptional Students (3) Fall, Spring. Identification and analysis of student performance as direct or contributing factors to educational and behavioral failures of exceptional students. Must be taken concurrently with EDSE 447, 448 and three sections of 443 . Prerequisites: EDSE 484, senior status and permission of department. C/F hrs.: 15. Lab fee.

EDSE 454. Education of Students with Severe Behavioral Disabilities (3) Fall, Spring, Summer. Problems of students with severe behavioral disabilities: identification, placement, programs, support services, educational treatments. Disorders are considered in terms of etiology, incidence, prognosis and concomitant disabling conditions. Prerequisite: EDSE 431 or consent of instructor. C/F hrs.: 11.

EDSE 456. introduction to Educational Neuropsychology of the Exceptional Child (3) On demand. Theories and research related to the function and development of the brain as related to language, speech, reading, writing, spelling, mathematics. Major attention given to brain dysfunction, assessment, instructional approaches. Prerequisites: EDSE 431, 433 and 451. C/F hres: 10.

EOSk 457. Parent Education and Interac: tion (3) Fall, Spring, Summer. Approaches for educators in communicating with parents of children with disabilities. Counseling parents and families; understanding legislated rights of the child with disabilities and the roie of educators/parents in Instuction. Prerequisite: EDSE 431. C/F hrs.: 8.

EDSE 459. Introduction to Manually Coded English Systems/Total Communication (3) Spring. Introduction to manual English and Total Communication Instruction, sign systems and processes. Development of besic sign skills for classroom use.

EDSE 460. Advanced Seminar in Manually Coded English/Classroom Techniques and Applications (3) Fall. Investigation of inguistics of manual English in classroom use, implementation procedures for older studenis and parents. Development of advanced skills in manually coded English. Prerequisites: EDSE 459 or consent of instructor.

EDSE 461. Introduction to Education Students with Hearing impairments (3) Spring. History, philosophy, psychology and education of students with hearing impairments. Definitions of terms, structure of the ear, chuses of deainess, types of hearing impaiments, classification of hearing impairments, educational needs. Prerequisites: EDSE 431 and 451. C/F hrs.: 15.

EDSE 462. Eeginning Methods of instruction of Students with Hearing impairments (3) Fall. Observation through puble schools; review of commercial lexibooks (K-HS). Developing lesson plans, unit plans, IEPS, techniques of teaching supplemented by audio-visual workshops and cemonstrations. Prerequisites: EDSE 431, 451, PSYC 324 or EDSE 459 or EDSE 460.

EDSE 403. Curiculum Development and Instructional Strategies for Students with Hearing Impairments (3) Spring (part two of two-part sequence). This course stresses a mini-practicum experience in the public schools, four hours, three times per week. Emphasis on lesson plans, unit planning, dovelopment of materials and demonstration of teaching. Must be taken concurrently with EDSE 443. Prerequisites: EDSE 431, 451, 461, 452. C/F hrs.: 15.

EDSE 464. Language Development of Students with Hearing Impairments I (3) Fall (part one of two-part sequence). Students observe and evaluate language; develop a language picture file; analyze language through a hierarchy of language development and compare normal language with language of the hearing impaired.
Prerequisites: EDSE 431, 451, 461. C/F hrs.: 15. Lab fee.

EDSE 465. Language Development of Students with Hearing Impairments il (3) Spring (part two of two-part sequence). Teaching structured language--Fitzgerald Key; teaching language patterns; developing spontaneous language, language charts, stories through oral/written form. Must be taken concurrently with EDSE 443. Prerequisites: EDSE 431, 451, 461, 464. C/F hrs.: 15. Lab fee.

EDSE 466. Orthographic Systems of the Deaf and Phonetic Transcriptions (3) Fall. Teaching orthographic systems to students with hearing impairments; observation in public schools; comparative speech development for students with and without hearing impairments; definitions/related terminology; phonetic transcription and instruction in speech sensory stimulation. Prerequisite: EDSE 461. C/F hrs.: 15.

EDSE 467. Teaching Advanced Speech to Students with Hearing Impairments (3) Spring. Philosophy, teaching procedures, techniques of instruction through analytical and synthetical approaches. Use of current curriculum guides and testing materials. Assessment and diagnostic instruction. Must be taken concurrently with EDSE 443.
Prerequisites: EDSE 461 and 466. C/F hrs.: 5.

EDSE 470. Education of Students with Multiple Disabilities (3) Fall. Educational dynamics, strategies, logistics and responsibilities involved in socialization and educafion of students with multiple disabilities. Must be taken concurrenlity with EDSE 443. Prerequisites: EDSE 431, 433. C/F hrs.: 25.

EDSE 484. Prepracticum with Exceptional Students (3) Fall, Spring. Observations of educational programs for exceptional sludents. Experience in using media and developing IEPís with exceptional students. Must be taken concurrently with EDSE 431 or 451 or 454 . Prerequisite: EDSE 431 . C/F hrs.: 80. Graded S/U.

EDSE 490 . Problems in Education (3) On demand. For advanced students wanting to conduct intensive study of selected problems in education. May be repeated to six hours; undergraduate credit only. Prerequisite: consent of department.

EDSE 492. Student Teaching ( $1-10$ ) Fall, Spring. Classroom teaching in special education under supervision on full-day basis. Required for special education cerifification. Conferences and seminars supplement program. Fee: $\$ 5$ per credit hour. College/program eligibility prerequisites must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Sport Management (SMD)

$\triangle$ SMD 201. Introduction to Sport Management (3) Fall, Spring. Basic concepts of sport management; career preparation; professional opportunities.

SMD 229. Lifeguard Training (2) Spring. Red cross lifeguard training in hazards, distress recognition, rescue, patron and employer relationsips, and responsibilites. Prerequisites: Standard First Aid and CPR certificates. Eligibility skills exam conducted first week of course. (See PEG 173.)

SMD 231. Aquatic Games and Activities (1) On demand. Overview of equatic games and activities applicable to a variety of aquatic programs. Prerequisite: intermediale swimming skill level.

SMD 240. Sport and Recreation Clients with Differing Abilities (3) Fall, Spring. Introduction to knowledges and skills that w. enable future sport and recreation management professionals to identify, assess, organize, supervise and promole sport and recreational programs for the disabled population.

SMD 245. Aquatics Operation and Management (3) On demand. Designing, construction, planning, programming, operating and administering aquatic facilities. Prerequisites: CHEM 115 and BUSE 101.

SMD 250. Computer Utilization in MPER Services (3) On demand. Manipulation and application of microcomputer software to selected problems in sport management, recreation and activity settings; two lectures, two lab hours per week.
$\triangle$ SMD 298. Principles of Sport Management (3) Fall, Spring. Practical applications of various techniques of management and marketing required in a sports enterprise setting. Areas of study include: marketing, promotions, employee relations, personnel, finances and legal considerations. Prerequisite: matriculation in sport management program or consent of insituctor.

SMD 305. Sport and Event Promotion (3) Fall, Spring. Fundamental promotional principles used in marketing sport and even. services and products. Focus on strategies of information-based promotional campaigns related to sport and event management. Prerequisites: SMD 201 and MKT 300.

SMD 306. Sport and Event Management Fall, Spring. Processes for managing rt and event enterprises. Roles and skills tiflized by sport and event managers. Prerequisites: SMD 201 and MGMT 305 or 360.

SMD 310. Care and Prevention of Sports Injuries (3) Fall, Spring. Basic principles of prevention, recognition and care of sports injuries and duties of athletic trainer. Athletic training majors/minors required to complete clinical observation experience. \$20 lab fee required.

SMD 311. Evaluation of Athletic Injuries (3) Fall even years. Commonly accepted techniques and procedures for clinical evaluation and recognition of the signs and symptoms of athletic injuries. Prerequisites: KNS 230 and SMD 310.

SMD 324. Adapted Aquatics Instructor (1) On demand. Experiences, knowledges and competencies leading to the test for Red Cross certification to conduct adapted aquatics programs. Prerequisite: current Water Safety Certificate.

SMD 365. Foundations of Sport Psychology (3) Fall, Spring. Nonclinical approach for athletes, teachers and coaches regarding the role of psychological aspects of human tavior as it affects performance in sport physical activity; psychological wellbeing, interpersonal skill development and fitness adherence also emphasized:

SMD 366. Psychological Aspects of Exercise and Fitness (3) Fall, Spring. Psychological considerations of exercise and fitness, psychological techniques to enhance adherence to fitness/rehabilitation programs and to enhance coping with exercise related injury. Prerequisites: PSYC 201 and junior standing.

## SMD 375. Sport and Public Assembly

 Facilities (3) Fall, Spring. Designing, planning, managing public and private sport and other public assembly facilities.Prerequisites: SMD 387 and junior standing.
SMD 387. Practicum in Sport Management (1-5) Fall, Spring, Summer. Under supervision of SMD division of School of HPER; petitioning required before registration; credit hours approved separately by program area. Prerequisites: formal matriculation into the sport management program and approval of appropriate division faculty. Professional liability insurance required for Option I students.

SMD 390. Legal Aspects of Sport and acreation (3) Fall, Spring. Negligence bility; control of amateur, professional and school sport; violence/crowd control; product liability; risk management; selected current issues. Prerequisite: junior standing.

SMD 391. Practicum in Athletic Training
(2) Fall, Spring. Field experience for athletic training certification students only; weekly seminars. Prerequisites: C or better in KNS $230 ;$ B or better in SMD 310 and KNS 328; certification in Red Cross CPR and Advanced First Aid; 90 credit hours; 600 supervised clinical clock hours; permission of instructor.

SMD 395. Workshop on Current Topics (13) On demand. Intensive educational experience in selected topics related to skill development, content update or material development; typically, an all-day or similar concentrated time format.

SMD 410. Pathology of Athletic Injuries (3) Spring odd years. Normal physiological responses of the human body to trauma and inactivity, physiological process of wound healing and tissue repair, and the relationship between typical symptoms and clinical signs and injury/illness pathologies. Prerequisites: SMD 310 and 311 . $\$ 20$ fee required.

SMD 411. Therapeutic Athletic Exercise (3) Spring even years. Essential components of a comprehensive rehabilitation program including goals and objectives, exercise selection, methods of evaluating and recording progress, and development of criteria for progression and return to competition. Prerequisites: SMD 410 and 429 or permission of instructor.

## SMD 413. Therapeutic Athletic Training

 Modalities (3) Fall odd years. Examination of the application and physiological response to selected therapeutic modalities available to the athletic trainer. Prerequisites: SMD 410 or permission of instructor.SMD 414. Interpretation of Research in HPER (3) Fall odd years. Identification and evaluation of research problems; interpretation of research in HPER-related areas (e.g., athletic training, sport management, fitness, health, recreation, physical education); basic statistical analysis. Prerequisites: ENG 112, MATH 115 or higher and junior standing.

SMD 421. History and Philosophy of Sport
(3) Fall, Spring. Major historical and philosophical developments in sport.

SMD 425. Sport and Gender (3) Fall, Spring. Cultural, social-psychological and physiological considerations associated with gender and participation in sport and physical activity. Prerequisite: junior standing.

SMD 429. Principles and Problems of Athletic Conditioning (3) Fall, Spring. Physiological foundations of conditioning and the basic fundamentals of conditioning techniques based on principles of strength, power, endurance, speed, etc., relevant to
athletic fitness and performance. Prerequisites: BIOL 332 or KNS 360 or consent of instructor. $\$ 15$ fee required.

SMD 431. Program Planning and Management for Recreational and Youth Sports
(3) Spring. Planning, management, financing, promotion of intramural, club, youth, community and special sport programs. Prerequisite: junior standing or permission of instructor.

SMD 440. Designing and Directing of Fitness and Sport Programs (3) Fall. Objectives, transactions and procedures to conduct professional physical activity and sport programs. Prerequisites: SMD 387 and either KNS 423 or SMD 431.

## SMD 470. Independent Study in Sport

Management (1-3) Fall, Spring, Summer. Indepth study project of a topic of particular significance to the student; project must be approved by project supervisor and program area chair prior to registration; may be repeated. Prerequisite: permission of supervisor and program chair.

SMD 487. Practicum in Sport Management (1-5) Fall, Spring, Summer. Under supervision of sport management division of School of HPER, petitioning required before registration; credit hours approved separately by program area. Prerequisites: SMD 387 and approval of appropriate division faculty. Professional liability insurance required.

SMD 489. Internship in Sport Management (15) Fall, Spring, Summer. Field experience for sport management majors only. Petitioning required before registration. Prerequisites: 52 hours in major field, satisfactory completion of SMD 387, GPA of 2.5 or above, an average of 2.7 or above in the major field and approval of appropriate division faculty. (Option I majors must also complete HED 313.) Professional liability insurance required for Option I students.

SMD 490. Professional Resources in Sport Management (3) Fall, Spring. Professional resources for leadership roles in sport and physical activity. Prerequisite: SMD 387.

## Statistics (STAT)

STAT courses are listed under the heading Applied Statistics. See page 153.

## Technology (TECH)

$\Delta T E C H$ 101. Technology I (3) Fall, Spring and Summer on demand. Communication processes and methods defined by the technology system model. Problem solving techniques introduced and developed.

Students use several application software packages on microcomputers to solve communication problems. No prerequisites. Materials fee.

ATECH 102. Technology 11 (3) Fall, Spring and Summer on demand. Study of technology systems, elements and applications to meet industrial or commercial objectives. Course applies the technology systems model and explores the basic human adaptive skills required to operate, build, maintain, test and develop technology systems. One and one-half hours lecture and three hours laboratory. No prerequisites. Lab ise.

TECH 223. Mechanical Power Transmission (3) Fall. Mechanical drive systems and applicailions. Design, operation, maintenance of mechanical power systems used in industry. One and one-half hour lecture and three hours laboratory, Lab fee.

TECH 280. Developments in Technology
(3) On demend. Now developments in technology, as related to studies in the College of Technology, that impact on labor, menagement, equipment, materials and systems. May be repeated with approval of adviser. Four hours of lecture and laboratory.

ATECH 289. Cooperative Education (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved, paid, full-time position related to student's intended areas of concentration. A minimum of 520 hours of employment during one semester is required. Prerequisites: consent of department and successful completion of co-op workshop. Graded SN.

## TTECH 290. Studies in Engineering

Technology (i-4). For students wanting to conduct extensive study of selected problems in engineering technology.

TTECH295. Field Experience (3) Ten weeks of field work in an appropriate technology environment to be decided in consultation with the student's adviser. Prerequisite: permission of site supervisor and adviser.

## TATECH 302. Technology Systems in

 Societies (3) Fall, Summer on demand. Current issues and their relationship to technology and systems in various cultures throughout the world; emphasis on explaining technological behaviors, and on showing how techrology permeates all human affairs. Two one-and-one-half hour lectures per week. Prerequisites: TECH core and junior status or consent of instructor. Materials fee.TECH 323. Fluid Power Transmission (3) Spring. Pumps, motors, valves, circuits, applications of hydraulic and pneumatic power systems. Design, operation, maintenance of fluid power systems used in industry. One and one-half hours of lecture and three hours laboratory. Lab fee.

TECH 389. Cooperative Education (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved paid, full-time position related to student's area of concentration. A minimum of 520 hours of employment during one semester is required. Prerequisites: TECH 289 and consent of department. Graded S/U.

TECH 391. Internal Combustion Engines (3) Fall, Spring, Summer on demand. Otto (gasoline) or diesel cycles engines; emphasizes assembly, disassembly, testing and measurement procedures. Five hours instructed laboratories. Prerequisite: ET 191 or consent of instructor. Lab fee.

DTECH 395. Technology Workshop (1-3) On demand. Intensive educational experience in a specialized technology. Typically an all-day or concentrated format. Requirements usually completed within time format. May be repeated.

TECH 402. Innovation in Technology (3) On demand. Techniques and procedures involved in innovation and experimentation related to technology; emphasis on product and prototype innovation, experimentation, problem solving, research and development, diffusion and adoption of innovations. Prerequisite: junior status or consent of instructor. Materials fee.

TECH 454. Energy Conversion and Power Transmission (3) Spring even years. Existing and developing systems of energy conversion and power problems of fuel efficiency, pollution, potential, maintenance and application. Four hours of lecture and laboratory. Prerequisite: ET 191. Lab fee.
$\triangle$ TECH 480. Topics in Technology (1-3) On demand. Current trends and developments in industry and business, particularly as they have significance to equipment, materials, processes, systems and facilities related to the education of technologists. May be repeated on approval of adviser.

TECH 489. Cooperative Education (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved, paid, full-time position related to student's intended areas of concentration. May be repeated to eight hours. A minimum of 520 hours of employment during one semester is required. Prerequisites: TECH 389 and consent of department. Graded S/U.

TECH 490. Problems in Technology (1-3) On demand. For advanced students wantino to conduct intensive study of selected problems in technology. Prerequisite: consent of college. May be repeated. Materials fee. Graded S/U.

## Technology Education (TE)

TE 252. Elements of Instruction (3) Fall. Models of instruction as related to learner and functions and purposes of specialized career and technology education programs on all educational levels including individual observation and participation at various levels. Materials fee.

TE 352. Instructional Scope and Sequence (3) Spring. Design and implementation of instructional systems including performance objectives, appropriate content, teaching-learning strategies and evaluation in specialized career and technology education program on all educationai levels including individual observation and participation at various levels. Prerequisite: TE 252. Materials fee.

TE 428. Deveiopment of Training Programs (3) Fall, Spring and Summer on demand. Design production and evaiuation, of training programs for industry and business. Job analysis, task analysis, instructional design and cost analysis in development of training programs. Materials fee.

TE 447. Teaching Technology Systems (3) Spring even years. Integration and use of principles developed in previous methods courses and laboratory settings; selection, organization, adaptation and use of instructional materials or curriculum projects related to industrial technology systems. Prerequisites: MFG 112, CONS 235. Materials fee,

TE 449. Organization and Administration (3) Fall. Financial and business procedures, program, laboratory and equipment planning; maintenance programs, classroom and laboratory management systems; purchasing, storage, dispensing and inventory control procedures; public relations, curricular responsibilities, innovative programs. Prerequisites: TE 352 and TE 497. Materials fee.

TE 462. Career and Technology Education in Elementary Schools (3) Spring on demand (odd years). Development and evaluation of instructional activities to facilitate career development and understanding of technology among elementary. children. Materials fee.

TE 470. Coordinating Cooperative Education Programs (3) On demand. Prepares coordinator of cooperative work education programs in all phases of career and technology education. Readings, discussion and field experiences designed to develop understanding of various types of cooperative programs, role of coordinator and related instruction. Materials fee.

TE 490. Problems in Technology Education (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in technology education. May be repeated. Prerequisite: consent of college..Materials fee.

TE 492. Student Teaching ( $1-10$ ) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Feee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs.: 300 . May be repeated. Graded S/U.

TE 497. Student Teaching (1-10) Fall. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs.: 300 .

## Telecommunications (TCOM)

TCOM 103. Introduction to Mass Communications (3) Fall, Spring, Summer. Survey of broadcasting and other mass media; mass communication media and effects; role and influence of radio, television, film, print media, advertising and public relations. No credit for both JOUR 100 and TCOM 103. Open to norimajors.

TCOM 250. Radio and Television Production for Non-TCOM Majors (3) Fall, Spring. Basic theories and tasks of audio and video production including scripting, technical quality and aesthetics. In-studio experience in radio and television operation. Laboratory hours. No prerequisites. Not open to TCOM majors.

TCOM 255. International Telecommunication Systerns (3) Spring, Summer. Survey of telecommunication systems worldwide. Comparison of technical bases, economics, politics, programming, regulation and audience research. No prerequisites. Intended for majors.

## TCOM 260. Writing for the Electronic

Media (3) Fall, Spring, Summer on demand. Writing for broadcasting and other electronic media; creating scripts with visual and aural
appeal; conveying messages in clear, economical, simple style that communicate to mass audiences. Prerequisites: Completion of at least 30 semester hours of general education requirements including ENG 112, TCOM 103 and TCOM 255 with overall GPA of 2.5 before admittance to TCOM 260; C or better in TCOM 103 and 255. Application for course available in 322 West Hall. Reserved for pre-TCOM majors; nonmajors MUST have departmental permission.

TCOM 262. Radio Announcing and Production (3) Fall, Spring on demand. Style and basic principles and practices of announcing; theories and processes of audio production. Laboratory hours. Lab fee. Prerequisite: TCOM 260.

TCOM 263. Video I (3) Spring, Fall on demand. Basic theories and tasks of video production, including scripting, organization and aesthetics. In-studio experience in equipment operation, program directing. Laboratory hours. Lab fee. Prerequisite: TCOM 260. Nonmajors by permission of instructor.

TCOM 270. Topics in Minorities and Film/ Video (3) On demand. Portrayal and/or participation of minorities in film and video. Topic varies. No prerequisite.

TCOM 350. Scriptwriting (3) Spring. Study and practice of writing for radio, television, film; treatment, format, audience requirements, production techniques. Prerequisite: TCOM 260, nonmajors with permission of instructor.

TCOM 360. Applied Research in Telecommunication (3) Fall, Spring, Summer. Overview of approaches to social research; survey methods, including sampling, measurement, interviewing, questicnnaire design and presentation of results; content analysis; ratings; and interpretation of elementary descriptive statistics.

TCOM 364. Video II (3) Fall. Theories and processes of producing and directing video programs, including scripting, visualization, personnel management and budgeting. Includes multi-camera and single-camera productions, video editing techniques. Laboratory hours. Prerequisite: TCOM 263 or equivalent experience.

TCOM 365. Broadcast History (3) Fall. Current U.S. broadcasting with view of antecedents in regulations, economics, programs, audiences, stations, networks, technology and employment. Prerequisite: eight hours of TCOM.

TCOM 366. Media Effects (3) Fall, Spring, Summer. Theories and research studies of media effects. Critical examination of opposing viewpoints.

TCOM 368. Radio Workshop (1) Fall, Spring, Summer. Development of program ideas through all stages of planning, writing, directing and selling. Individual program projects for possible use on WBGU or WFAL. May be repeated to three hours. Prerequisite: TCOM 262.

TCOM 395. Workshop on Current Topics (1-3) On demand. Intensive educational experience on selected topics: Typically, an all-day or similar concentrated format. Requirements usually completed within time format. May be repeated if topics differ, on approval of adviser.

TCOM 441. Broadcast Computer Applications (3) On demand. Microcomputer-based software applications for radio and television stations. Prepares majors to function in the PC-based job environment. Prerequisite: TCOM 260 or consent of instructor.

TCOM 451. New Electronic Media (3) Fall, Spring, Summer on demand. New, existing and future telecommunications technologies affecting broadcast and media industries with emphasis on World Wide Web, internet and related multimedia technologies. Prerequisite: TCOM 260.

TCOM 455. Electronic Media Management (3) Spring. Function, organizational structure and procedures involved in the operation of electronic media companies and broadcast stations. Prerequisite: TCOM 260.

TCOM 460. Telecommunication Policy and Regulation (3) Fall, Spring. Theoretical approach to key policies and regulations shaping activities in the telecommunications sector. Applied study of regulatory issues in broadcasting, cable and telephony. Prerequisite: TCOM 260.

TCOM 462. Radio Programming (3) On demand. Modern radio program formats in the United States. Prerequisite: TCOM 260.

TCOM 463. Television Programming (3) Fall. Structure and appealing characteristics of television and cable programs. Prerequisite: TCOM 260.

TCOM 466. Television and Film Criticism (3) On demand. Historical development of theatrical, documentary and avant-garde films and video. Function, content and style of film and television criticism.

TCOM 468. Video III (3) Spring. Production of dramatic and public affairs television. programs. Writing, producing and directing emphasized. May be repeated once. Prerequisite: TCOM 364 or equivalent experience.

TCOM 469. Seminar: Contemporary Aspects of Telecommunications ( $1-3$ ) On demand. Investigation and analysis of area in telecommunications. Various topics of current concern. May be repeated with pormission of adviser to six hours.

TCOM 489. internship in Telecommunicathons (1-6) Fall, Spring, Summer. Supervised field experience in electronic communication. Student must arrange for experience with approval of intern supervisor in advance of registration. May De repeated up to six hours Limited to TCOM majors. Prerequisite: 2.5 overall GPA. Graded SU.

TGONin 490. Problems in Telecommunica. tions ( $1-3$ ) Fall, Spring, Summer. For advanced student who wishes to do intensive study in tadio, tolevision or film, independentiy or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of department.

## Theatre (THEA)

ATHEA 110 . Intercollegiate Forensic Activities (1) Fall, Spring. Instruction and experience in intercollegiate contest speaking: including forms of public address and oral interprotation. May be repeated to two credils.

TTHEA 199 Dramatic Production (1) Fall, Spring. Laboratory course for student who participates as performer or technician in Firelands College productions. May be repeates to wo hours. Any combination of THEA 139 and THEA 146 may not exceed two hours. Prerequisite: consent of instructor.

VATHEA 141. The Theatre Experience (3) Fall, Spring, Summer. Art of theatre; heritage and contemporary values as humanistic discipline; importance as social/cultural experience; cpportunity for some involvement in theatrical activities. Laboratory hours required.

THES 146. Dramatic Production (1) Fall, Sping, Summer. Laboratory course for student who participates as performer or technician in University Theatre productions. May be repeated to two hours. Prerequisite: consent of theatre program. Graded S/U.

THEA 201. Playscript Analysis (3) Fall. Methods of reading, studying and analyzing playscripts for production on stage. Concentration on script as vehicle for performance and the understanding of it from the perspective of the actor, director, designer and techucian.

MATHEA 20\%. Ferformance Studies I (3) Fall, Spring, Surnmer. Introduction to the solo performance of ilterature (poetry, prose, oral history. Emphasis on textual analysis as well as vocal and physical techniques of perfomance.

ITHEA 215. Exploring Cultural Diversity Through Performance (3) Fall, Spring. Through performance and discussion of selected public and private texts written by American minority writers, this course explores what it means to be a part of a culturally diverse society.

THEA 241. Principles of Acting (3) Fall, Spring. Basic techniques of acting applied to creating contemporary characters in realistic situations; imaginative, emotional and sensory responsiveness. Three two-hour meetings per week.

THEA 243. Basic Theatre Technology I (3) Fall. Introduction to stagecrafi. Concentration on physical theatre, forms of scenery, materials, tools, construction techniques, rigging, painting, backstage organization and stage properties. Laboratory hours required.

THEA 244. Basic Theatre Technology II (3) Spring. Introduction to costuming, lighting and sound technology. Concentration on tools, techniques and materials of costume construction, lighting and sound equipment, their mechanics and application in production. Laboratory hours required.

ITHEA 261. Introduction to Film (3) Fall, Spring, Summer. Film as art. Essential elements of film; editing, camera work, sound and composition explored in some classic motion pictures. Various approaches to looking at movies and writing about them.

## THEA 266. Introduction to Theatre and

 Film Design (3) Fall. Exploration and application of design principles as they affect the theatre and film. Introduction to rendering, studio tools and media used by the various designers working in the theatre and film. Laboratory work on University productions required.$\triangle$ THEA 290. Studies in Theatre (1-3) Fall, Spring, Summer. For the intermediate student who wishes to do independent study. through a faculty adviser, on a variety of theatre topics. May be repeated. Prerequisite: consent of the theatre program.
$\triangle$ THEA 302. Performance Studies II (3) Spring. Exploration of various forms of solo performance, such as performance in social context, the one-person show, or specialized literary or genre study. (Shakespeare, modern poetry, southern fiction). Topics to be announced. May be repeated for 6 hours. Prerequisite: THEA 202 or consent of instructor.

ATHEA 310. Intercollegiate Forensic Activities (1) Fall, Spring. For juniors and seniors; similar to THEA 110. May be repeated to two credits.

THEA 330. Theatrical Makeup (3) Fall alternate years. Theory and application of makeup for stage, television and film, corrective and character makeup; prosthetics; facial hair.
$\dagger$ THEA 339. Dramatic Production (1) Fall, Spring. Laboratory course for student who participates as performer or tecinnician in Firelands College productions. May be ropeated to three hours. Any combination of THEA 339 and THEA 346 may not exceed three hours. Prerequisite: consent of instructor.

THEA 340. Creative Drama (3) Fall, Spring. A hands-on experience in the use of drama in nonperformance situations. Drama as a stimulus for creativity and problem solving in preschool, elementary and secondary classrooms and in other settings. Theory and practice of improvisation, pantomime and story dramatization.

THEA 341. Directing (3) Fall. Theory and techniques of play direction. Laboratory hours arranged. Prerequisites: THEA 141, 241 and 243 or consent of instructor.

THEA 342. Advanced Directing (3) Spring. THEA 341 continued. Each student directs at least one short play or series of short scenes. Prerequisite: THEA 341. Laboratory hours arranged.

THEA 343. Lighting Design (3) Fall. Theories and techniques of lighting stage productions; lighting instruments and equipment. Prerequisite: THEA 244 or permission of instructor.

THEA 344. Intermediate Acting (3) Offered once a year. Understanding and creating characters that are different from the actor in style or idiom; expressing the inner life of the character; particularizing the role. Prerequisite: THEA 241 or consent of instructor. Three two-hour meetings per week.

THEA 345. Advanced Acting (3) Spring. Intensive and individualized laboratory work for advanced acting students. Three twohour meetings per week. Prerequisites: THEA 241 and 344 or consent of instructor.

THEA 346. Dramatic Production (1) Fall, Spring, Summer. Same as THEA 146. For juniors and senlors. May be repeated to three hours. Prerequisite: consent of theafre department. Graded S/U.

ITHEA 347. Theatre History and Literature: Origins-1700 (3) Fall. History of theatrical production, major dramas and dramatists from primitive time through 1700.

ITHEA 348. Theatre History and Literature: 1700 -Present (3) Spring. History of the theatrical production, major dramas and dramatists from 1700 to the present.

THEA 349. Costume Design (3) Spring. Basic principles of costume design for the stage; development and rendering of design concepts; use of historic, stylistic and fantasy elements in stage character realization. Prerequisite: THEA 266.

THEA 350. Milestones in Black Theatre (3) Spring. Read, research and discuss/report on the aesthetics, dramatic intent, historical significance and production history of milestone black plays.

THEA 352. Musical Theatre (3) Spring. History, theory and staging techniques of musical theatre production in the United States.

THEA 395. Workshop on Current Topics (1-3) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. Requirements usually completed within time format. May be repeated if topics differ, on approval of adviser.

THEA 440. Theatre for Young Audiences (3) Fall. Producing plays for child audiences; application of concepts of child development to aesthetic problems of theatre for young audiences, through reading, discussion and participation.

THEA 443. Playwriting (3) Fall. Writerís workshop involving creation and production of original play for stage; discussion of process of playwriting and mounting a. play for production. May be repeated.

THEA 446. Summer Theatre Performance (1-6) Summer. Intensive laboratory work in study, preparation and development of roles. Particular problems of performance in summer theatre. Prerequisite: consent of theatre department.

THEA 448. Summer Theatre Production (1-6) Summer. Intensive laboratory work in scenery construction and painting, stage lighting, organization and operation of backstage crews and technical theatre. Particular problems of technical production in summer theatre. Prerequisite: permission of theatre department.

THEA 449. Contemporary Issues in Theatre (3) On demand. Seminar for advanced students. Specific topics vary and depend on current trends in world theatre as identified by students and faculty members. Prerequisite: consent of instructor.

THEA 450. Summer Theatre Management (1-6) Summer. Intensive laboratory work in various aspects of theatre management; -publicity, box office, house management, public relations. Particular problems of management of summer theatre. Prerequisite: consent of theatre department.

THEA 460, Period, Style and Form (3) Fall alternate years. Historical overview of decorative arts in their social context for application in theatrical staging.

THEA 466. Scene Design (3) Spring alternate years. Advanced study in design for the stage and screen. Dramatic action as organic element in design. Effects of line, mass, color and texture on the scenic environment. Lab work on University productions required. Prerequisite: THEA 266 or consent.

THEA 470. Stage Management (3) Spring alternate years. Practical approach to the tools and techniques involved in stage management for drama, musicals, ballet and dance, and opera; including building prompt scripts, sight reading musical scores, dance notation, and basic music and dance terminology.

THEA 489. Theatre Internship (1-12) Fall, Spring, Summer. Supervised field experience in theatre. Contract-based study of theatre principles as intern in public or commercial theatre company. Student must be recommended by adviser and approved by chair of theatre department. Only nine hours applicable to the specialized program of a BAC. Graded S/U.
$\Delta$ THEA 490. Problems in Theatre (1-3) Fall, Spring, Summer. For advanced student who wishes to do intensive study in theatre, independently or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of theatre department.

THEA 498. Senior Seminar in Theatre (2) Fall, Spring. Exploration of the learning/life skills inherent in the study and practice of theatre. Emphasis on vocational, theoretical and applied dimensions of using and doing theatre in a variety of contexts and settings. Prerequisite: senior standing or permission of instructor.

## University (UNIV)

UUNIV 100. University Success (2) Fall. Introduction to higher education. Development of skills in oral and written communication, time and stress management, interpersonal relations, personal wellness, library research, studying/test-taking. Awareness of social issues such as AIDS, alcohol and substance abuse, acquaintance rape, race relations.

UNIV 110. Academic Enhancement (2). Structured academic support system for continuing students participating in the Student Support Services program. Enhancement of competencies necessary for success at the University.

UNIV 124. State Government (1) Summer. Issues of government, governmental processes at local and state levels; societal and governmental influences on electoral process. For Boys State students.
†UNIV 129. Career Planning (2). Strategies developed for career and life planning decisions. Occupational choice theory, assessment of values, needs, interests and skills helpful in selecting an academic major and relating that major to a career. Investigation of occupations and issues affecting career choice.
†UNIV 130. Job Search (2). Strategies developed for job search and preparation. Skills in preparing resumes, job applications, cover and thank you letters, networking and interviewing.

UNIV 131. Career Life Planning (2) Fall, Spring, Summer. Helps students assess personality, interests, values, aptitudes and abilities, explore world of work and requisite academic preparation, generate occupational and academic options, make knowledgeable and self-appropriate decisions.

UNIV 201. Orientation Training (2) Spring. Introduction to issues, challenges, student development theories, support services associated with the freshman year of college. Development of oral and written communication skills, teaching techniques, presentation skills, an understanding of higher education and Bowling Green State University.

UNIV 202. Practicum in Orientation (2) Fall. Participants co-facilitate an orientation course for freshmen, plan and present class sessions, promote awareness of campus resources, meet weekly with their cofacilitators, serve as peer adviser, evaluate the program and their experience and attend training events.

UNIV 210. Residence Life for the Paraprofessional (1) Fall, Spring. Knowledge, skills, competencies needed to fulfill effectively the responsibilites and role of the paraprofessional in a university residence hall setting. Instructor permission required.

UNIV 310. Seminar in Residence Life ( 1 ) Spring. Expands knowledge and skill level of experienced paraprofessional. Problem solving activities, role playing, case studies used to address issues of the residential environment. Instructor permission required.

UUNIV 331. Career Exploration (3) Spring. Explore occupational and academic prospects. Develop understanding of career decision making process, world of work, job search strategies, employability issues. Six to eight hour per week internships. Instructor permission required.

UNU 380. Peer Career Advising (1) Spring. Development of peer advising skills including listening, interviewing, problem solving. decision making, related to career planning issues. Career development theory and explanation of roles in career planning and placement. Insiructor permission required.

UNiV 401. Independent Studies (1-15) Fall, Spring, Summer. Research or project designed by student under supervision of faculty member. Open to any sophomore, junior or senior with 2.5 GPA. Contact Cooperative Education before registration. Graded S/U.

UNIV 410. Advanced Residence Life for the Paraproiessional (1) Spring. Experienced paraprofessional is teamed with fulltime professional in group discussion format. As faciliator with groups of potential paraprofessionals, focus on skills and competencies needed for success. Instructor permission required.

## Visual Communication Teehnology (VCT)

vCT 203. Visual Communication Technology (3) Fall, Spring, Summer. Visual cormmunication theory and processes; video prodtction, visual presentation, display theory, slide presentations, multimedia production and image transfer systems. Four hours of lecture/laboratory. Lab fee.

VCT 204. Concepts of Visual Communication (3) Fall, on demand. Advanced visual communication concepts including problem solving, research, ideation, design, script writing, storyboarding, training techniques, proposal preparation, cost estimating and analysis. Overall project management techniques and environmental factors covered in depth. Four hours lecture and laboratory. Prerequisite: VCT 203 or instructor approval. Lab fee.

VCT 208. introduction to Print Media (3) Fall, Spring, Summer. Major printing processes; concentrations in image design, digital image assembly and photo conversion, image carrier preparation and image transter. All new print media will be explored. Four hours of lecture/laboratory. Lab fee.

VCT 209. Graphic Image Transfer Systems (3) Spring. Offset, screen, flexographic and gravure image transfer examined. Integration of digital image preparation and the impact on transier systems. Topics include quality $\therefore$ control, problern solving, system management and production. Four hours of lecture/ laboratory. Prerequisite: VCT 208. Lab fee.

VCT 282. Photography $:(3)$ Fall, Spring, Summer. Basic camera and darkroom techniques. Experiences in film processing
and printing techniques as well as basic camera operation with an introduction to digital imaging. Four hours of lecture/ laboratory. Lab fee.

VCT 304. Display and Exhibit Technology (3) On demand. Display and exhibit industry from problem analysis through design and production to installation and evaluation. Overview of "high-tech" media used to stop audiences and create the desired outcome. Four hours lecture and laboratory. Prerequisite: VCT 203 or instructor approval. Lab fee.

## VCT 308. Fundamentals of Imaging

Technology (3) Fall, Spring and Summer on demand. Image/art preparation techniques for various publishing applications including print, CD ROM and other computer media. Digital imaging fundamentals of computer systems, type, graphic images and color. Four hours of lecture/laboratory. Prerequisite: VCT 208 or instructor approval. Lab fee

## VCT 309. Electronic Image Preparation

 for Print Media (3) Spring and on demand. Study of imposition and electronic image assembly and preparation for printing. Experiences in color proofing, plate preparation and process color printing are also provided. Four hours lecture/laboratory. Prerequisite: VCT 308 or instructor approval. Lab fee.VCT 368. Video Production in Visual Communication Technology (3) Fall, Spring, Summer on demand. Video recording theory, concept planning, production techniques, and linear and non-linear editing. Four hours of lecture/laboratory. Prerequisite: VCT 203. Lab fee.

VCT 382. Photography II (3) Spring and Summer on demand. Advanced camera handling, darkroom techniques, and an emphasis on digital image capture and manipulation. Four hours of lecture/ laboratory. Prerequisite: VCT 282. Lab fee.

VCT 386. Animatronics Technology (3) Fall even years and on demand. Overview of the audio-animatronic industry including design, fabrication, programming, installation, maintenance and evaluation; various applications. Four hours of lecture/laboratory. Lab fee.

VCT 456. Digital Color Applications (3)
Fall and on demand. Basic color theory and color models as applied in color capture (scanning, photo, video) and output (monitors/videos, color printers, color separation). Color management as applied in color image processing is also studied. Four hours of lecture/laboratory. Prerequisite: VCT 308 or instructor approval. Lab fee.

VCT 460. Digital Photography (3) On demand. Research and experimentation in computer-generated digital imaging techniques. Four hours of lecture/laboratory. Prerequisite: VCT 382. Lab feo.

VET 465. Commercial Photography (3) On demand. Application of skills and knowledge pertaining to the professional field of commercial photography. Production requirements, studio management and the use of large format cameras and advanced lighting techniques in both B\&W and color photography. Four hours of lecture/laboratory. Prerequisites: VCT 282, 382 and ART 211. Lab fee.

VCT 466. Principles of Multimedia Production (3) Fall. Exploration and experimentation in various visual presentation technologies including digital media. Emphasis on design and production of total presentations. Four hours of lecture/ laboratory. Prerequisites: VCT 203 and 308 or instructor approval, Lab fee.

VCT 467. Visual Communication Technology Synthesis (3) Spring, Summer on demand. Techniques of visual communication problem solving; project coordination, scheduling, cost and estimating for visual presentations; aesthetic and technical qualities of graphic presentation. Four hours of lecture/laboratory. Prerequisites: VCT 208, ART 211 and senior standing. Lab fee.

VCT 482. Advanced Concepts of multime: dia Production (3) Spring. Indepth examination and experimentation of multimedia concepts and tools. Integration of digital photography, imaging, computer applications of hardware and software, learning strategies, planning and evaluation. Four hours of lecture/laboratory. Prerequisites: VCT 466 or instructor approval. Lab fee.

VCT 483. Color Photography (3) On demand. Theories and principles in producfion of color negatives, prints and transparencies for commercial and industrial photographic applications; emphasizes basic color sensitometry, quality control techniques and use of laboratory color films. Four hours of lecture/laboratory. Prerequisite: VCT 382. Lab fee.

VCT 490. Problems in Visual Communication Technology (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in visual communication technology. May be repeated. Prerequisite: consent of college and instructor. Materials fee. Graded S/U.

## Women's Studies (WS)

IISWS 200. Introduction to Women's Studies: Perspectives on Gender, Class, and Ethnicity (3) Fall, Spring, Summer. Multidisciplinary survey of the new scholarship on women. Emphasis on the interconnectedness of gender, class, and ethnicity in women's experiences and viewpoints.

WS 300. Topics in Women's Studies (1-4) Fall, Spring. Topics of interest in studying women in subject area not offered in regular college course offerings. May be repeated twice if topics differ. No prerequisite.

WS 301. Women, Art and Culture (3) Fall. Women's creativity and cultural production in the visual, literary and performing arts, and their relationships to broader cultural issues, including cross-cultural perspectives. Prerequisite: WS 200 or consent of instructor.

WS 302. History of Feminist Thought (3)
Spring. Historical survey of feminist theorists who have challenged and advocated changes in traditional ways of thinking about women's diverse social, sexual, racial, theological, class-specific status in society. Prerequisite: WS 200 or permission of nstructor.

WS 327. Women in Modern Europe (3) Fall alternate years. Examination of women in Europe since 1750. Emphasis on changes in women's working, family, sexual and political lives in conjunction with Europe's economic and political modernization. Credit not given for both WS 327 and HIST 327.

WS 400. Advanced Topics in Women's Studies (3) Fall, Spring. Indepth study of specific topic in women's studies scholarship or feminist criticism and theory. May be repeated if, topics differ. Prerequisite: WS 200.

WS 401. Senior Seminar (3) On demand. Capstone course examines relationship between feminist theory and practice. Apply ideas learned in previous women's studies courses and seminar readings to experience working with community or national organization. Supervised practicum and weekly seminar meetings. Prerequisite: senior standing.
$\Delta W S$ 470. Independent Study in Women's Studies (1-3) Fall, Spring. Study project to be designed by student and member(s) of women's studies faculty in subject area not offered in regular course offering. Prerequiite: junior or senior standing or permission $f$ instructor.

# Administration and Faculty 

## Boarel of Trustees

John A. Laskey, Toledo<br>G. Ray Medin, Totedo<br>Michael J. Marsh, Bowling Green<br>Debbert L. Latta, Bowling Green<br>Kermit F. Stroh, Wapakoneta<br>David A. Bryan, Toledo<br>Valerie L. Newell, Cincinnati<br>1998<br>1999<br>2000<br>2001<br>2002<br>Leon D. Bibb, Cleveland<br>2004

Term Expires

## Presidene

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## Facuity

includes kenured, probationary faculty and icglurers

Jan E. Adams, 1983. B.S., Ph.D., Ohio State University. Associate Dean of instructional Support; Assistant Professor of Electrical/Electronic Engineering Technology, Department of Applied Sciences, Firelands College.

Judy Adams, 1979. B.S., Indiana State University; M.S., Pn.D. Bowfing Green State University. Associate Professor of Medical Technology.

Delis Agullar, 1990. A.B., University of Phillipines; M.A., Baston College; M.A., University of Connecticuit; Ph.D., Union Institute. Associate Professor of Elhnic Studies with joint appointment in Women's Studies.

Maj. Stanley F. Aibaugh, 1992. B.A., San Diego State University; M.A., Central Michigan University. Assistant Professor of Aerospace Studies.

James H. Alberi, 1979. B.S., Bucknell University; M.A. Ph.D., Purdue University. Professor of Mathematics and Statistics.

Whllem Albrecht, 1990. B.A., M.A., University of Iowa; Ph.D., Virginia Polytechnic Institute and State University. Associate Professor of Accounting and Management Information Systems.

## Year following name is year of first

appointment at BGSU.
7. Service on faculty is not continuous.

Information correct as of March 1, 1997.

Phil Alkire, 1986. B.S., M.A., Ohio State University; Ed.D., University of South Dakota; Associate Professor of Educational Administration and Supervision.

Elizabeth Allgeier, 1980. B.S., University of Oregon; M.A., State University of New York, Oswego; Ph.D., Purdue University. Professor of Psychology.

Pamela C. Allison, 1985, B.S., University of North Carolina, Greensboro; M.A.T., University of North Carolina, Chapel Hill; Ed.D., University of North Carolina, Greensboro. Associate Professor of Health, Physical Education and Recreation.

Dennis M. Anderson, 1968. B.A., Oberlin College; M.A., Ph.D., Northwestern University. Assoclate Professor of Political Science.

Richard B. Anderson, 1991. B.A., M.S., Ph.D., Pennsylvania State University. Associate Professor of Psychology.

Roger C. Anderson, 1967. B.A., University of Minnesota; M.A., Ph.D., University of Wisconsin. Associate Professor of Political Science.
A. Rolando Andrade, 1977. B.A., B.D., Phillips University; M.A., Ph.D., University of Oklahoma. Associate Professor of Ethnic Studies.

Patricia A. Antonelli, 1996. B.A., Empire State College; M.L.S., State University of New York at Buffalo. Instructor of Humanities, Department of Humanities, Firelands College.

Charles H. Applebaum, 1969. B.S., Case Western Reserve University; M.S., Ph.D., Rutgers University. Associate Professor of Mathematics and Statistics.

Lillian Asheraft-Eason, 1990. B.S., Hampton University; M.E., University of Virginia; Ph.D., College of William and Mary. Associate Professor of History.

Mark F. Asman, 1966**. B.S., M.B.A., Bowling
Green State University; Ph.D., University of Missouri. Professor and Chair of Accounting and Management Information Systems.

Pietro Badia, 1963. B.A., M.A., Kent State University; Ph.D., Adelphi University. Distinguished University Professor of Psychology.

Sung Chul Bae, 1987. B.A.B.A., Korea University; M.B.A., Michigan State University; Ph.D., University of Florida. Associate Professor and Chair of Finance.

Walter W. Baker, 1967. B.M., M.M., Oberlin Conservatory of Music; D.M.A., University of . Michigan. Associate Professor of Music Performance Studies.

John Balistrerl, 1996. A.B., Colorado Mountain College; B.F.A., Kansas City Art Institute; M.F.A., Kent State University. Assistant Professor of Art.

Janet Ballweg, 1990. B.S., University of Wisconsin; M.F.A., University of Illinois. Associate Professor of Art.

William K. Baizer, 1983. B.A., State University of New York; M.S., Rensselaer Polytechnic Institute; Ph.D., New York University. Associate Professor and Chair of Psychology.

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Lise whort, 1996. B.A., Eckerd College; M.A., State University of New York at Stony Brook; M.F.A., University of California, San Diego; Ph.D., Northwostern University. Assistant Professor of Theatre.

Gllabein Wood, 1979. B.A., M.L.S., University of Michigan. Associate Professor and Head of Information Services, Library.

Florig W. Wood, 1978. B.A., University of Michigan; M.i.S. Stare University of New York, Abany. Assistant Professor, Library.

Hon C. Woodrult, 1977. B.S., M.S., East Texas Stete University; Ph.D., Utah State University. Distinguished Fesearch Professor of Biological . Sciences.

Sard w. Worley, t991. B.A., Reed College; Ph.D., University of Plitsburgh. Associate Professor of Philosophy.
P. Thomas Wright, 1974. B.S., M.Ed., Bowling Green State University; Ph.D., University of Utah. Assistant Profossor of Health, Physical Education and Fecreation; Assisiant Track and Field Coach.

Mary Wrighten, 1981. B.A., Clafin College; M.L.S., Wayne State. Assistant Professor, Library.

Bon Thw, Wu, 1981. B.A., Fu-Jen Catholic University; M.B.A., University of Georgia; D.B.A., Indiana Universily. Associate Professor of Fiatheting

Thamas h. Wymer, 1966. B.A., Rice University; Ph.D., University of Oklahoma. Professor of English.

Haowen xt, 1995. B.S., Fu Dan University; M.S., Ph. O., Lehigh University. Assistent Professor of Physics and Astronomy.

Eltembeth Varris, 1983. B.S., M.A., Ph.D.,
University of lowa. Associate Professor and Counsaling Psychologist, Counseling and Career Development Center.
(Arthur) Eafyau Veh, 1993. B.S., National Tsing Hua University, Talwan; M.S., Ph.D., Rutgers University. Assistant Proiessor of Applied Statistics and Operations Research.

Jong Sik Yoon, 1978. B.S., Yonsei University, Korea; M. A., Ph.D., University of Texas, Austin. Profossor of Biological Sciences.

Debra A. Zeppitelli, 1996. B.F.A.. M.F.A., Bowling Green State University, Lecturer of Family and Consumer Sciences.

Richard A. Zeller, 1976. B.A., LaVerne College; M.A., Ph.D., University of Wisconsin, Madison. Professor of Sociology.

Yu Zhou, 1993. B.S., Nanjing Normal University; M.A., Ph.D., Clark University. Assistant Professor of Geography.

Steve Ziliak, 1996. B.A., Indiana UniversityBloomington; Ph.D., Ph.D. Certificate, University of lowa. Assistant Professor of Economics.

Guy Zimmerman, 1990. B.S.E., University of Michigan; M.S., M.S., Ph.D., Michigan State University. Associate Professor of Computer Science.

Craig Zirbel, 1996. B.A., !llinois Wesleyan University; Ph.D., Princeton University. Assistant Professor of Mathematics and Statistics.

Opportune Zongo, 1992. B.A., Universite de Ouagadougou; M.A., Ph.D., University of California. Assistant Professor of French.

Mark M. Zust, 1992. B.S., M.S., Kent State University. Assistant Professor of Art.

## Emeriti Faculty

Aassoon Al-Amiri, 1964-95. Professor Emeritus of Mathematics and Statistics.

William D. Alex:ander, 1946-80. Professor Emeritus of Music Education.

Liuda L. Alssen, 1962-85. Professor Emeritus of German and Russian.

Parick Alston, 1971-92. Professor Emeritus of History.

Beverly Amend, 1969-90. Assistant Professor Emeritus of Family and Consumer Science.

Mary L. Amos, 1969-84. Associate Professor
Emeritus of Library and Educational Media.
Thomas D. Anderson, 1964-95. Professor
Emeritus of Geography.
Thomas W. Attig, 1972-96. Professor Emeritus of Philosophy.

Virginia Merrell Austin, 1969-77. Associate
Professor Emeritus of University Libraries.
Thomas C. Bach, 1965-83. Assistant Professor Emeritus of Technology.

Gioacchino Balducci, 1968-95. Associate Professor Emeritus of Romance Languages.

Ron F. Bandy, 1968-91. Associate Professor meritus of Art.

Lester E. Barber, 1968-97. Professor Emeritus of English.

Susan A. Barber, 1973-96. Instructor Emerius in Health, Physical Education and Recreation.

Raymond F. Barker, 1964-90. Professor Emeritus of Marketing.

William Barker, 1969-79. Associate Professor Emeritus of Library.
J. Robert Bashore, 1951-83. Professor Emeritus of English.

Jean Bateman, 1971-94. Associate Professor Emeritus of Health, Physical Education and Recreation.

Dennis E. Bauer, 1972-96. Professor Emeritus of Business Education.

William Baxter, 1966-94. Associate Professor Emeritus of Biological Sciences.

Robert Beard, 1967-84. Assistant Professor Emeritus of Health, Physical Education and Recreation.

Dorothy Behiling, 1981-95. Associate Professor Emeritus of Family and Consumer Science.

Orlando Behling, 1981-95. Distinguished University Professor Emeritus of Management.

Yruce Bellard, 1948-81. Professor Emeritus of Aealth, Physical Education and Recreation.

Thomas L. Bennett, 1966-96. Associate Professor Emeritus of Educational Foundations and Inquiry.

Stewart Berry, 1956-84. Professor Emeritus of Educational Foundations and Inquiry.

Edwin Betts, 1962-92. Professor Emeritus of Music Performance Studies.

Edieann Biesbrock Didham, 1977-97. Associate Professor Emeritus of Education.

James H. Bissland, 1976-96. Associate Professor Emeritus of Journalism.

Dolores Black, 1963-94. Associate Professor Emeritus of Health, Physical Education and Recreation.

Robert B. Blackwell, 1969-95. Professor Emeritus of Special Education.

Albert B. Blankenship, 1971-79. Professor
Emeritus of Marketing.
Edwin C. Bomell, 1956-81. Professor Emeritus of Accounting and Management Information Systems.

Charles Boughton, 1961-87. Associate Professor Emeritus of Theatre.

Rlchard W. Bowers, 1969-96. Professor Emeritus of Health, Physical Education and Recreation.

Carole A. Bradford, 1970-95. Professor Emeritus of Romance Languages.

Bartley A. Brennan, 1974-96. Professor Emeritus of Legal Studies.

Morgan M. Brent, 1957-85. Professor Emeritus of Biological Sciences.

Don Bright, 1968-92. Professor Emeritus of Business Education.

Melvin E. Brodt, 1960-85. Associate Professor Emeritus of Health, Physical Education and Recreation.

Clifford C. Brooks, 1969-93. Professor Emeritus of Educational Curriculum and Instruction.

Ray B. Browne, 1967-92. Distinguished University Professor Emeritus of Popular Culture.

Lloyd J. Buckwell Jr., 1967-85. Professor Emeritus of Accounting and Management Information Systems.

Joseph Buford, 1948-87. Professor Emeritus of Geography.

Richard Burke, 1972-96. Professor Emeritus of Educational Foundations and Inquiry.

Antonio Buron, 1969-95. Associate Professor Emeritus of Romance Languages.

Frances Burnett, 1964-91: Professor Emeritus of Music Performance Studies.

John R. Burt, 1972-97. B.A., M.A., Ph.D., University of Minnesota. Professor Emeritus of Romance Languages.

Alvar W. Carlson, 1970. Professor Emeritus of Geography.

Richard C. Carpenter, 1953-82. Professor Emeritus of English.

David L. Cayton, 1970-96. Professor Emeritus of Art.

Leslie J. Chamberlin, 1967-85. Professor Emeritus of Educational Administration and Supervision.

Benita S. Chambers, 1972-92. Assistant Professor Emeritus of Educational Curriculum and Instruction.

Norman S. Chambers, 1969-92. Associate Professor Emeritus of Special Education.

Ernest A. Champion, 1974-95. Professor Emeritus of Ethnic Studies.

Donald Chase, 1971-90. Associate Professor Emeritus of Education Curriculum and Instruction.

Lois Cheney, 1964-85. Professor Emeritus of Theatre.

Charles Chittle, 1965-95. Professor Emeritus of Economics.

John W. Chun, 1975-95. Associate Professor Emeritus of English, Department of Humanities, Firelands College.

Richard Ciofarri, 1967-94. Professor Emeritus of Music Performance Studies.

Robert K. Clark, 1963-85. Professor Emeritus of Speech Communication.

Darwin B. Close, 1980-89. Professor Emeritus of Finance.

Cornelius Cochrane Jr., 1964-85. Associate Professor Emeritus of Health, Physical Education and Recreation.
J. Russell Coffey, 1948-69. Professor Emeritus of Health, Physical Education and Education.

Ronald L. Coleman, 1964-96. Associate Profeṡsor Emeritus of Art.

Gerald P. Colgan, 1973-93. Professor Emeritus of Technology Systems.

Robert J. Conibear, 1964-94. Assistant Professor Emeritus of Health, Physical Education and Recreation.

Robert Conner, 1971-92. Professor Emeritus of Psychology.

Florence S. Cook, 1966-78. Associate Professor Emeritus of Library.

Samuel M. Cooper, 1946-75. Trustee Professor Emeritus of Health, Physical Education and Recreation.

Ramona T. Cormier, 1965-90. Trustee Professor Emeritus of Philosophy. .

Ronald R. Cote, 1970-93. Professor Emeritus of Educational Administration and Supervision.

Howard Cottrell, 1967-95. Associate Professor Emeritus of Libraries and Learning Resources.

June M. Coughlin, 1974-90. Librarian Emeritus/ Assistant Professor Emeritus of Library and Humanities.

Paul Crowfort, 1969-90. Professor Emeritus of Geography.

Don A. Bumingham, 1946-92, Associate Director Ementus of intercollegiate Athletics.

Ecdgar Danists, 1953-81. Professor Emeritus of Englist.

Glenn M. Daniele, 1965-85. Professor Emeritus of Library and Educatlonal Media.

Thomas A. Davenport, 1969-85. Associate Professor Emeritus of Art.
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Douglas D. Daye, 1969-92. Proiessor Emeritus of Philosophy

Keith Dearvorn, 1971-93. Associate Professor Emerius, Music Education.

Tosemh A. Dei Potto, 1988-78. Professor Emeritus of doumallsm.

Thlicent deolvelfa, 1970-85. Assistant Professor Ementus of Home Economics.

Helon Darmer, 1960-82. Assisiant Proiessor Emertue of Education.

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Robett Eutisy, 195s-83. Associate Professor Ementus of Healh, Physical Education and Recreauman.

Caret Parantil, 1967-94. Assistant Professor Emeritus of Health, Physical Education and Recreation.
W. Whitam Ensteriy, 1957-85. Prolessor Emeritus of Biological Sciences.

Martha Eskmath, 1963-80. Associate Professor Emeritus of English.

2ruce 른. सhwarcis, 1966-95. Associate Professor Emerius of Economics.

Donald Elutichman, 1968-94. Associate Professor Emetius of ant.

Weat Eimum, 1967-90. Professor Emeritus of Music Perfomance Studies.

David e. Eisess, 1960-45. Trustee Professor Emeritus of Educational Administration and Superviston.

Whan S. Ethsen, 1968-95. Trustee Professor Emertus of Political Science.

Whilem R. Fichthem, 1965-84. Professor Emeritus of Fhance and insurance.

Heroid A. Fisher, 1972-02. Protossor Emeritus of Joumallem.
T. Richard Fisher, 1968-82. Professor Emeritus of Biological Sciences.

Merie E. Flamm, 1948-72. Assistant Professor Emertus of Physics.

Lyle R. Fletcher, 1946-71. Professor Emeritus of Geography.

Giles R. Floyd, 1948-69. Professor Emeritus of English.

Bll E. Forisha, 1973-93. Professor Emeritus of Applied Human Ecology.

Jana L. Forsyth, 1965-92. Professor Emeritus of Geology.

Willard Fox, 1959-81. Professor Emeritus of Educational Administration and Supervision.

Ralph W. Frank, 4956-85**. Professor Emeritus of Geography.

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Lawrence J. Friedman, 1971-93. Professor Emeritus of History.

Emma Lila Fundaburk, 1966-88. Professor Emeritus of Economics.

Darrel W. Fyffe, 1970-93. Professor Emeritus of Educational Curriculum and Instruction.

Clifford J. Gallant, 1970-85. Professor Emeritus of Romance Languages.

David Gedeon, 1964-97. Professor Emeritus of Technology Systems.

Margy J. Gerber, 1974-97. Professor Emeritus of German, Russian and East Asian Languages.

Robert Gill, 1969-94. Assistant Professor of Health, Physical Education and Recreation.

Stuart R. Givens, 1952-97. Professor Emeritus of History and University Historian.

David S. Glesmire, 1958-83. Professor Emeritus of Music Performance Studies.

Andrew M.W. Glass, 1971-97. Professor Emeritus of Mathematics and Statistics.
M. Lee Goddard, 1962-92. Professor Emeritus of Business Education.

Aobert P. Goodwin, 1961-89. Professor Emeritus of Philosophy.

James Gordon, 1966-93. Professor Emeritus of Journalism.

James Q. Graham Jr., 1960-93. Professor Emeritus of History.

Louls C. Graue, 1959-90. Professor Emeritus of Mathematics and Statistics.

Robert C. Graves, 1966-93. Professor Emeritus of Biological Sciences.

Bonita R. Greenberg, 1970-95.Associate
Prolessor Emeritus of Communication Disorders.
Herbert J. Greenberg, 1970-95. Professor Emeritus of Communication Disorders.

John T. Greene, 1955-90. Associate Professor Emeritus of Psychology.

Patricia Griffith, 1973-94. Instruclor Emeritus of Special Education.

Theodore Groat, 1961-94. Professor Emeritus of Sociology.

Robert M. Guion, 1852-85. Distinguished University Proiessor Emeritus of Psychology.

Wean Guthrie, 1954-85. Professor Emeritus of Business Education.

Helmut Gutmann, 1975-94. Assisiant Professor Emeritus of German, Pussian and E. Asian Languages.

Sue A. Hager, 1967-92. Assistant Proiessor Emeritus of Health, Physical Education and Recreation.

Cari D. Thall, 1957-85. Professor Emeritus of Ant.
W. Heinlen Hall, 1936-76. Professor Emeritus of Chemistry.

Carl Hallberg, 1951-83. Professor Emeritus of Biology.

Cnarles f. Hamed, 1968-91. Professor Emeritus of Business Education.

Gan Hammond, 1967-93. Professor Emeritus of Music Performance Studies.

Willam D. Hann, 1967-92. Associate Professor Emeritus of Biological Sciences.

William N. Harris, 1963-81. Professor Emeritus of Educational Curriculum and Instruction.

Kirill R. Hartman, 1964-92, Assistant Prolessor Emeritus of German, Russian and Eastern Asian Languages.

Warren Hauck, 1979-89. Professor Emeritus of Management.

Charies Earl Hayden, 1965-85. Professor Emeritus of Educational Foundations and Inquiry.

David T. Hayes, 1975-92. Professor Emeritus of Educational Curriculum and Instruction.

Daniel Heisier, 1967-85. Associate Professor
Emeritus of Educational Administration and Supervision.

Harold Henderson, 1970-90. Associate Frofessor Emeritus of Special Education.

Robert D. Henderson, 1954-75. Professor Emeritus of Management.

John H. Hepier, 1949-77. Professor Emeritus of Speech.

George Herman, 1958-81. Professor Emeritus of Speech Communication.

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Kenneth F. Hille, 1968-93. Associate Frofessor Emeritus of Biology, Department of Natural and Social Sciences, Firelands College.

Robert L. Hillerich, 1975-87. Professor Emeritus of Educational Curriculum and Instruction.

Shn Hiltner Jr., 1958-92. Professor Emeritus of Geography and Gerontology.

Richard D. Hoare, 1957-90. Professor Emeritus of Geology

Marle R. Hodge, 1965-84. Assistant Professor Emeritus of Management.

Harry W. Hoemann, 1969-97. Professor Emeritus of Psychology.

James E. Hof, 1951-82. Vice President Emeritus for Development and Alumni Affairs.

Ruth Hoffman, 1979-85. Assistant Professor Emeritus of Library Science.

Robert W. Hohin, 1960-79. Professor Emeritus of Music Education.

Herbert A. Hallister, 1965-92. Professor Emeritus of Mathematics and Statistics.

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William R. Hoskins, 1965-84. Professor Emeritus of Marketing.

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John Huffman, 1978-93. Professor Emeritus of Journalism.

Ronald J. Hunady, 1969-92. Associate Professor Emeritus of Management.

Sylvia W. Huntley, 1969-92. Assistant Professor Emeritus of Educational Curriculum and Instruction.

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Kenley P. Inglefield, 1974-95. Professor Emeritus of Music Composition and History.

Robert W. Innis, 1960-80. Associate Professor Emeritus of Industrial Education and Technology.

Faith Jackson, 1971-93. Associate Professor Emeritus, Communication Disorders.

William B. Jackson, 1957-84. Distinguished University Professor Emeritus of Biological Sciences.

Laurence J. JankowskI, 1975-96. Associate Professor Emeritus of Journalism.

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Mercedes Junquera-Early, 1965-91. Professor Emeritus Of Romance Languages.

Delbert Karnes, 1970-84. Associate Professor Emeritus of Business Education.

Donald F. Kausch, 1968-92. Professor Emeritus of Psychology.

Rita Keefe, 1969-88. Associate Professor Emeritus of Educational Foundations and Inquiry.

Robert J. Keefe, 1955-78. Professor Emeritus of Health and Physical Education.

Mark Kelly, 1966-94. Professor Emeritus of Music Education.

Allen Kepke, 1963-95. Professor Emeritus of Theatre.

Ruth K. Kilmer, 1947-73. Associate Professor Emeritus, Library.

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Thomas L. Kinney, 1959-90. Professor of English.
William A. Kirby, 1961-89. Professor Emeritus of Mathematics and Statistics.
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Radha G. Laha, 1972-96. Professor Emeritus of Mathematics and Statistics.

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Mary Lane, 1963-79. Assistant Professor Emeritus of Home Economics.

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Verlin W. Lee, 1964-85. Professor Emeritus of Educational Curriculum and Instruction.
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Virginia E. Leland, 1948-78. Professor Emeritus of English.

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Angela Lindley, 1968-92. Associate Professor Emeritus, Library.

Richard H. LIneback, 1965-95. Professor Emeritus of Philosophy.

Loy D. Littlefield, 1966-96. Associate Professor Emeritus of Philosophy.

Nora Yan-Shu Liu, 1976-96. Associate Professor Emeritus of Health, Physical Education and Recreation.

Lenita C. Locey, 1971-95. Associate Professor Emeritus of Romance Languages.

Michael D. Locey, 1969-96. Associate Professor Emeritus of Romance Languages.

Bette Jean Logsdon, 1970-85. Professor
Emeritus of Health, Physical Education and Recreation.

Clifford A. Long, 1959-93. Professor Emeritus of Mathematics and Statistics.

Dorothy Luedtke, 1948-83. Associate Professor Emeritus of Health, Physical Education and Recreation.

Bevars D. Mabry, 1959-92. Professor Emeritus of Economics.

Mary Mabry, 1963-92**. Associate Professor Emeritus of Art.

Robert A. MacGuffie, 1969-90. Professor Emeritus of Special Education.

Elizabeth Mackey, 1965-78. Associate Professor Emeritus of Home Economics.

Marilyn Madden, 1968-92. Associate Professor Emeritus of Romance Languages.

Paul Makara, 1958-95. Professor Emeritus of Music Performance Studies.

Joseph J. Mancuso, 1960-96. Professor Emeritus of Geology.

Louis E. Marini, 1964-77. Associate Professor Emeritus of Music.

Michael T. Marsden, 1972-92. Professor Emeritus of Popular Culture.

Elden W. Martin, 1963-97. Associate Professor Emeritus of Biological Sciences.

Whate Rantin Bicynoids，1374－94．Professor Ementus of Educational Curriculurn and Instruc－ fict．

Hahard D，Mathay，1868－97．Professor Emeritus of Music Performance Studies．

Hemes fin Piciaide，1966－83．Dean Emeritus， Firelands College．

Chantes McGaghy，1970－94．Professor Emeritus of Gociology

Howard m．Whe Cora，1971－97．B．A．，University of Texas；M．A．，University of Uian．Professor Emeritus of English．

Evan E，負cFee，1967－97．Professor Emeritus of Educational Curricuium and Instruction．

Elaa Hemuhen，1983－93．Professor Emeritus of Applied Hunan Ecology．

Dievic t．Relle，1967－92．Professor Emeritus of Music Perfomance Studies．
semn 0．Merriam，1967－93．Professor Emeritus of Politeal Science．

David meronk，1067－95．Professor Emeritus of Mathematios and Statistics．

Cichard E．解esser，1975－97，Professor Emeritus of Englisin．

Momman ．Meyer，1959－90．Professor Emerius of Chemistry：

E．Lee theste，1948－80．Professor Emeritus of Speech Communication．

Wariotis L．Filiter，1973－96．Assistant Professor Emertus of Family and Consumer Sciences．

Therasm A．Mmes，1971－92．Instructor Emeritus of Trucational Curriculum and Instruction．

Hervey Di Hiner，1947－75．Associate Professor Emeritus of Industrial Education and Technology．
 Frofessor Emerius of Home Economics．

Robert Mocmex Educational Founcations and Inquiry．

RHuthuel A．Fhoore，1965－97．Assuciate Professor
Efrientus of History．
 Music Performance Studies．

Edvand E．Horgan or．，1975－96．Associate
Proiesser Emeritus of Gorontology．
Chatles 解ovi，1986－92．Associate Professor
Emertus of Applied Statistics and Operations
Rescarin．
Rhentag Ahot，1980－92．Protessor Emeritus of Engiish．

Sazyanatayana hotupall！，1966－90．Professor Emeritus of Mathematics and Statistics．

Dorothy 䌇oulton，1946－59．Assoclate Professor
Emertus of English．
Tempern F．Mucher，1970－95．Associate Professor Emeritus of Piysics and Astronomy．

Paul Mueller，1976－96．Associate Professer Emeritus of Finance．

Joyce PT．Myles，1966－84．Assistant Professor Emeritus of Educational Curriculum and Instruc－ tion．

Clifford R．Mynatt，1972－97．Professor Emeritus of Psychology．

John G．Nachbar，1973－97．Professor Emeritus of Popular Culture．

Z．Michael Nagy，1970－97．Professor Emeritus of Psychology．

Leo Navin，1964－94．Professor Emeritus of Economics．

Arthur Neal，1960－93．Professor Emeritus of Soclology．

Elizabeth A．Neldecker，1962－82．Assoclate Professor Emeritus of Speech Communication．

Ralph B．Nelson，1960－85．Associate Professor Emeritus of Technology．

Joseph S．Nemeth，1965－85．Professor Emeritus of Educational Curriculum and Instruction．

Dean Neumann，1971－94．Professor Emeritus of Mathematics and Statistics．

Relda Nederhofer，1969－91．Assistant Professor Emeritus of Biology，Department of Natural and Social Sciences，Firelands College．

Reginald Noble，1969－93．Professor Emeritus of Biological Sciences．

Victor Norton，1970－94．Associate Professor Emeritus of Mathematics and Statistics．

Bobert G．Oana，1985－96．Professor Emeritus of Educational Curriculum and Instruction．

Thomas V．O＇Brien，1969－96．Professor Emeritus of Mathematics and Statistics．

Philip O＇Connor，1967－92．Distinguished
Research Professor Emeritus of English．
Otto G．Oevirk，1950－85．Professor Emeritus of Art．

Paul J．Olscamp，1982－97．Professor Emeritus of Philosophy．

Lorrene L．Ort，1959－77．Professor Emeritus of Education．

Jacquelin S．Osborne，1973－96．Assistant Professor Emeritus of Educational Curriculum and instruction．

James R．Ostas，1969－95．Professor Emeritus of Economics．

Janis Louise Pallister，1961－85．Professor Emeritus of Romance Languages and Distin－ guished University Professor．

Paul Parnell，1960－87．Professor Emeritus of English．

Beryl M．Parrish，1946－76．Associate Professor Emeritus of English．

Terry W．Parsons；1970－92．Professor Emeritus of Health，Physical Education and Recreation．

Ronald L．Partin，1975－96．Proiessor Emeritus of Educational Foundations and Inquiry．

Robert Patton，1967－92．Professor Emeritus Applied Statistics and Operational Research．

Fayetta M．Paulsen，1963－90．Associate Professor Emeritus and Special Assistant to Financial Aid and Student Employment．

Alma d．Payne，1946－79．Professor Emertus of English and American Studies．

Michael Pearson，1971－94．Professor Emeritus of Marketing．

Marilyn B．Perimutter，1972－93．Assistant Professor Emeritus of Communication Disorders．

Joseph Perry，1959－94．Professor Ementus of Sociology．

Robert Perry，1970－97．Professor Emeritus of Ethnic Studies．

Adella M．Petars，1968－96．Professor Emeritus of Educational Foundations and Inquiry．

Pairtcia Potersen，1963－94．Assistant Professor Emeritus of Health，Physical Education and Recreation．

Trevor 1．Phillips，1963－95．Professor Emeritus of Educational Foundations and Inquiny．

Fred Pigge，1964－95．Professor Emeritus of Educational Foundations and Inguiry．

John Piper，1967－94．Associate Protessor Emeritus of Health，Physical Education and Recreation．

Virginia B．Platt，1947－75．Professor Emeritus of History．

Neil A．Pohimann，1962－85．Professor Emeritus of Educational Administration and Supervision．

David J．Pope，1963－93．Professor Emeritus of Music Performance Studies．

Bolesiav S．Povsic，1963－90．Frofessor Emeritus of Romance Languages，

Frances Povsic，1978－90．Professor Emeritus of Libraries and Learning Resources．

Diane Goodrich Pretzer，1962－90．Associate Professor Emeritus of Romance Languages．

Wallace 2．Pretzer，1963－92．Professor Emeritus of English．

Conrad Pritscher，1971－97．Professor Emeritus of Educational Foundations and Inquiry．

Roger L．Ptak，1968－97．Professor Emeritus of Physics and Astronomy．

Emil Raeb，1969－82．Professor Emerilus of Music Performanice Studies．

Francis Rabalais，1968－94．Associate Professor Emeritus of Biological Sciences．

Bernard Rabin，1955－82．Professor Emertus of Eoucational Foundations and Inquiry．

Deanna Radeloff，1962－91．Professor Emeritus of Applied Human Ecology．

Donald M. Ragusa, 1965-95. Associate Professor Emeritus of Psychology.
tricia L. Fieed, 1970-95. Professor Emeritus of Educational Administration and Supervision.

Robert L. Reed,1969-96: Associate Professor Emeritus of Educational Foundations and Inquiry.

William O. Reichert, 1968-84. Professor Emeritus of Political Science.

George Rendina, 1967-84. Professor Emeritus of Chemistry.

Lois Renker, 1971-90. Associate Professor Emeritus of Applied Human Ecology.

Audrey L. Rentz, 1974-96. Professor Emeritus of Higher Education and Student Affairs.

Joan Repp, 1978-91. Associate Professor Emeritus and Director of Access Services, Library.

Victor E. Repp, 1960-85. Professor Emeritus of Technology.

Bill J. Reynolds, 1967-91. Professor Emeritus of Educational Administration and Supervision.

Charles C. Rich, 1958-90. Professor Emeritus of Geology.

John T. Rickey, 1967-82. Professor Emeritus of Speech Communication.

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Alpha Chi Omoga Sorority 80
Alpha Gamma Delta Sorority 17
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Alpha Phi Sorority 76
Alpha Phi Alpha Fraternity 95
Alpha Sigma Phi Fraternity 29
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Alunini Center 4,AA
Amani 38
Anderson Arena 43,B
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Ant Center 31, AA
Ats and Sciences, College of 64,C
Ashley Hall B,AA
Batchelder Hall 5, AA
Beta Theta Pi Fraternity 25
Booksiore 33, A
Bromfield Hall 10
Bursar 64,C
Business Administration Building 44,AA
Campus Safety and Security 38,B
Central Services 102
Centrex Building 41
Chaprnan Hall 11
Chi Omega Sorority 81
College Park Ofirice Building 99,AA
Commons 38,B
Commons Dining Center
Chily's Express Convenience Store
Compton Hall 6, AA
Conklin Hall 30
Darrow Hall 9,AA
Day Care Center 101,AA
Delta Gamma Sorority 75,8
Delta Upsilon Fraternity 26
Delia Z.ela Sorority 55
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Educational Memorabilia Center 39
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Family and Consumer Sciences Building
61,A
Fleld House 10\%, AA
Financlal Aid 64,0
Fine Arts Center 31,AA
Founders Hall 62,AA
Keepers Food Court
Keepers Snack Bar
Club 57 Dining Room
Fronch House 78
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Golf Clubhouse 108
Graduate College 60,AA
Greenhouse 98
Guest House 56
Hanna Hall 52
Harshman Quadrangle 12
Galley Snack Bar
Hayes Hall 49,C
Health and Human Services, College of
104, A
Health Center 104, A
Heating Plant 65
Housing 33,A
Ice Arena 3,B
Jerome Library 32,C
Johnston Hall 71
Jordan Family Development Center 101,AA
Kappa Alpha Psi Fraternity 96
Kappa Delta Sorority 77
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Kappa Sigma Fraternity 20
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Kreischer Quadrangle 7,AA
Sundial Food Court
Shadows Snack Bar
Silver River Cafe
Lambda Chi Alpha Fraternity 28
Library 32,C
Life Sciences Building 89, A
Mathematical Sciences Building 90,AA
McDonald Dining Hall 86,AA
Street Side
Country Side
GT Express Convenience Store
Towers West Restaurant
McDonald East Hall 83
McDonald North Hall 85
McDonald West Hall 84
McFall Center 60,AA
Memorial Hall 43
Mileti Alumni Center 4,AA
Moore Musical Arts Center 105,AA
Moseley Hall $50, \mathrm{~B}$
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Offenhauer Tower West 87,AA
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Nest Dining Area
Bowl 'n' Greenery
Pheasant Room
Prout Dining Center
Technology Annex 103
Technology Building 97,AA
Television Station 57,A
Theta Chi Fraternity 21
Tucker Telecommunications Center 57, A
Union 69,AA
University Hall 51,C
Visitor Information Center 1,C
Warehouse 100
WBGU-TV 57
West Hall 63,C
Williams Hall $68, \mathrm{C}$
Zeta Beta Tau Fraternity 23

## Accessibilty Code

## AA Totally accessible

A Accessible with telephones, fountains, no accessible restrooms
B Accessible first floor only, limited facilities
C Totally accessible, limited facilities
Buildings with no designation are considered nonaccessible.

(P) Parking Areas

#  





[^0]:    Choral-musical theater option (vocal emphasis)
    (MUED 240, MUED 340, MUED 341, MUED 344, MUED 345) MUED 359, MUSP 310, 3 hours of instrument classes (see additional requirements-instrument classes), 3-5 hours of class piano, functional proficiencies I, II

[^1]:    Applied Sciences
    Accounting
    Applied Statistics
    Business Administration
    Business Education
    Business Management Technology
    Computer Science
    Computer Programming Technology
    Design and Engineering Graphics
    Economics
    Electronic Technology
    Environmental Heaith Technology
    Finance
    Health Iniormation Technology
    Lega Studios
    Management
    Nianagement information Systems
    Manufacturing Technology
    Marketing
    Respiratory Care Technology
    Humanties
    Art
    Aft hisiony
    Greative Writing
    Education
    English
    French
    tumanites
    Interpersonal Communication
    Jounaliem
    Music
    Philosophy
    Physical Education
    Popuiar Culture
    Spanish
    Theatre
    Women's Studies
    Natural and Social Sciences
    Astronomy
    Biology
    Chemistry
    Grimina dusitce
    Ethnic Sludies
    Geography
    Geology
    History

[^2]:    -ThL 352. Italian Composition and iversation II (3). Improvement of oral fid written skills in the language; emphasis on conversation. Prerequisite: ITAL 202.

[^3]:    ** For elementary education credit only.

[^4]:    **For elementary education credit only.

