# BGSU 1989-1990-1991 Undergraduate Catalog 

Bowling Green State University - Main Campus

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## BOW L I NG

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S T A T E
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U N D E R G R A D ATE


C A TALOG


## 1989-91 Academic Calendar

Summer Session 1989
May 15, 1989 - Monday
May 29, 1989 - Monday
June 5, 1989 - Monday
June 19, 1989 - Monday
July 4, 1989 - Tuesday
July 10, 1989 - Monday
August 12, 1989. Saturday
Faif Semesier 1989
August 23, 1989-Wednesday
September 4, 1989 - Monday
Novernber 22, 1989-Wednesday Thanksgiving recess begins 7:30 a.m.
November 27, 1989 - Monday Decomber 8, 1989 - Friday
December 11, 1989 - Monday
Decomber 15, 1989 - Friday
December 16 -Saturday
Spring Semester 900
January 8, 1990 - Monday
January 15, 1990-Monday
March 17, 1930 - Saturday
March 26, 1950 - Monday
April 27, 1990-Friday
April 30, 1990 - Monday
Nay 4, 1990-Friday
May 5, 1980-Saturday

First 5 -, 8 - and 10 -week terms begin Memorial Day, no classes
Second $5-, 8$ - and 10 -week terms begin
Third 5- and 8 -week terms begin
Independence Day, no classes
Fourth 5-week term begins
Commencement

Classes begin 7:30 a.m
Labor Day, no classes Classes resume 7:30 a.m.
Classes end 10 p.m.
Examinations begin
Fall semester ends
Commencement

Classes begin 7:30 a.m.
Martin Luther King Day, no classes
Spring recess begins
Classes resume
Classes end 5:30 p.m.
Examinations begin
Spring semester ends
Commencement

Summer Session 1390
May 14, 1989 - Monday May 28, 1989 - Monday June 4, 1989 - Monday June 18, 1989 - Monday July 4, 1989-Wednesday July 9, 1989 - Monday August 11, 1989 -Saturday

Fall Semester 4990
August 29, 1990-Wednesday September 3, 1990 - Monday November 21, 1990 - Wednesday November 26, 1990 - Monday
December 14, 1990 - Friday
December 17, 1990-Monday
December 21, 1990 - Friday
December 22, 1990 - Saturday
Spring Semester 1991
January 14, 1991 - Monday January 21, 1991 - Monday March 25, 1991 - Saturday April 1, 1991 -Monday May 3, 1991 - Friday
May 6, 1991 - Monday
May 10, 1991 - Friday
May 11, 1991 -Saturday

First 5 -, 8 and 10 -week terms begin
Memorial Day, no ciasses
Second 5 -, 8- and 10 -week terms beg
Third 5 - and 8 -week terms begin
Independence Day, no classes
Fourth 5 -week term begins
Commencement

Classes begin 7:30 a.m
Labor Day, no classes
Thanksgiving recess begins 7:30 a.m.
Classes resume 7:30 a.m.
Classes end 10 p.m.
Examinations begin
Fall semester ends
Commencement

Classes begin 7:30 a.m
Martin Luther King Day, no classes
Spring recess begins
Classes resume
Classes end 5:30 p.m.
Examinatlons begin
Spring semester ends
Commencement

## Where to Go

| Admissions information | 110 McFall Center | 372-2086 |
| :---: | :---: | :---: |
| Advising, academic |  |  |
| College offices |  |  |
| Atts and Sciences | 205 Admin. Bldg. | 372-2015 |
| Eusiness Administration | 371 Bus. Admin. Bldg. | 372-2747 |
| Education and Allied Protessions | 365 Education Bldg. | 372-7273 |
| Health and Human Services | 101 Health Center | 372-8242 |
| Musical Ans | 1031 Moore Musical Arts Ctr. | 372-2181 |
| Tecinology | 204 Technology Bldg. | 372-7581 |
| Pre-Major Advising | 101 University Hall | 372-2677 |
| Campus Safety | Commons | 372-2346 |
| Changing majors | College offices |  |
| Counseling |  |  |
| Counseling and Caroer Development Center | 320 Student Servs. Bldg. | 372-2081 |
| Placement | 360 Student Servs, Bldg. | 372-2356 |
| Psychological Services | 309 Psychology Bldg. | 372-2540 |
| Center for Academic Options | 231 Admin. Bldg. | 372-8202 |
| Drop/add | 110 Admin. Bldg. | 372-8441 |
| Employment, studeni | 460 Student Servs. Bldg. | 372-2651 |
| Financlal aid | 450 Student Servs. Bldg. | 372-2651 |
| Housing, on-campus | 440 Student Servs. Bidg. | 372.2011 |
| IU cards | 104 Commons | 372-6081 |
| Registering for classes STAR ielephone registration | 110 Admin. Bldg. | $\begin{aligned} & 372-8441 \\ & 372-8966 \end{aligned}$ |
| Transcripts | 110 Admin. Bldg. | 372-8441 |

BOWLING
G R E E N
STATE
U N I V E: R S I T Y
U N D ERGRADUATE
C A T A O G

## About This patalog

1. Students are responsible for knowing all requirements and policies in this catalog, particularly those academic policies on pages 9-16.
2. All information in this catalog was correct as of April 30, 1989, 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 $3 n$ yember. Course descriptions are弇he back of this catalog in alphabettual 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 two-year catalog, students follow the approved degrees requirements in effect at the time of enrollment.
b. Students may elect to complete a degree program under the most recent 1 ndergraduate Catalog. If this choice Hade, then the student must comte all degree requirements speci-
fied 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 twoyear 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 inital 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 social security number is used for identification and record-keeping purposes throughout a student's attendance at the University. 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 commmunity or government agencies to secure any available financial assistance to meet their needs.

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# The University 

Bowling Green State University is situated on a 1,250 -acre campus, which includes more than 100 buildings. The University offers more than 170 undergraduate degree programs, 75 master's degree programs and has 13 departments granting doctoral degrees in more than 40 specialty areas. More than 17,300 students, including about 2,000 graduate students, attend classes on the main campus. The University enrolls an additional 1,200 students at the Firelands College and various off-campus centers. At the center of the University's academic community are the 730 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 gises in 1914, but it was not until the Howing year that the first two build-ings-now University Hall and Williams Hall-were ready for use. Student enrollment for that initial 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 programs 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 offers career and technical education leading to associate degrees in 17 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. Most recently, 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 intellectual 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; more than half, however, have been constructed since 1960. Many are equipped with ramps and ground-level entryways for the handicapped.
The nine-story Jerome Library is the focal point of the academic community. The design, open stacks, reading lounges, study carrels and seminar rooms have been planned to create an atmosphere conducive to independent study. Jerome Library houses a collection of more than 4 million items, including books, journals, periodicals, microforms, government documents and other materials. In addition, the library contains a curriculum resource center and special collections, including sound recordings, maps, popular culture and rare books. The Center for Archival Collections houses materials relevant to northwest Ohio history and the Institute for Great Lakes Research contains materials on the shipping industry's past and present.

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.

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

Art facilities are located throughout the campus and include individual studios for design and workshops for such areas as jewelry making, woodworking, painting, drawing, enameling, weaving, printmaking, sculpture, ceramics and glass blowing. Photography laboratories are also available at several campus locations. An art gallery located in the Fine Arts Building annually features 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 professional 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 concert 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.

The focal point of campus recreational activity is the Student Recreation Center. Among the facilities contained in the recreation center are two swimming pools, 14 handball/racquetball courts, 3 squash courts, 4 weight rooms, a running track and basketball/volleyball/tennis courts and the Fitwell Center. Other campus athtetic and recreational facilities include a 30,000 -seal football stadium, an ice afena, a 5,200 -seat basketball arena, an 18-hole golf course and 25 tennis courts.
The University Union is a center for social and cultural activities on campus. There are three food service facilities and 20 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 an art gallery which features works by alumni, faculty and students.

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

## Academic 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 hallmarks 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; demonstrated competency in critical thinking, problem 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.

## 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 Secondary 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 State Department of Education; the College of Musical Arts, by the National Association of Schoois 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 Standard Board ASLHA; dietetics, by the American Dietetics Association; environmental health, by the National Accreditation Council for Environmental Health Curricula; health information technology (Firelands), by the Committee on Allied Health Education of the American Medical Association; health, physical education and recreation, by the Athletic Training Program, the National Athletic Training Association, the National Council on Accreditation of the National Recreation and Park Association and the American Association for Leisure and Recreation; journalism, by the American Counc on Education for Journalism and Mass Communication; medical record technology (Firelands), by the American Medical Record Association; medical technology, by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); nursing, by the National League of 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 Committee on Allied Health Education Association of the American Medical Association; social work, by the Council for Social Work Education; technology, by the National Association of Industrial Technology; and theatre, by the National Association of Schools of Theatre.

cademic organization<br>outrses of instruction leading to bacca- laureate 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 Allied Professions, 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 and the College of Business Administration. 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 Allied Professions, Firelands, Health and Human Services, Musical Arts or Technology. An undergraduate student who is undecided as to college enrolls in the Office of Pre-Major Advising.

The University emphasizes a liberal education for freshmen 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 yecific degree-granting undergraduate sileges.

## Degrees offered

Four-year undergraduate programs are available leading to the following degrees:
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 Applied Microbiology
Bachelor of Science in Art Therapy
Bachelor of Science in Business
Administration
Bachelor of Science in Child and Family Services
Bachelor of Science in Criminal Justice
Bachelor of Science in Dietetics
Bachelor of Science in Economics
Bachelor of Science in Education
Bachelor of Science in Environmental Health

Bachelor 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 Speech Pathology and Audiology
Bachelor of Science in Technology
Two-year programs are available lead-
ing to the following associate degrees:
Associate in Applied Business (Business
Administration)
Associate of Applied Business (Firelands)
Associate of Applied Science (Firelands)
Associate of Arts (Firelands)
Associate of Science (Firelands)
Associate of Technical Studies (Firelands)
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, prob-lem-solving and critical thinking; integrating values in decision-making, and he acquisition of functional understand-
ys in literature, the fine arts and other , umanities; the natural sciences; the social and behavioral sciences; and an understanding of at least one culture other than one's own.

The major provides the student with indepth practical and theoretical knowledge in one particular area of study. Electives allow the student to explore diverse individual academic interests or interests that relate to the major.

## Dual 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:
3. secure permission of the deans of both colleges before the end of the junior year;
4. complete the requirements of both colleges for the degrees sought; and
5. 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, page 10.
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 as outlined on pages 9 and 10 .
5. Complete two semester hours of general physical education activities courses (PEG 100) preferably in the freshman year unless complete credit is granted for experiences in the U.S. Armed Forces or waived for a physical handicap. In the case of the latter exception, a student must obtain a certificate from a University physician and the approval of the dean of the college in which the student is enrolled. PEG $100-$ level activities courses must be completed before the student enrolls in PEG courses at the 200 level.
6. Complete the freshman English composition sequence, preferably in the freshman year. See "Requirement of Writing Proficiency" on page 11 for penalty if this requirement is not completed before junior or senior year.
7. 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.
8. Satisfy all course requirements for the degree as listed in the appropriate sections of this catalog.
9. 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 Office of Registration and Records, 110 Administration Building. 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 Allied Professions who turn the applications in at the Office of Registration and Records. 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.

## General Education Core Curriculum

The General Education Core Curriculum is the foundation of Bowling Green State University's emphasis on a practical liberal education for all undergraduate students. The core is a body of learning designed to give students an understanding of the multiple realities of a complex and culturally diverse world. It is organized to provide a basic understanding of the modes of inquiry common to each of four functional areas: Natural Sciences, Social and Behavioral Sciences, Humanities and Arts, and Foreign Languages and Multicultural Studies.

All candidates for the baccalaureate degree at Bowling Green State University must take at least eight courses from the University General Education Core Curriculum. At least one of the eight courses must be from each of the four functional areas.

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 significant writing, reading and research. It is suggested, although not required, that students complete at least one general education courses at the 300 or 400 level.

Courses approved for inclusion in the four functional areas of the General Education Core Curriculum are listed below. Students should check with their college office for specitic details regarding General Education Core requirements in individual colleges.

## Punctional Understandings in the Natural Sciences

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, 115, 116, 125, 126, 135, 136
Geography
GEOG 125

## Geolegy

GEOL 100, 104, 105, 205, 322
Physics and Astronomy
PHYS 101, 201, 202, 211, 212
ASTR 201, 212

## Functional Understandings in the Social and <br> <br> Behavioral Sciences

 <br> <br> Behavioral Sciences}The principal objective of general education courses in the social and behavioral sciences is to explain through empirical investigation and theoretical interpretation the behavior of individual 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.

## Applied Human Ecology

 HDFS 107
## Economics

ECON 100, 200, 202, 203
Environmental Studies
ENVS 101, 301
Ethnic Studies
Ethn 101, 410

## Geography

GEOG 121, 122, 230, 325, 331, 337, 343, 344, 346, 349, 426, 452

## History

HIST 151, 152, 180, 205, 206, 310, 311, 319, 370, 382, 411, 429, 470
Psychology
PSYC 201
Political Science
POLS 201, 271, 272, 301, 372, 402, 403
Sociology
SOC 101, 202, 231, 316
Technology
TECH 302

## Functional Understandings in Foreign Languages and Multicultural Studies

Knowledge of at least one foreign language is an essential tool for the understanding and appreciation of culture and a practical skill enabling cross-cultural communication. Multicultural courses promote the student's recognition and understanding of foreign cultures and the multicultural nature of American Society. All courses examine some of the methods of crosscultural analysis and investigation and study such concepts as culture shock, stereotyping and culture mapping.

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

## Romance Languages

Beginning and Intermediate French, Italian, Latin and Spanish 101, 102, 201, 202, 211, 212

## German and Russian

Beginning and Intermediate German, Russian, Japanese and Chinese 101, 102,
201, 202, German 117, 118, 260

## Multicultural Studies

SOC 231, 316
EDFI 408
GEOG 121, 122, 230, 325, 331, 337, 343, 344, 346, 349, 426, 452
HIST 151, 152, 180, 310, 311, 319, 370,
382, 411, 429, 470
MUCH 125, 233, 234, 235, 431
ETHN 101, 220, 410
POLS 271, 272, 372
WS 200

## Functional Understandings in Humanities and Arts

General education courses in the humanities address universal aspects of human experience and further an understanding of humanistic approaches to knowledge. They develop skills in analysis and interpretation of major works 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 Studies

AMST 200, 230, 300
Art
ART 101, 102
ARTH 145, 146
Arts and Sciences
A\&S 200

## English

ENG 150, 200, 261 \& 262, 264 \& 265, 266 \& 267

## Ethnic Studies

## ETHN 220

Music
MUCH 101, 125, 221, 431
Philosophy
PHIL 101, 102, 103, 204, 211, 212, 230, 325

## Popular Culture

POPC 160, 165, 220
Radio-Television-Film
RTVF 261
Romance Languages
LAT 141, 142
Theatre
THEA 141, 202, 347, 348
Women'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 taking courses in the areas of defiicy; these courses may be used to satisfy general education requirements in most cases. All deficiencies must be completed within the first 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 10). 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 Audit Form, 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 Admissions where a copy of each student's high school tran-
cript is attached. All Deficiency Audit ms are then forwarded for review/ tion to the Faculty Articulation Resource Committee; students will be notified of this committee's action. (Please note that the college offices are not involved in the appeals process.)

Students with identified deficiencies must remove them by taking specified course work; this course work must be completed before the student has accumulated 60 semester hours. Applicability of this course work 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 sourses 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 200; ECON 100; ETHN 101; GEOG 121, 122, 230; HIST 151, 152, 180, 205, 206; POLS 201, 250, 271;
PSYCH 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, 115, 116, 125, 126, 135, 136; 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 the following sequences: 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; RTVF 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 course work 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 semseter hours). Students who do not demonstrate competency via successful completion of a reading test or successful completion of EDCI 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 (also see statement on writing proficiency, this page).
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 EDCI 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 hallmark of an educated person, the University requires that each student enrolled in a baccalaureate or associate degree program complete satisfactorily ENG 112 or give evidence of proficiency in written expression equivalent to that attained by the student who completes 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 students. 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 altogether from English composition are also tested for writing proficiency.

Special courses and services designed 10 aid international students (i.e., nonnative 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, alt entering international students admitted through the Office of International Frograms and the Office of Admissions, except those whose native language is English, are required to take oncampus proficiency tests; international students transferring from other colleges and universities in the United States as weil as students from Puerto Rico are also required to take these tests. On the basis of these tests, the University reserves the right to require enrollment in ENG 100 (English as a Foreign Language) and to limit courses taken for credit. Although it may be necessary for students to repeat ENG 100, only four semester hours of credit can be counted toward graduation. 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 an accumulative grade point average of at least 2.0 (C) for all course work attempted.
4. Complete two semesters of general physical education activities courses (PEG 100), preferably in the freshman year. PEG 100 courses are not required for the Associate of Applied Science or for the Associate of Applied Business (Firelands only) and may be waived for the Associate of Arts and Associate of Science if a student is over age 25.
5. Complete the freshman English composition sequence, preferably in the freshman year.
6. Complete all course requirements for a degree program as listed in the appropriate section of this catalog.
7. 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 dead-
line for filing an application is the end of the second week of the spring semester.
c. For graduation in August, the filling date deadline is the end of the first week of the summer session.
An application form and information may be obtained at the Office of Registration and Records, 110 Administration Building, or 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 dos 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 course work but who does not have a degree goal is an unclassified undergraduate student. A student who has earned a degree and who desires to register for undergraduate courses without pursuing another degree enrolls as an unclassified degree-holder.

## Status change to parttime

For registration purposes, a full-time undergraduate student is one registered for 12 or more hours. During the eightweek summer session, a full-time siude is one enrolled for eight or more hours (four or more hours for a five-week summer term). A part-time student is one enrolled for fewer than the minimum number of hours outined above.
A full-time student who drops sufficient hours during a semester to become a part-time student is subject to the following restrictions:

1. Ineligibility for intercollegiate athletics.
2. Possible reduction of financlal aid awards. Check with the Office of Financial Aid 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 was. approval of the college to which the sti dent 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 within a college should notify the ege office. 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 within five weeks of the end of the semester is not permitted to enroll for the next semester except by special permission of the dean of the college.

When, in the judgment of the medical ff of the Student Health Service, the mysical or mental condition of a student might 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 and I-incomplete.

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 S/U grading option in no more than 16 credit hours in a baccalaureate degree program (beyond those hours graded $S / \cup$ only). Any $S / \cup$ 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 after 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 $S / \cup$ grades may increase the grade point average needed for graduation with honors. 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

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 second through the third week of a five-week summer term, the second through the fifth week of an eight-week summer term, and the second through the sixth week of a ten-week 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 SIU. 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. WP and W grades are not recorded on a student's permanent record.

See Incomplete Marks, page 13.
See Withdrawal from the University, page 13.

## Grade point average

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

For each hour of A-4 points;
For each hour of B-3 points;
For each hour of $\mathrm{C}-2$ points;

For each hour of $D-1$ point;
For each hour of $F$ or WF-0 points;
For each hour of I-0 points after the deadline for removal.
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 $S, U, P, W$ or WP are recorded. The hours for which a mark of I 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:

$$
\begin{array}{ll}
\text { Biology (a 4-hour course) } & \text { B } \\
\text { English (a 3-hour course) } & \text { B } \\
\text { French (a 4-hour course) } & \text { C } \\
\text { Health (a 3-hour course) } & \text { A }
\end{array}
$$

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 $2(\mathrm{C})=8$
+3 times $4(\mathrm{~A})=12$
14 hours 41 quality points
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 I (incomplete) is given when, for some acceptable reason, a student fails to meet a definite requirement in a course as established by the instructor. In courses graded only on an S/U basis and in courses elected to be taken on an $S / U$ basis, a grade of $U$ is recorded until the work is satisfactorily completed. The mark of I or $U$ 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 I or U must be removed by March 1, August 1 and November 1 for the fall and spring semesters and summer session, respectively. Incompletes not removed by these deadlines will be computed as $F$ in the accumulative 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 recalculated and the incomplete 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 assigned 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. Grade and absence grievances may not be appealed beyond the college level.

## Academic forgiveness

Academic forgiveness allows a student refurning 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 course work with a grade of S or C or better.

The academic 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 5 -year absence and request academic forgiveness in writing from the registrar. The student must complete a minimum of 30 credit hours at BGSU 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. After a student elects academic forgiveness and eligibility is verified, a notation will be added to the student's transcript indicating that all BGSU credit hours earned 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 course work 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.

Students 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 senior 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. See formula below.

## Cum laude

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

## Magna cum faude

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

## Summa cum laude

Summa cum laude signifies the highes level of academic achievernent and gra uation with great praise. This honor requires a minimum of 99 TLC and an accumulative 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 accumulative 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. At least 30 of these hours must be in lettergraded courses.
3. A candidate should be in residence at least one academic year or 30 hours in consecutive summers (attending either the full summer session or both of the terms each summer) immedlately 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 merit.

## Repeating a course

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

A student may repeat a course in which a grade of D, F, I, U or WF was received. If a student repeats such a course at the University, it must be repeated under the same grading option as selected initally. If the course is repeated for the purposes of auditing, no grade will be given.

If a student repeats 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 repeat registrations will be used in completing the student's accumulative grade point average, with the following exception:

For the first two such courses repeated at the University, 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 points for eac. repeat registration will be used in computing the student's accumulative grade point average.
f a student repeats a course at the ersity in which a grade of $U$ was ived, it will have no effect on the accumulative grade point average.

Except for the purpose of auditing, a student may not repeat a course in which a grade of $C$ or better (including S) was received, nor a course that is a prerequisite to a higher level course in the same department that has been completed and passed.
No grade is removed or erased from a transcript by repeating a course
If the student repeats 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 or suspension. These classificadings are intended to inform the student academic improvement is needed to ain good standing at BGSU. Students who receive such notification, 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:


## 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
k appropriate advice and services m their college office.

## 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 during 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 their college in a reinstatement decision):
3. such students may not participate in intercollegiate activities.
4. 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 page 14).

## 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 Center for Academic Options 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 Center for Academic Options, page 20.
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 and Career Development 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 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 $\$ 30$ fee is assessed for a credit-by-exam course. Credit by Examinations are graded on an $S / U$ 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 Center for Academic Options, page 20.
A student may also receive credit for course work 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 course work taken before entrance into BGSU's baccalaureate program in nursing.

## Portiolio assessment

Admitted adult students with considerable work/life experience matching speoific 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 course work 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.
The Office of Academic Enhancement houses three University-wide learning laboratories-the Mathematics Laboratory, the Study Skills Center (Reading . Laboratory) and the Writing Laboratory.
For further information on these facilities, see "Academic Enhancement" on pages 17 and 18.

The Language Laboratory, located in 302, 303 and 304 University Hall, serves the departments of romance languages and German, Russian and East Asian languages and occasionally English and Asian studies, providing intensive instruction in foreign language. Listening, recording and audio-visual facilities are avail-
ie. Students may use the laboratory through their foreign language classes as well as during open hours. Laboratory personnel include assistants proficient in one or more languages who supervise and aid students.

## Academic advising

In addition to these support programs, 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 long-range 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 planning are also available in each college office 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 Allied Professions, 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, 204 Technology Building, 372-7581
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.

In addition to these academic advising services, the Counseling and Career Development Center maintains information on a variety of majors and careers and has available career-related interest and value inventories.

Also, a course entitled Career Planning and Decision Making (CAO 131) is offered each semester.

## Academic Enhancement

This University-wide program places special emphasis upon the delivery of academic support services for new students at the University. These services include academic advising, tutoring in the basic skill areas of reading, writing and mathematics as well as special academic assistance for disadvantaged students.

Academic Enhancement staff members recognize that many students entering the University are not yet ready to decide which undergraduate college is best for them. Some entering students may have so many interests that they cannot select one college. Other students may not know enough about the many options available at Bowling Green State University to feel that they can 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. A program is provided in the Pre-Major Advising office to assist students in their decision making process. Academic advisers in this program help students select classes from the University-wide general education core. Such 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 the Pre-Major Advising office are also assisted by their adviser in selecting an undergraduate college.

The Office of Academic Enhancement also houses three University-wide learning laboratories-the Mathematics Laboratory, the Study Skills Center (Reading Laboratory) and the Writing Laboratory.

Each of these laboratories works cooperatively with academic departments in offering individualized and small group instruction to students needing assistance in developing and/or improving their competencies in the basic skill areas of mathematics, reading and writing. Such competencies are, of course, important for success at the University and are also essential after graduation.

The Student Special Services Program is also housed in Academic Enhancement. This federally funded program provides extra academic support for disadvantaged students. Academic advising, tutoring and special classes are available to students who qualify for this program.
.Each program in Academic Enhancement is designed to assist students in their transition to the University. The freshman year is an important one during which students lay the foundation for their remaining years at the University. A strong foundation is important for future academic success. By using the services available in the Office of Academic Enhancement many students can be assisted in making a successful transition to the University.

## University Honors

## Program

The University Honors Program provides enriching and intellectually stimulating classes, at 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. An Honors student may take as many or as few Honors courses as she or he wishes (though 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 determined by a written essay judged by the English department;
2. ACT composite score of 26 or above or SAT composite score of 1100 or above;
3. High school grade point average of 3.5 or better on a 4.0 point scale or graduation in the top 10 percent of the high school class; and
4. Two favorable letters of recommendation from teachers.

Beginning students who wish to apply must complete the application process by May of the year they intend to enter the University. Transfer students should contact the Honors office.
Continuing students must have at least a 3.0 GPA and be registered for or have completed English 112. Continuing studenis should make an appointment with the director or associate director to discuss the Honors Program and course enrollment:

Most of the classes offered through the Honors Program are sections or seminars which satisfy general education courses required of all students. Additionally, some upper-division 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 interdisciplinary-that 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 if she or he meets the following criteria:

1. Has at least a 3.5 GPA overall and at least a 3.2 in Honors courses;
2. Completes at least 20 semester hours of University Honors courses with at least a $B$ in each Honors course and at least one of the courses having been an interdisciplinary seminar, and
3. Successfully completes an interdisciplinary senior Honors thesis. Application for graduation with University Honors must be made no later than the semester before graduation.

Some departments on campus also have departmental honors programs. The University Honors Program does not conflict with such programs because University Honors Program courses are taken primarily in the freshman and sophomore years whereas departmental honors courses are upper division. In fact, University Honors courses are very useful in preparation for departmental honors programs. It is also possible to graduate with departmental honors. Any interested student should discuss such a possibility with his or her department.

An Honors housing option in Darrow Hall in Kreischer Quadrangle is available. Students interested in this option must apply both through the Honors office and the On-Campus Housing Office.
The Honors Program also features an Honors Student Association to which any student may belong. The HSA offers a variety of social and cultural activities, many of which take place in the Honors Center on campus.

For more information, contact the director or associate director, University Honors Program, 231 Administration Building, Bowling Green State University, Bowling Green, Ohio 43403-0014, (419) 372-8504.

## Combined

baccalaureate-

## master's program

Some students may be able to complete a baccalaureate degree in seven semesters, thereby making it possible to begin graduate school early. For more information, contact the Graduate College, 372-2791.

## Siudy abroad <br> Center for Internationa! Programs

The Center for international Programs is located in 403 South Hall (372-2247). The director and staff provide information and counseling services regarding a variety of foreign universities, study abroad programs, faculty and student exchange programs such as the study abroad programs in the United Kingdom.
Additionally, a study abroad library with current information is maintained by the Center for International Programs. Some study abroad programs are offered for the entire academic year while others are for one semester. Students may also arrange for study abroad on an individual basis by contacting the Center for International Programs.

The center is the academic locale for wion all present international student affairs and is the initial office for screening all new international student applicants.

## KOREA, JAPAN

Through the Asian studies program, students may have the opportunity to study in either Korea or Japan. This program is conducted on an exchange basis, with equal numbers of students exchanged between the participating universities. BGSU has an exchange arrangement with Yonsei University in Korea and Nanzan University in Japan. Tuition is waived for the American students. Students bear the cost of airfare, room and board and live with a family in the host country for a total cultural immersion experience. All academic credits earned at the host institution are transferrable to Bowling Green.

## AUSTRIA-Salzburg

The Department of German, Russian and East Asian Languages conducts an academic year abroad program in Salzburg, Austria. The program consists of two semesters (three quarters) of academic study in a German-speaking country with an excellent cultural environment. All academic work is done in German. The curriculum includes courses in German language and literature as well as the arts and the social sciences. Qualified music students may also take courses at the Mozarteum. An American program director resides in Salzburg but the teaching staff is drawn from the faculty of the University of Salzburg. Students live with Austrian students in a dormitory.

The program generally runs from Octo1 through June 30. Applications are epted starting in January of every academic year. Applicants must have the equivalent of two years of college German prior to leaving for the year abroad. Students must also have a minimum accumulative grade point average of 2.25 in all academic work, with a minimum GPA in German courses. A similar program is offered during the summer session. For more information, call 372-2268.
UNITED KINGDOM-Brighton, England An exchange program exists for physical education majors with Brighton Polytechnic of Brighton, England. This study abroad is usually arranged for the second semester in the junior and senior years. For more information, call 372-2209 (physical education) or 372-2247 (International Programs).

## FRANCE—Tours

Tours, situated in the "garden of France," is the site of BGSU's academic year in France, conducted by the Department of Romance Languages. All courses are conducted in French and include work in French language and literature as well as the arts and social sciences. Students live with carefully chosen French families. A BGSU faculty member supervises the program but the teaching staff is drawn m the University of Tours and the titut d'Etudes Francaises de Touraine. The program also features an intensive language orientation session at the Alliance Francaise in Paris during September.

The program is open to any student having completed FREN 202, regardless of the major area of study. A student must have a minimum 2.5 accumulative grade point average, with a 2.5 average. in French courses. For more information, call 372-2667.

## FRANCE-Nantes

The College of 'Business Administration offers an opportunity to enroll in a fiveweek summer session at l'Ecole Superieure de Commerce et d'Administration des Entreprises, a leading business school in Nantes, France. All students are eligible. Courses are taught in English and carry six hours of credit. Graduate students are also eligible; four hours of graduate credit are granted. Knowledge of French is not required. Students live with carefully selected French families. The class schedule allows 3 1/2-day weekends for traveling.

The course of study includes European background and civilization; the European Economic Community; and European labor unions, business and financial environment. Students also attend two days of classes at the headquarters of the European Economic Community in Brussels, Belgium. Classes are taught by European professors. Students have the option of receiving credit in either economics or business administration and may take the courses for a letter grade, S/U or audit.

More information can be obtained from the director of International Programs in Business, 372-6868 or 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 German students to BGSU each year, in exchange for two BGSU students going abroad to one of 13 cooperating German universities. BGSU students must have approximately a 3.00 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 information, contact the Center for International Programs, 372-2247.

## SPAIN-Madrid

The Department of Romance Languages conducts a year-round study program in Madrid, Spain. The curriculum for the program, which runs for two semesters and the summer session, includes course work 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 Spanish institutions of higher learning. An American program director resides in Madrid 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 three-week summer program is offered, as well as a three- or six=week program for high school teachers. For more information, call 372-2667

## UNITED KINGDOM-Norwich, England

The Center for International Programs sponsors an academic semester program in England at the University of East Anglia in Norwich, England. A range of courses in the humanities, arts, social sciences and business is available. Students may live with British families or in dormitories and study with British students and professors; also, a BGSU faculty member is in residence.

For more information, call Center for International Programs, 372-2247.

## Student teaching abroad

Students enrolled in the College of Education and Allied Professions and interested in completing their student teaching in another country may apply for student teaching sites in Rio de Janeiro, Brazil, and Montreal, Quebec. While completing the student teaching requirements, students live with national host families and participate in the daily cultural activities of the country. All instruction is provided in English and knowledge of the national language is not a requirement. For more information, call 372-7372.

## Cooperative Education Program

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 course work. 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 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 majors are required to participate in three semesterlong, paid, full-time 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 course work. 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.
Interested students should contact the Cooperative Education Program, 238 Administration Building, (419) 372-2451, for information. College of Technology students should contact the Office of Cooperative Education, Technology Building, (419) 372-7580, for information.

## Continuing Education and Summer Programs

Continuing Education and Summer Programs offers educational services to traditional and nontraditional learners. The unit manages off-campus and summer credit offerings, provides academic support services to the nontraditional degree-seeking student, promotes life-long learning, supports the credentialing and recredentialing of professionals and trains individuals to develop new skills. Continuing education also provides a counseling/testing service at a minimum charge to potential students through its adult learner services, directs assessment to prior learning by portfolio assessment, meets the training needs of business and industry through its conference and customized training program and meets the educational needs of the local community through its noncredit program for children and adults.

## Summer Programs

BGSU's summer program consists of a wide range of offerings designed primarily to enable the University's traditional and nontraditional students to register for credit courses leading to degrees or to professional certification or licensing.

Summer courses are offered either in 5 -, 8 - or 10 -week frames or in the workshop format. A student may enroll in a maximum of six semester hours during a 5 -week session and a maximum of 10 hours during the 8 -week sessions. Freshmen enrolling for the first time in the summer usually pursue a regular freshman program in English, mathematics, reading and the social and natural sciences. They also receive tutorial and other academic support not readily available during the regular academic year.

During the summer session, noncredit programs are also scheduled for nontraditional learners of all ages who may wish to enhance their skills or understanding of certain fields or disciplines.

## Evening Program

The Evening Credit Program offers a wide variety of undergraduate courses for students who attend the University after 4:30 p.m. The student may take courses to update skills, to explore a new career or to work toward a degree. A student may begin University studies as an unclassified student while determining academic interests and possibilities. An unclassified student may accumulate up to 16 hours of credit before being admitted to the University and declaring a major. For information about the degree programs available in the evening, contact the Office of Continuing Education, Regional and Summer Programs, 300 McFall Center.

The Evening Credit Program also offers special services to the student on campus during the evening. Course offerings are advertised each semester and a special evening registration is held the Tuesday and Wednesday before classes begin each semester. Program advising is available during evening registration, or by appointment through the Office of Continuing Education, Regional and Summer Programs, 372-8181. 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.

## The Off-Campus Credit Program

The Off-Campus Credit Program offers upper-division baccalaureate and graduate courses at off-campus sites. The program schedules a selected number of upper-division courses at the Firelands College campus and some of the sites in its 25 -county service region in northwest Ohio. These courses are usually scheduled after 5 p.m. and generally meet once or twice a week.

## Senior adults grants program

The Senior Adults Grants for Education (SAGE) program is an opportunity for all Ohio residents age 60 and over to enroll in courses on a non-credit basis at BGSU without payment of instructional or general fees. To be eligible, persons must have lived in Ohio for at least one year prior to enrollment. Participants have access to all University classes and workshops in which space is available.

## Center for <br> Academic Options

The Center for Academic Options, which includes the Office of Special Programs, provides academic programs and curricular options, focusing on both faculty and students, which serve to augment a liberal education and enhance the undergraduate experience. Students interested in any of the programs described below should contact the center, 231 Administration Building, (419) 372-8202.
The center director coordinates the general education core curriculum and works with faculty to initiate and deveiop curricular projects and assessment projects to determine the results of classroom practices.

The Office of Special Programs promotes student growth and developmen by providing opportunities to experienc. education in different settings, to test abilities to cope with unfamiliar environments and to develop independence and responsible leadership skills by putting liberal education to practical use. The National Student Exchange offers students the opportunity to travel and take courses at a choice of universities across the country; the Washington Center Internship Program allows students to work as interns in their chosen fields in the nation's capital; and independent study permits the exploration and application of diverse academic interests and skills. Credit alternatives, for those students qualified for advanced standing, include Advanced Placement, the High School College Credit Program and the CLEP program. A Career and Life Planning program assists students in assessing their interests, skills and abilities and relating them to the world of work.

## College Level Examination Program (CLEP)

Selected subject examinations are offered which grant credit for courses within the areas of accounting, biology, chemistry, computers, literature, Western civilization, American history, human development, business law, marketing and sociology. Then be eligible for an area of the CLEP exan. a student must not have done collegelevel work in that specific area. For intormation on the monthly Bowling Green testing dates, contact the Counseling and Career Development Center. Other questions about CLEP should be directed to the Center for Academic Options. The policies governing the administration of CLEP examinations are subject to change.

## Advanced Placement Program

The Advanced Placement Program of the College Entrance Examination Board (CEEB) allows Bowling Green, as a member institution, to award college course credit to entering students who achieve quaiifying scores on proficiency examinations in a variety of academic areas. These examinations are given in the high schools, following completion of collegelevel courses taught in the high schools. Bowling Green awards course credit and/ or exemption in the following subject areas: art (studio and history), biology, chemistry, computer science, English, foreign languages (French, German, Latin, Spanish), history (American and European), mathematics, music and physics.

High School Illege Credit Program

High school students with a minimum 3.0 grade point average may enroll in regular University courses and receive college credit by applying and being accepted for the High School College Credit Program. For high school students who possess general or specific academic talent, the program offers an opportunity to take course work which is unavailable at their own institutions. College credit is granted for satisfactory completion of these courses whether or not they are used to complete a student's high school requirements. Interested students may consult with the director of special programs about application requirements and course selection.

## National Student Exchange

The National Student Exchange offers BGSU students the opportunity to take course work 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 consor1 of 80 U.S. colleges and universities. 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 students take courses which transfer back to BGSU. Students must have at least a 2.5 grade point average, be enrolled full-time at BGSU and must exchange prior to their last 30 hours before graduation. Interested students should consult with the director of special programs about costs, course selection, choice of host university and planning the best time for the exchange.

## Washington Center Internships

The 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 Center for Academic Options. Interested students with a minimum 2.5 GPA are urged to contact the Center for Academic Options at least six months prior to the term in which they would like to intern.

## Independent study

This program allows qualified students to design their own course of learning for a particular topic and earn up to fifteen hours of elective credit. Working with at least one faculty sponsor, students formulate their own goals, learning objectives, methods by which these will be met and how the project will be evaluated.
Independent study projects can range from internships to in-depth research of a particular topic to creative, alternative learning experiences. Past projects have included a school board election campaign, internships with various offices near and far, marine research and scholarly research on a variety of topics. Students must have a 2.5 GPA to apply and must have completed the freshman year. For information on the independent study option, contact the Center for Academic Options.

## Career and Life Planning (CAO 131)

The Career and Life Planning course helps students assess those values, inter ests, needs and skills which will be most helpful in selecting an academic major and relating that major to a career. Students investigate occupations, learn about employer expectations, identify issues affecting their career choice, develop interview skills and learn to write a resume Strategies are developed for making career and life planning decisions.

## Center for Environmental Programs

The staff of the Center for Environmental Programs, 124 Hayes Hall (372-8207), is responsible for coordinating, facilitating and monitoring a variety of academic programs relating to the environment. Fouryear programs are available in the College of Arts and Sciences, the College of Education and Allied Professions and the College of Health and Human Services. In cooperation with academic advisers in the various colleges, the center staff assists students in selecting the program options that can best fulfill their goals and provides a comprehensive overview of all options. An Environmental Resource Room (127 Hayes Hall) is maintained by the center. The Resource Room contains more than 10,000 items including current periodicals, technical reports, general environmental literature and curriculum materials 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 data base 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) <br> Air Force ROTC

The objective of the Air Force Reserve Officers Training Corps (AFROTC) program, offered by the Department of Aerospace Studies, is to provide college-level education qualifying interested men and women for commissioning as second lieutenants in the United States Air Force in response to Air Force requirements. Emphasis is placed on the development of each student's sense of personal integrity, honor, individual responsibility and potential as a leader and 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, receiving one hour of credit each semester. A uniform and AFROTC textbooks are provided without cost while enrolled in the GMC. The 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) 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 courses, receiving three hours of credit each semester. While enrolled in the POC, students receive $\$ 100$ per academic month (tax-free), free AFROTC textbooks, and individually tailored 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 two-year 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 offers opportunities for practical leadership training and experience in a supervised environment. Certain selected students are eligible for two-, three- and four-year ROTC scholarships. Scholarships provide full college tuition, required fees, textbook allowance and pay the recipient $\$ 100$ per academic month (tax-free).

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

For additional information, contact the Department of Aerospace Studies, (419) 372-2176.

## AIMY ROTC

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 National Guard. All ROTC courses are fully accredited.

A two-year and a four-year program are offered at BGSU. The traditional four-year program consists 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. Participation in the basic course entails no military obligation, no uniform wear and no military drill.

Upon successful 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 taken in the last two years at BGSU. In addition to one military science course each semester, it includes a sixweek advanced camp, for which students are paid, during the summer after the junior year. All advanced course students receive a monthly allowance of $\$ 100$ (taxfree). 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 with prior military service, those who are community or junior college graduates or are members of the National Guard or Army Reserve. It is also available to BGSU and transfer students who were not able to take ROTC during their first two years. Students interested in the twoyear 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 which pay for BGSU tuition, fees, books and supplies. Scholarship students also receive $\$ 100$ each month. Limited programs are available to assist qualified students in graduate study.

A course fee of $\$ 3$ is charged to students in the basic courses. Advanced course students pay a $\$ 5$ course fee. These fees are applied to cadet activities such as dinners, formals and picnics. 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 the Siudy of Popular Culture

The Center for the Study of Popular Culture is the national headquarters of the Popular Culture Association and the American Culture Association. The Center houses the Popular Press which publishes, among other works, The Joumal of Popular Culture, The Journal of American Culture, The Journal of Canadian Culture, the Journal of Regional Cultures, the Jourhal of Cultural Geography, Clues: A Journal of Detection and houses the editorial office of the Journal of Popular Film and Television. The Popular Culture Library has extensive collections of popular literature, both fiction and nonfiction. These include a variety of comics, serials, paperbacks and magazines. The Sound Recordings Archives section of the Music Library houses 150,000 LP records, $160,00045-\mathrm{rpm}$ singles, $70,00078 \mathrm{rpm}$ records and 800 cylinder recordings. Among its collections are more than 2,000 hours of old radio shows, all-inclusive discography holdings and subscriptions to more than 80 popular music and recording industry periodicals.

## Management Center

A division of the College of Business Administration since 1969, the center offers educational, training, 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, éthough the Management Center emphasizes assistance to clients located in northwest Ohio. The center has assisted many ciients in such areas as strategic planning, market analysis, feasibility studies, acquisition analysis, regional economic development, profit improvement, management development, sales forecasting, inventory. management and other areas.

The center offers in-house training services, technical advice and research services. It also provides programs and cosponsors seminars or conferences with professional societies and trade associations.

Using faculty resources of the University, the Management Center, located in 369 Business Administration Building (372-2807), also provides assistance in specific problem solving for business, industry and public institutions.

MaNaster Leadership Institute
Harold and Helen McMaster Leadership Institute for Scientific and Technical Industry focuses on the ways in which small firms in scientific and technical industry can profit and grow in today's economic climate, concentrating on planning, organization, communication, continuing innovation, management and other areas critical to the success of the scientific and technical business community.

The institute sponsors a McMasters Fellows Program whereby two types of fullfee fellowships are granted. The first is a Senior McMaster Fellow, a one-year award to an industrial scientist who is a leader in research and development. The junior fellows are selected from undergraduates who plan to pursue doctoral studies in the Center for Photochemical Sciences.

## Social Philosophy and Policy Center

Established in 1981, the center is devoted to the examination of public policy issues from a philosophical perspective; e.g., economic regulation, land use legislation and national defense. The center, which is maintained by foundation grants, sponsors national conferences, publishes a journal, Social Philosophy \& Policy, and other topical literature, and

## jonal 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 in Austin upon the recommendation of the National Science Foundation, the American Society of Naturalists and the National Policy Guidance Council. It is located in the Life Sciences Building.

## Mid America Stock Center

Since 1966, Bowling Green has operated the center which is a repository for the world's largest collection of a specific research/fruit fly species, the 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.

## Population and Society Research Center

The center, which is engaged in interdisciplinary studies in sociology, psychology and institutional research, also conducts surveys for external clients on questions of social concern and the quality of life in northwest Ohio, e.g., attitudes on the use of nuclear power, energy conservation, motor vehicle fuel usage and vehicle purchase plans.

## Productivity and Gainsharing Institute

Formed in 1980, the institute assists organizations in the study, evaluation, installation and maintenance of productivity, gainsharing and measurement systems. Offered through the College of Business Administration, the institute provides formalized education programs for managers and employees during the installation and first and subsequent years of operation.

## National Institute of Physical Education for Children

Dedicated to improving physical education experiences for all children, including the preschool child, the institute encourages research on such topics as movement and motor learning and ways in which attitudes and values are affected by physical education. The institute has worked to improve curriculum development and instruction in preschool and elementary school settings and sponsors periodic in-service opportunities and regular summer graduate seminars for teachers and others who work with children in movement settings.

## Clinical Laboratory

Located in the College of Education and Allied Professions, the laboratory permits students to experience the newest technological developments in teacher education. Thirty electronically equipped study carrels provide students the opportunity to learn teaching techniques through slide-tape, video-tape and other media presentations, many of which have been designed and prepared by Bowling Green's own faculty and staff. Mainframe and microcomputers complement course work on the utilization of computers in classroom teaching, are used for tutorials, simulations and statistical packages to teach various skills, and also assist students in producing written assignments.

## Philosophy Documentation Center

The Philosophy Documentation Center collects, stores and disseminates bibliographic and other types of information in philosophy. The center's major publication is The Philosopher's Index, a subject and author index with abstracts of all major philosophy journals in English, French, German, Spanish, Italian and other selected languages, and other related interdisciplinary publications.

## 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 microfilm program.
Among the materials available are local government records, newspapers, 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 BG 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 Bowling Green State University.

## Center for Photochemical Sciences

Coordinated by the Department of Chemistry, the Center is designed to prepare post-doctoral students and other research professionals in the principles of photochemistry, photopolymer science, photophysics and spectroscopy. In addition to serving as a clearinghouse for information, the Center conducts research projects related to medicine, printing and other industries that make use of various photochemical processes.


Bowling Green's tuition is broken down into two charges: instructional fee and general fee. The instructional fee, which is 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 board charges.

The following table shows what students paid during the $1988-89$ academic year:

|  | semester | year |
| :---: | :---: | :---: |
| Instructional fee | \$1,020 | \$2,040 |
| General fee | 220 | 440 |
| Room charge | 619 | 1,238 |
| Meal (board) charge | 486 | 972 |
| )TAL | \$2,345 | \$4,690 |

ese charges were typical for a fulltime 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, page 33, for a description of room and meal plans.

There is a surcharge for all out-of-state students. Nonresident students paid a surcharge of $\$ 2,980$ during the 1988-89 academic year or $\$ 1,490 /$ semester.
The Board of Trustees reserves the right to make adjustments in fees or charges when deemed necessary. Current fee information can be obtained through the Office of Admissions or the Bursar's Office.

A student who is an Ohio resident and is enrolled for 11 or more credit hours pays fees as a full-time student.

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 full-time to part-time, the hourly rate schedule will be applicable to the remaining hours.

During any semester when a student is registered for a combination of main campus (including extension) and branch or resident credit center courses, fees are determined as follows: if the number of main campus credit hours equals or exceeds the off-campus credits, the main campus fees are charged for all courses. Off-campus rates apply when branch and resident credit center credit hours exceed the main campus credits.

A previously 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.

## 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 non-compliance- $\$ 1,490$ for a full-time student or $\$ 141$ per hour for a part-time student.
Questions about selective service status should be directed to the Office of Registration and Records, 110 Administration Building, (419) 372-8441.

## Summer session fees

Full-time summer session students paid an $\$ 1,020$ instructional fee and a $\$ 138$ general fee for a total of $\$ 1,158$ in 1988. The nonresident fee was an additional $\$ 1,490$. Part-time students paid $\$ 115$ per hour.

## 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 perhour rate as credit class registration.
Automobile registration- $\$ 25$ per year (fall semester through summer session). Firelands charge is $\$ 20$ per year.

Change of registration - $\$ 5$ for any change of registration made on or after the first day of classes.
Credit by examination- $\$ 30$ for each special examination.
Driver education fee-\$25 for HED 362; \$20 for HED 462.
Excess credit fee- $\$ 50$ per hour for each hour over 18 taken each semester.

Late payment charge-- $\$ 5$ for each day (including Saturdays and Sundays) fees are paid late at the beginning of a term.

## Music fees-

Applied music private lessons
$\$ 45 /$ credit hour
Applied music classes $\$ 22.50$ /credit hour Music major equipment fee $\$ 25 /$ semester MUED 402 \$15/course Tools for piano tuning variable
Proficiency examination- $\$ 5$ for qualifying examinations in typing and shorthand given by the business education staff.
Return check service charge-a $\$ 10$ service charge is 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 costs.
Student teaching laboratory fee-\$5 per credit hour

Transcript charge-\$3 each Physical education course fees:
Billiards \$ 15
Bowling \$ 22

Beginning golf \$5
Intermediate golf $\$ 10$
Advanced golf \$20
Ice skating, curling, hockey \$15
Club hockey $\$ 20$
Skiing $\$ 88.50$
Horsemanship \$135
The student is held responsible for apparatus lost or damaged and for materials wasted in laboratory classes. The student pays for all materials used in making articles or items that become personal property.
The Board 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 in advance of the semester for which the student is enrolled. The final date for payment of fees for each semester is seven calendar days before the official date for the beginning of the semester. 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 $\$ 25$.

Fees are payable at the Bursar's Office on the first floor of the Administration Building between 8 a.m. and 5 p.m. Checks and money orders made payable to Bowling Green State University for the exact amount are accepted for the payment of all fees. At Firelands, fees are payable at the Office of Registration.

## Charge cards

Personal charges at the University can be paid not only by check or cash but also by MasterCard and Visa. Any questions should be directed to the Bursar's Office.
Installment payment plan-fall, spring An optional installment payment plan is available for the payment of instructional and general fees, room and meal charges.

The instailment plan, which has a persemester application fee, permits on-campus students to spread their fall semester room, meal and fees charges over four payments and spring semester fees over four payments. Off-campus students can spread instructional and general fees over four payments for each semester (fall and spring).

Students interested in participating in the installment plan should contact the Bursar's Office, (419) 372-2815.

## hefund of fees

In the case of voluntary withdrawal of a student from the University in any semester, fees, except for the application fee, are refunded on the following basis: during the calendar week in which classes begin, 90 percent; during the second calendar week, 80 percent; during the third calendai week, 60 percent; during the fourth calendar week, 40 percent; after the fourth week, no refund. A student withdrawing under discipline forfeits 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. 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 con-tract-acceptance agreement. No deduction is granted because of late entrance.

Summer session fees are refunded as follows: 90 percent during the calendar week in which classes begin; 80 percent during the second calendar week; 60 percent during the third calendar week; 40 percent during the fourth calendar week; no refund after the fourth calendar week. A different refund schedule applies to students withdrawing from a five-week or eight-week summer term.

## If a student drops a course which

 reduces the fee status from full-time to part-time, the hourly rate schedule will be applicable to the remaining courses. 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 in the preceding paragraph unless the dean of the college in which the student is enrolled authorizes different action. Refunds normally take a minimum of four weeks to be processed.

## Nonresident fee regulations

A student classified as a nonresident of Ohio for lee 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 student's 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 on February 2, 1985.

## (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 Soard 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 enitities which are not related to the recipient.
3. An "institution of higher education" as used in this rule shall mean any university, community cc lege, technical institute or college, general and th cal college, medical college or private medical or aen tal 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 tuftion 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 surcherge purposes

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

1. A dependent student, ai 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 enroliment 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.

This section of the nonresident fee regulations is subject to change. Please contact the Office of Rstit tration and Records, 110 Administration Building further details.
D. Additional criteria which may be considered in determining residency for the purpose may include but are not limited to the foilowing:

1. Criteria 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 license and/ or car registration.
2. Criteria evidencing 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 loan 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 receipt of welfare
benefils (see paragraph (D)2.(a) of this rule).
(E) Exceptions to the general rule of residency for subsidy and tuition surcharge purposes:

1. 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.
2. 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 pur poses 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
3. A person on active duty staius 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.
4. A person who is transferred by his employer nd the territorial limits of the fifty states of the d 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.
5. 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

1. A dependent person classified as a resident of Ohio for these purposes and who is enrolled 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 untif 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. 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.
4. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.
5. 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.


## Admissions

## 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 an international Baccalaureate Diploma or Certificate.
Applications for admission are accepted and processed each semester of the academic year and the summer session until the capacity of the freshman class is reached on the Bowling Green campus and at the Firelands College
mpus in Huron, Ohio. Admission is
petitive and is based on grade point uverage, 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. Admission to the Bowling Green campus closes on February 1 for the following fall semester; during the past several years admission to the Bowling Green campus has been closed to freshmen several months before the beginning of spring semester and the summer session. Although the largest number of new students enters in August, it is possible to enter in the spring semester or the summer session. For spring and summer terms, applications must be subrnitted 30 days prior to the beginning of the term, and all admission credentials must be received by the Office of Admissions 14 days before the term to allow sufficient time for processing, notification, academic advising and registration for classes.

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, the College Preparatory Curriculum Completion Form, application processing card and the application fee receipt card. 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.

Applicants who have already graduated from high school may send their completed applications, application processing and receipt cards, and application fee directly to the BGSU Office of Admissions. Upon receipt of the completed Application for Undergraduate Admission the Office of Admissions will send a high school transcript form. Either an official final high school transcript or this completed form should be sent from the school to the Office of Admissions. The College Preparatory Curriculum Completion Form should be given to the high school counselor or principal for completion, also.
Applicants who have earned high school equivalency through the General Education Development (GED) testing program should send their completed applications, application processing and receipt cards 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.
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 Housing, page 33.

For residency requirements for Ohio residents and nonresidents, refer to residency regulations under Fees and Charges, page 25.

## 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.

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 college preparatory program. See pages 10-11 for details of the University's Articulation Policy.

## Transier Students

Candidates for admission who have attempted 12 or more hours at a college or university since high school are considered as transfer applicants. A transfer student who wishes to enroll at Bowling Green as an undergraduate must submit an application for admission and a nonrefundable $\$ 30$ application fee. The University requires an official final high school transcript sent from the school by the high school counselor or principal. A transfer student who has earned 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 director 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 transfer of credit and/or expulsion from the University if discovered subsequently. In addition, transfer applicants will receive a transfer recommendation card to be completed by the personnel dean of the last institution attended and sent directly to the director of standards and procedures at Bowling Green State University. This card must be on file before formal admission can be granted. Transfer application deadline is 30 days before the start of the term to which the student is applying. All admission credentials must be received by the Office of Admissions 14 deys before the semester or the summer session to allow sufficient time for processing, notification, academic advising and registration for classes.

Transfer students applying to the physical therapy or the nursing program professional curriculum must apply to the University by December 1 so that they may be granted formal admission before appiying to the physical therapy or nursing programs. January 15 is the deadine for applying to the physical therapy professional curriculum for the following fall semester. January 31 is the deadline for applying to the nursing professional curriculum.

A student who has attended another accredited college or university and is in good standing is considered for admission:

1. if the student has earned an associate degree or at least 60 semester 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 in the latter category whose accumulative grade point average is between 2.0 and 2.5 may be considered for admission upon petition. After the initial evaluation of the student's completed admission credentials, the Office of Admissions will send a petition form to the student. Upon return of this form, an admission decision concerning a student in the petition range $(2.0-2.5)$ is made by the dean of the college to which the student is applying in consuitation with the director of admissions.

The Office of Admissions no longer sends petitions after the thirtieth day before the semester or summer session begins. The office has set this time limit to provide sufficient time for processing applications. An applicant who is too late to petition will be denied admission for that term.

A student who cannot meet the above transfer admission policies and who has not attended another college or university for a period of one or more years may be considered for probationary admission by petitioning the director of admissions.

A person receiving probationary admission is restricted to no more than four courses (in addition to required physical education) during the first semester at Bowling Green. If academic and residence hall accommodations are not available, probationary admission may be available to the main campus for the summer session only. Generally, probationary admission to the Firelands College is available for either fall or spring semester or the summer session.

BGSU's College of Technology offers eight 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. When applying for admission, the student must request acceptance of the associate degree.

Some upper division (junior/senior) majors have additional transfer requirements. Transfer students should refer to the catalog description of their intended major program for additional requirements.

## Transfer of credit

Bowling Green State University awards transfer credit for formal course work 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. Credit may be awarded also for experiential learning that meets the guidelines and is validated by procedures as described below.

Acceptable Collegiate Sources Universities and colleges with accredite tions or which are candidates for accreartation by one of the accrediting associations, (such as North Central Association of Colleges and Schools) and colleges and universities in foreign countries which hold official recognitlon 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 substantially equivalent 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 department, school, program or area. (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. Pro dures 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 agencies:
5. Credit for basic education courses is accepted generally (with some specific exceptions).
6. Credit granted may be course equivalent and non-equivalent credit, or credit may be deferfed.
7. Course work in technical or specialized disciplines is evaluated by faculty members in appropriate departments.
8. A maximum of 64 semester hours of credit up to the awarding of the associate degree may be transferred from a twoyear institution or from all institutions attended. Subsequent work at a two-year institution is to be included as part of the 64 semester hours allowed for the associate degree and/or attendance at a twoyear institution.
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):
9. Credit may be accepted only upon. the recommendation of the specific department and/or college/school in which the course work is offered.

Before credit is awarded, previous se work may be subject to validation 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 an accrediting agency for course work 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 The National Guide to Credit Recommendations for Noncollegiate Courses.

1. Credit is accepted generally as recommended by ACE for lower-division (100-200 level) courses at BGSU
2. Course credit recommendations for work which is on the upper-division (300400) 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 he Armed Services.
Credit is accepted generally as recommended by ACE.
3. Normally, all credit accepted is nonequivalent course credit.
4. 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 granted for experiential learning is subject to Credit by Examination.
3. A $\$ 30$ 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 and Summer Programs.
5. Portfolios are written in a threesemester credit hour English course; in addition, a $\$ 70$ fee is assessed for each course for which portfolio credit is requested.

## Appeal of Credit Transfer

Students or institutions wishing to challenge a Bowling Green State University transfer of credit decision may submit a written appeal to the Office of Registration 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 appropriate research and send the appeal to the Undergraduate Council. The Undergraduate Council will review all available information and make a recommendation to the Office of Academic Affairs. The Office of Academic Affairs will give final approval or disapproval of the Undergraduate Council's recommendation.

## Other admission categories

## International students

Students from more than 50 countries are enrolled at the University. Well qualified foreign students are welcomed. Their participation is eagerly sought to enrich educational opportunities for all students. Students from outside the United States interested in applying for admission should write the Center for International Programs, Bowling Green State University, Bowling Green, Ohio 43403, (419) 372-2247.
For admission purposes, applicants whose native language is not English are required to take an English proficiency test-either 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 tests, 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.

## Evening and part-time students

Prospective students who plan to take evening classes only (after 4:30 p.m.) can apply for admission to the Evening Program or, if space allows, enroll as unclassified undergraduate students (page 32) before seeking admission to the University.

## Concurrent enrollment

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 courses 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 student. See transient students, 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 8 hours or more of course work at the home university shall pay all fees to the home university. If a student registers for fewer than 8 hours, instructional, general and nonresident fees are to be paid at the separate universities. (Special course fees are payable to the teaching institution.)

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

Course work 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 enrollment forms are avail able through the Office of Registration and Records of either institution.

## Unclassified degree holder

A student who has an earned degree in higher education and who wishes to enroll in undergraduate courses without pursuing another degree is classified as an unclassified degree holder. BGSU requires official confirmation from the appropriate institution of the highest degree received. Unclassified degree holders who maintain continuous attendance at BGSU will automatically be sent registration materials for succeeding terms. Students not in continuous attendance must resubmit the unclassified degree holder application in order to obtain registration materials for the designated term.

## Unclassified undergraduate student (Guest)

A student who has not attended another college or university and who is not a candidate for a degree may be eligible for enroliment as an unclassified undergraduate student. An unclassified student must apply for enroilment each term. Registration is allowed on a space-available basis after advance registration has been completed. An unclassified undergraduate student is limited to 16 credit hours of work attempted before applying for formal admission to the University. An unclassified student is not required to submit a high school transcript or American College Test results. However, he or she must be either a high school graduate or have completed the GED equivalency.

## 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 writing to the registrar. 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 and provide evidence of good standing, both personal and academic, at the institution last attended. A 2.0 accumulative grade point average (on a 4.0 system) is required.

## Transient student (Guest)

A student of another college or university who wishes to earn credits at Bowling Green may be enrolled as a transient student. The student must present an official statement from the institution being attended that certifies eligibility to return to the home institution and that the credits earned at Bowling Green are acceptable as part of the program there.

The above principle applies to a student of Bowling Green attending another college or university as a transient student. Permission to attend other universities as a transient student is granted only to students who have at least a 2.00 accumulative grade point average at BGSU. Grades earned as a transient student at another college or university do not become part of the student's record at BGSU, but they are included in calculating all honors.

Transient students will register at a time announced by the Office of Regis tion and Records. A transient student is limited to 16 credit hours of work attempted before applying for formal admission to the University. Transient students are not required to file a transcript of previous college credit.

All applications can be obtained from the Office of Registration and Records, 110 Administration Building.

## Residence Halls

Bowling Green is primarily a residential University, and nearly 8,000 undergraduate students live in residence halls.

University residence halls provide a physical environment designed to further the academic, cultural and personal development of the resident students. A wide range of living options is available to students and a wide variety of educational and social programs are offered.
Undergraduate students are required to reside in University-owned living units as a condition of enrollment unless they are commuting daily from the homes of their parents, guardian, spouse; OR unless they have attained 60 earned academic hours and/or four semesters of campus
dency on or before the first day of
sses for fall. For the purposes of this regulation, a home is defined as the actual and regular place of residence in the community in which the parent, guardian or spouse is eligible to register to vote. A guardian is defined as a person awarded legal guardianship by a court of competent jurisdiction. The housing acceptance agreement is a contract 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 policy.
Accommodations in University residence halls are available to any University student regardless of race, religion, creed, color, national origin or handicap.
The Office of On-Campus Housing, 440 Student Services Building (372-2011), is responsible for the assignment of all students to on-campus housing accommodations. This office processes all housing applications and roommate requests for assignment to the 21 residence halls and 31 small group living units. Issuance and cancellation of University meal coupons are also coordinated through this office.
The Office of Residence Life, 425 Student Services Building (372-2456), is responsible for the operation, staffing and programming of all campus living units, Huding sorority and fraternity houses. A ned residence hall staff including undergraduate resident advisers (R.A.'s) is present to help students derive the fullest possible benefits from the residence life experience.

## Housing regulations Responsibility for personal effects

During a student's residence in a hall, every effort is made to provide adequate supervision. 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. A linen rental service is available.
For detailed information regarding services and accommodations available contact the Office of On-Campus Housing.

## Occupancy of rooms

Each student is required to vacate and remove personal belongings from the residence hall 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 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 all its residence halls, and the right is reserved to remove an occupant at any time for violations of University and/or residence hall policies, rules and regulations. 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.

## Vacation periods

With the exception of Compton Hall, the residence halls are not open during the vacation periods. Residents of Compton 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; however, residents may prepare their own meals in the kitchen facilities. The Office of On-Campus Housing can assist in making these arrangements. The University reserves the right to assign, inspect, maintain and make repairs in residences any time during the school year.

## Change of university address

If, for some reason, a student should find it necessary to change his or her campus address, such a change must be registered and approved by the Office of OnCampus Housing in advance of the proposed move.

## Off-campus housing

The Off-Campus Housing Office, 425 Student Services Building, maintains up-todate listings of available houses, apartments, rooms in homes and subleases and their prices. The Off-Campus Housing Office will not list housing vacancies unless the owners have agreed not to engage in discrimination to prospective tenants on the basis of race, color, religion, sex and national origin. The office operates a roommate locater service to help students find compatible roommates. The office can also provide move-in inventory forms, information on the public utilities and a variety of other information.
A student who lives off campus does so accepting individual responsibility. The University does not undertake to provide social and educational opportunities or the supervision furnished in University residence halls to students residing in offcampus housing. A contractual arrangement exists between the student and the landlord 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 contract in the spring before the opening of the fall semester. Dates and procedures for payment are outlined in the contract.
Four housing plans with several different rates are available to students regardless of class rank as long as space is available. Priority of assignments is given to continuing upperclass students with seniors, juniors, sophomores and incoming freshmen assigned in that order. Feturning former students are assigned with new incoming students.

Plan I includes Conklin Hall and McDonald North. Students living in these residence halls are not required to purchase the meal plan. Double occupancy rate is $\$ 619$ per semester or $\$ 1,238$ per academic year. The single occupancy rate is $\$ 809$ per semester or $\$ 1,618$ per academic year. These rates are for room only (no meals).

Plan I/ covers these residence halls: Kreischer, Harshman, McDonald East and West, Founders, Rodgers, Kohl, Prout and Alpha Fhi Aipha. This rate also applies to students living in Conklin and McDonald North halls who are taking part in the basic meal plan program. Multiple occupancy rates, including the basic meal plan, are $\$ 1,105$ per semester, or $\$ 2,210$ per academic year. Single occupancy, including the basic meal plan, is $\$ 1,295$ per semester, or \$2,580 per academic year.

Plan III applies only to Offenhauer East and Offenhauer West. The rate for double occupancy, including the basic meal plan, is $\$ 1,253$ per semester, or $\$ 2,506$ per academic year. A single occupancy room with the basic meal plan is $\$ 1,420$ per semester, or $\$ 2,840$ for the academic year.

Plan $I V$ is for the room-only rent for fraternities, sororities and the French House. These rates are $\$ 698$ per semester, double occupancy (\$1,396 per academic year). Since most Greek houses operate their own dining facilities, the University collects only room rent, leaving the various groups to collect their own meal plan charges.

These were the rates for the 1988-89 academic year only and are subject to change as economic conditions warrant.

Additional information regarding living options and rates can be obtained from the Office of On-Campus Housing, 440 Student Services Building, 372-2011.

## Payment schedule

Since arrangements for residence on campus must be made before the opening of fall 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 contract is accepted. The acceptance agreement should be read thoroughly by both student and parents or guardian and retained for future reference. A residential contract 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 Installment Payment Plan described in the acceptance agreement. The initial payment date appears on the residential contract card.

## Refunds

Adherence to the payment schedule is a prerequisite for admission. Should it be necessary 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 information regarding other fee refunds see fees and charges, page ?:

## Mieal plan

University Food Operations utilizes a variety of facilities to offer quality food at a reasonable price. Since 1971 the meal system has given students a choice of what, when and where they may eat. Food Operations is also concerned about the nutritional value of each meal and makes sure that each student is more than satisfied with the services offered.

Food items in all dining facilities are individually priced and students pay only for what they choose. Students may eat in any University dining facility and may use the food plan to purchase bulk items such as six-packs of soda. Guests are welcome in the dining halls and their meals may be purchased with meal plans or cash.

There are five dining halls, four snack bars, a deli and soda shoppe and two restaurants. The dining hall menus offer five to eight entrees at each meal, plus cold sandwich lines, theme lines and a salad bar at lunch and dinner.

For the 1989-90 academic year, Food Operations offers various food plans that provide different amounts of food to fit different lifestyles. Students who eat fewer than average meals or who leave campus frequently on weekends may want to purchase a basic plan. Studen. who eat three meals a day and will want to take advantage of the snack bars on campus will want to purchase a more comprehensive meal plan.

All types of financial aid are coordinated through the University's Office of Financial Aid and Student Employment. The staff is also available for financial aid counseling.
Each student and the student's family are responsible for a reasonable contribution to the cost of the student's education. However, students may require financial assistance. Financial aid is generally limited to full-time students, but part-time undergraduate students may be eligible for some types of financial aid.
To apply for financial aid, students must file a Financial Aid Form (FAF) which may be obtained from high school guidance counselors, the Office of Financial Aid and Student Employment, the Office of Admissions or the Firelands Financial Aid Afice.
rospective freshmen who complete forms by February 15, and are fully admitted to BGSU by March 1, will be notified in late March and early April about their financial aid awards. Late applications will be considered separately. Awards are made depending on the availability of funds and the terms and conditions of controlling legislation, regulations and policies.

For more information about the types of financial aid and eligibility criteria, see the financial aid brochure available from the Office of Financial Aid and Student Employment or from the Office of Admissions.

## Assistantships

Qualified juniors and seniors may apply to individual departments to become undergraduate assistants. Upperclass students are also employed as residence hall advisers. Information about residence hall advisers is available in the residence halls or in the Residence Life Office, 425 Student Services Building.

## Employment

A variety of student employment opportunities is available both on and off campus. The Office of Student Employment (460 Student Services Building) posts job openings and refers applicants for interviews with prospective employers. Campus employment is available to undergraduate students who are enrolled for at least six credit hours per semester. Students typically work as clerks, custodians, receptionists, typists and food service employees. A listing of summer job opportunities is also available from the Office of Student Employment.

Students in need of financial assistance may be eligible for the College WorkStudy Program, financed partially by a federal grant. A student's eligibility for this program is determined by the Office of Financial Aid and Student Employment.

## Grants

## Pell Grant

The Pell Grant program is the largest of the federal grant programs. It is designed to assist needy students to continue their education beyond high school and to provide a base of financial aid. The amount of the grant is determined by the student's need and the cost of attendance. Graduate students are not eligible. Students should indicate that they wish to be considered for the Pell Grant when filing the FAF. A separate Pell Grant application is also available.

## Ohio Instructional Grant

Students must apply for this grant by filing an OIG application which is available from high school guidance counselors, the Office of Financial Aid and Student Employment or the Ohio Board of Regents ( 30 East Broad Street, Columbus, Ohio). Students must be Ohio residents and enrolled for at least 12 credit hours.

## Supplemental Educational Opportunity Grant

Students who file the FAF are considered for this federal grant, which is awarded to students with exceptional financial need.

## Talent Grants-in-Aid

Talented students in art, athletics, music or speech may be eligible for these Uni-versity-administered grants. Application should be made to the specific department.

## Loans <br> Stafford Loans (formerly Guaranteed Student Loans)

These are long-term loans with eight percent interest rates. Students may borrow up to $\$ 17,250$ as an undergraduate. Interest on the loan is paid by the federal government while the student is in school.
Repayment begins six months after the student leaves the University. Application is made directly to a bank or other lending institution that participates in the Stafford Loan program. Students must also file an FAF in order for eligibility to be determined. A student pursuing a second undergraduate degree or teacher certification is eligible for the Stafford Loan only. Such a student must submit a Satisfactory Progress Appeal Form to the FASE Office before applying for a Stafford Loan.

## Perkins Loans (formerly National Direct Student Loans)

These are long-term loans with five percent simple interest rates. Students may borrow up to $\$ 9,000$ as an undergraduate. Interest on the loan is paid by the federal government while the student is in school. Repayment begins six months (or nine months for first-time borrowers in 1987-88) after the student leaves the University. Students who file the required financial aid forms are considered for this loan program.

## PLUS/SLS Program

These are long-term loans available at a variable interest rate not to exceed twelve percent (the interest rate is recomputed each year). The annual maximum for parents or an independent student is $\$ 4,000$. Repayment begins sixty days after the loan is disbursed. Application is made directly to a bank or other lending institution that participates in the PLUS/SLS Program. Independent students are required to complete the FAF.

## Short-term loans

The University has funds available for short-term loans to students for educational expenses and personal emergencies. Short-term loans are avallable up to a maximum of $\$ 150$ for a period of one month without interest. A student may receive a larger loan, to be repaid within six weeks at eight percent or higher interest. Application is made at the Office of Financial Aid and Student Employment.

## Scholarships

A limited number of academic scholarships are available to undergraduate students, regardless of need, who have outstanding scholastic records. Other scholarships, including National Merit awards, are awarded on the basis of academic achievement and need. Information on scholarships may be obtained in each of the college offices and the Office of Financial Aid and Student Employment.

## Standards of Satisfactory Progress for Undergraduate Financial Aid Recipients

To encourage financial aid recipients to complete academic degree/certificate objectives within a reasonable time and in accordance with federal and state requirements, Bowling Green State University requires undergraduate financial aid recipients to maintain satisfactory academic progress as defined by this policy. Specific programs governed by this policy are listed in Section B.

Alt students receiving or being considered for financlal aid from one or a combination of sources listed in Section B will have their satisfactory academic progess monitored annually at the conclusion of each academic year in which they enroll. The annual assessment of a student's satisfactory progress will be based on the student's entire academic record, to include all transfer credit hours being applied toward the student's degree/certificate. whether or not the student received financial aid for previous periods of enrollment.

Students will be considered to be maintaining satisfactory academic progress if they maintain the required cumulative grade point average (Section C), satisfaciorily complete the necessary number of credit hours (Section D) and, if enrolled as a full-time student, will graduate within ten semesters (Section E). Adjustments to the ten-semester requirement will be made for students who attend on a less than full-time basis. Permission to enroll at the University does not constitute maintaining satisfactory academic progress for financial aid. In most instances when a student does not maintain satisfactory academic progress, the student will be allowed one academic year, referred to as a period of Conditional Satisfactory Progress, to eliminate all deficiencies. During this time, the student shall be encouraged to seek appropriate counseling, tutoring, academic advising and other means of assistance.

If after a period of Conditional Satisfactory Progress a student does not attain satisfactory academic progress as defined by this policy, that student's eligibility for programs governed by this policy shall be terminated. Students whose eligibility for financial aid is terminated based on this policy may re-establish their eligibility for financial aid (Section I). A student also has the right to appeal a decision to ter minate financial aid eligibility (Section J).

## Section A: Definitions

Academic year: A period of twelve months beginning annually with the summer semester and continuing through the fall and spring semesters.
FASE Satisfactory Progress Review: At the con clusion of each academic year (May), FASE reviews each student's Satisfactory Academic Progress status.
Full-time undergraduate enrollment: Minimum full-time undergraduate enrollment is 12 hours per semester.
Three-quarter time and half-time undergraduate enrollment: Three-quarter time undergraduate enrollment is 9 to 11 hours per semester; halftime undergraduate enrollment is 6 to 8 hours per semester.
Section B: Programs Governed by the Policy
--Pell Grant
-Suppiemental Educational Opportunity Grant (SEOG)

- Perkins Loan (Formerly National Direct Student Loan)
-Stafford Loan (Formerly Guaranteed Student Loan)
-Parent Loan for Undergraduate Students/ Supplemental Loans for Students
-College Work-Study
- Nursing Student Loans
- The Ohio Instructional Grant (OIG) and other student financial aid programs sponsored by the state of Ohio
-All scholarships and grants sponsored by the University including the Minority Affairs Grant, Talent Grants and other institutional programs except those academic scholarships and grants which have higher requirements (Note: this includes athletic scholarships).
Section C: Minimum Cumulative Grade
Point Average Requirement Credit Hours Completed

CGPA Required
$00-29$
$30-59$
1.5

30-59
18
.
2.0

If the student does not attain the required cumulative grade point average, he/she will be placed on Conditional Satisfactory Progress status (Section F) and will have only one academic year to correct the deficiency. In addition, students whose cumulative grade point averages fall below a 2.0 will not be eligible for the Perkins Loan or Nursing Student Loan.
Section D: Undergraduate Minimum Credit

## Hours Required

1. During each academic year, financial aid recipients will be required to complete satisfactorily a minimum number of credit hours. Credit hours are considered to have been completed satsifactorily if the final grade received was an $A, B, C, D$ or $S$. Credit hours receiving a final grade of $F, U, I, W, W P, W F$ or NGR are not considered satisfactory.
2. Students who enroll in classes on a fu time basis will be expected to complete sat factorily 24 credit hours per academic year.

Students who enroll in classes on a less than full-time basis will have their minimum annual credit hour requirement adjusted accordingly. Also, if a student does not attend fall or spring semester during an academic year, similar adjustments will be made to the minimum credit hours required.

## Examples

The required rini mum credil hours to be completed
When enrollment is;
Fall Spring
$\begin{array}{lll}12 \text { hours (FT) } & 12 \text { hours (FT) } & 24 \text { hours } \\ 12 \text { hours (FT) } & 00 \text { hours } & 12 \text { hours }\end{array}$
$\begin{array}{lll}12 \text { hours (FT) } & 00 \text { hours } & 12 \text { hours } \\ 12 \text { hours (FT) } & 09 \text { hours (3/4 fime) } & 21 \text { hours }\end{array}$
06 hours ( $1 / 2$ time) 08 hours ( $1 / 2$ time) 12 hours
03 hours ( $<1 / 2$ time) 02 hours ( $<1 / 2$ time) 05 hours
3. Summer session will not be counted as a semester of enrollment for purposes of determining minumum credit hours required. Also, these periods do not count toward the maximum number of semesters (10) permitted by this policy. Summer sessions are considered by the University as make-up periods. It should be noted, however, that all hours and grades earned during a summer session will be included in determining the student's required grade point average.
4. If a student has not satisfactorily completed the minimum credi hours, an academic satisfactory progress status will be assigned as follows:
1.6 hours deficient. -Warning Stalus: No action taken but student is encouraged to make up deficien. cies in order to graduate within the then allowed.
7.12 hours deficient-Conditional Status: See Section F 13 hours and -Unsatisfactory Progress Status: Terminabeyond tion of financial aid eligibility

## Examplas

Warning Status: A first-year full-time student successfully completes 14 hours in the fall and 9 of 12 hours in the spring. At the conclusion of the academic year, the student has completed 23 hours. However, the student should have completed 24 credit hours, and is one hour deficient. Based on the requirements above, the student is still maintaining satisfactory academic progress but is encouraged to make up the (1) credit hour deficiency.
Conditional Status: A student has just completed the second year of consecutive full-time studies. The student has earned 39 credit hours. The student was required to have completed 48 credit hours ( 2 years $\times 24$ hours per year $=48$ ), and is 9 hours deficient. The student has one academic year to reduce his/her deficiency to less than 7 hours. As an example, the student could make up the 3 hours ( 9 hours -3 hours $=6$ hours, which is warning status) by completing 15 hours ( 12 full-time + 3 make-up hours) the following fall semester, Unsatisfactory Progress Status: A student has just completed the third year of consecutive full-time studies. The student has earned 59 credit hours. The student was required to have completed 72 credit hours ( 3 years $\times 24$ hours per year =72), and is 13 hours deficient. The student is no longer eligible for financial aid.
Section E: Maximum Academic Years of Financial Aid Eliglbility
To remain eligible for financial aid, the finans aid recipient must make sufficient progress : graduate within 10 full-time semesters (excluding summer sessions), or 5 academic years.

For part-time enrollment, additional semesters will be allowed in proportion to each semester of part-time enrollment.

Yansfer hours accepted by BGSU will be sidered when calculating the aid recipient's remaining semesters of eligibility, minimum hours to be completed and minimum grade point average expected

Undergraduate students who have already earned a bachelor's degree and are seeking another undergraduate degree or teacher's certification are eligible for the Stafford Loan only. The student pursuing a second degree or teacher's certification must submit an appeal form (Section J) to the Office of Financial Aid and Student Employment prior to the submission of the Stafford Loan application. Stuclents will receive a written response.

## Section F: Conditional Satisfactory

## Progress

A student will be placed on Conditional Satisfactory Progress if it is determined during the FASE Satisfactory Progress Review that he/she is deficient by 7 to 12 credit hours, or he/she is below the minimum grade point average according to the requirements stated in Section C , or both. A student placed on Conditional Satisfactory Progress will continue to be eligible for financial aid for one academic year.

If, at the conclusion of the Conditional Satisfactory Progress period, the student still has not achieved the minimum number of credit hours required to maintain progress (see Section D:4) and the minimum cumulative grade point average (Section C), the student's eligibility for programs governed by this policy will be terminated.

## Section G: Repeated Courses

purposes of this policy and because the versity policy is designed to limit the freuency and conditions under which repeated courses are permitted for credit, financial aid will be awarded when a student is permitted by University policy to repeat a course for credit. Under such circumstances, the student's grade point average will be calculated in accordance with the University's policy on repeated courses as described in the Academic Policies section of the Undergraduate Catalog.

## Section H: Academic Forgiveness

Financial aid recipients granted academic forgiveness by the University will be required to notify the Office of Financial Aid and Student Employment (FASE) in writing. FASE will determine the student's remaining years of eligibility by the following method

1. Total all credit hours completed with a letter grade of $A, B, C$ or $S$ during enrollment periods covered by Academic Forgiveness.
2. Total all credit hours completed with a letter grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$ or S during enrollment periods not covered by Academic Forgiveness.
3. Combine the total credit hours calculated in steps 1 and 2 above and divide by 24. The quotient represents the number of full-time equivalent academic years completed by the student to date. The full-time equivalent academic years completed will determine the required minimum cumulative grade point average and credit hours.
4. Subtract the full-time equivalent academic years from five years (which is the maximum years allowed under this policy) and this will determine the remaining years of financial aid eligiblity available.

## Section I: Reinstatement of Financial Aid

 EligibilityA student who does not meet the terms of Conditional Satisfactory Progress is not eligible for financial aid until he/she fulfills one of the following conditions:

1. Eliminate all academic deficiencies at own expense;
2. Demonstrate special circumstances worthy of appeal consideration (Section J);
3. Be granted Academic Forgiveness (Section H).
If the student meets one of the eligibilty requirements stated above, he/she must submit a Satisfactory Progress Appeal Form and other financial aid materials to FASE at least 15 working days prior to the first working day of the semester in which the student plans to enroll at BGSU. Students will receive a written response.

## Section J: Right to Appeal

A student who has been denied financial aid may appeal in writing to FASE. To appeal a Satisfactory Progress decision, the student must obtain a Satisfactory Progress Appeal Form from FASE.
The appeal form and all outside documentation must be submitted to FASE at least 15 working days prior to the first day of the semester in which the student plans to enroll. Appeals submitted after this time will be considered for the following semester of enrollment. FASE will respond by letter to each appeal. If the appeal is denied, final appeal may be made to the director of FASE within 10 working days

# Registration and Records 

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, certification for benefits under the Veterans Education and Social Security Acts, issuance of student transcripts, readmission of former students, admission of unclassified and transient students, certification for eligibility in athletics, membership in honor societies, clarification of residency, processing of credit-by-exams and various other academic student-related functions.

## Helentification card

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

Unclassified and transient students are not issued photo identification cards except on request. Identification cards may be replaced if lost or defective for a fee; photos are taken in Commons South.
The photo ID card, with the validation sticker, is needed for cashing checks, charging items, checking out library books, using computer labs, purchasing athletic tickets, using the recreation center, attending University functions, etc.

## Validation sticker

Validation stickers are issued each term to all registered and paid students. This sticker verifies enrollment in the particular term and includes the student's name, idenutification number, class, college, hours registered, term and year. Stickers are only issued to students determined by the bursar to have paid accounts. Stickers are distributed through the mailboxes in the residence halls and the on-campus mailboxes for all undergraduate students. Validations may be replaced if lost for a $\$ 2$ charge.

If the information on the validation sticker is not correct, the student should contact the Bursar's Office on the first floor of the Administration Building.

## Transcripts of credit

An official transcript of a student's record is used only for transferring credits to other colleges and universities and for transmitting information to certifying agencies and employers. An official transcript is issued only at the written request of the student. A charge of $\$ 3$ is made for each transcript and should be included with the request. A transcript 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). Two pieces of identification are required, one of which must be a photo ID.
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. During the eight-week summer session, a full-time student is one enrolled for six or more hours (four or more hours for a fiveweek summer term, eight or more hours for a ten-week summer term).

## Registration schedule

Since late entrance is a handicap to academic achievement, every student is expected to register for classes during the time announced for registration. Fully admitted continuing students recelve registration materials in the mail. Priority registration appointments are scheduled for the 11th and 12th weeks of the semester and open registration follows priority registration. Students are notified of their schedules prior to the succeeding term. (This does not apply to Firelands students.)

Anyone who fails to take advantage of the advance registration system is allowed to register up until the first day of classes without being charged a late fee.... Starting the first day of classes, a fee $v_{i}$ be assessed for each change made.

## Drop/add

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 only with permission of the college dean.

A student may change the grading option (graded or $S / U$ ) 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 session, students may register for courses, add, change grade options or drop during the first three calendar days of a given term.

An undergraduate who drops a course ring 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 25.

## Audit

A 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 term. 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 term.


# Organizations and Activities 

## Student organizations

The most successful students are those who take advantage of the extracurricular activities offered at BGSU through its more than 150 student 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 transferrable skills such as time management, leadership, motivation, group communication and goal-setting which can carry through into future careers.

The Office of Student Activities and Orientation is the center for student organizations, the undergraduate student body
pvernment, the coordination of campus
tivities programming and the Freshman re-Registration and Orientation programs, all of which are designed to aid in the total development of students at BGSU.

## Student organizational regulations

Students are free 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 faculty member or an administrative staff member of Bowling Green State University.

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

For a current list of student organizations, contact the Office of Student Activities and Orientation, 405 Student Services Building, 372-2843.

## Student Government

The Undergraduate Student Government provides the student with a wide range of 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. All councils and boards of the Undergraduate Student Government have available the advice of faculty members or administrative officers of 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 University.

## University 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 with such major events as the annual Fall Fest and Mardi Gras celebration, in addition to programs planned and implemented by the following 13 committees: administrative, campus films, exhibits, games, mini courses, news and views/lectures, outdoor recreation, performing arts, publications, public relations, publicity, spotlight entertainment and travel.
The University Activities Organization provides students with the opportunity to organize functions affecting the entire student body while developing leadership skills.

## Athletics

## Intercollegiate athletics

Participation and excellence are the primary goals of Bowling Green intercollegiate athletics. As one of the largest tctalsports programs in the Mid-American Conference, nearly 500 men and women compete for championship recognition each year on 19 varsity teams.

Men's and women's teams exist in basketball, cross country, golf, swimming, tennis and track. Men compete in football, baseball, ice hockey and soccer, while women compete in gymnastics, volleyball and softball.
Club sports include cricket, fencing, flying, gymnastics, hockey, ice hockey, lacrosse, orienteering, precision skating, racquetball, riflery, rugby, sailing, skiing, soccer, synchronized swimming, table tennis, volleyball, water polo, water skiing and weight training.

The University is a member of the National Collegiate Athletic Association (NCAA) and the nine-university Mid-American Conference (MAC). 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 and the MAC. 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.

## Intramural and recreational sports

 The intramural and recreational sports program offers a wide variety of activities for men and women including basketball, bowling, ice hockey, innertube water polo, flag football, floor hockey, golf, handball, racquetball, soccer, softball, swimming, touch football and volleyball. Many of these are offered as coed sports. Information regarding these and other activities may be obtained at the intramural office, located in 108 Student Recreation Center, 372-2464, from 8 a.m. to 5 p.m. daily.
## Athletic facilities

Athletic facilities at the University include: an 18-hole golf course; an ice arena; 25 outdoor tennis courts; the Eppler Complex; 5,000-seat Anderson Arena; 30,500seat Doyt Perry Stadium; Steller Field, which seats 2,000 for baseball; Whittaker Track; numerous activity and practice fields; and the Student Recreation Center (see below).

## Stuclent Recreation

## Center

The Student Recreation Center, with its two swimming pools, 14 handball/racquetball courts, 3 squash courts, running track, saunas, whirlpool spa, universal/ nautilus areas, computerized exercycles and courts for basketball, volleyball, tennis, squash and badminton, FITWELL Lab, lighted "Pace Trail," among other facilities, is a focal point for campus recreational and fitness activities.

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 pro-rated usage fee. Special plans for spouses and children of students are available. For more information, contact the Center or consult the Student Recreation Center Resource Guide.

## Firelands College

## Organizations

See Firelands College section for a description of organizations and activities there.

## ©upport Services

## Computer Services

Bowling Green State University provides students, faculty and staff with access to diverse computing capabilities through several large-scale mini and microcomputers. DEC VAX $780,785,8530$ are available for interactive use with FORTRAN, PASCAL and other popular computer languages from terminals located in the Mathematical Sciences Building and other areas on campus, including residence halls. An IBM 4381 is available for batch processing via computing service centers in the University Union, Technology and Business Administration labs. An IBM 4341 is available for interactive statistics. There are 15 laboratories equipped with IEM and Apple Macintosh microcomputers available for students use. There is least one microcomputer laboratory fated in every major residence hall. Students using these facilities for course work 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.

## Counseling and Career Development Center

The Counseling and Career Development Center, 320 Student Services Building (372-2081), provides free educational, career and personal counseling services to students. The staff includes licensed psychologists, career counselors and graduate student assistants.

SIGI (System of Interactive Guidance and Information) and DISCOVER, two career exploration computer packages, and various career-related inventories are available to students as aids in career planning. Career workshops and multiple sections of the course entitled Career-Life Planning (CAO 131) are offered each academic term by members of the center's staff.
Assessment of alcohol problems and ferral for alcohol and other drug related concerne are provided in the center. The staff is also available for consultation with faculty and staff regarding student concerns.

Tests in foreign languages are administered to students for placement in appropriate undergraduate language courses. A number of testing programs including the American College Test (ACT), College Level Examination Program (CLEP), Graduate Record Examination (GRE), Graduate Management Admissions Test (GMAT), National Teacher's Examination (NTE), Pre-Professional Skills Test (PPST), Medical College Admissions Test (MCAT), Law School Admissions Test (LSAT), Miller Analogies Test (MAT) and the Cooperative English Examination (CEE) are administered by the center.

Students are seen by appointment. Center hours are 8 a.m. to 5 p.m., Monday through Friday.

## Center for Career Resources

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 collection includes books, periodicals, VCR tapes, computer programs, employer profile books, company annual reports, job descriptions and many specialized directories. The periodical collection provides current information and job listings for many career fields.

Other special resources provided by the library are the SIG| PLUS computer program which is designed to aid students in assessing their career goals and interests.

Located in 300 Student Services Building, the center's hours are 8 a.m. to 5 p.m. during the academic year, with varying hours during semester breaks, holidays and summer sessions. The phone number is 372-2143.

## Off-Campus Student Center

The Off-Campus Student Center, located in 110 (ground level) Moseley Hall, provides a home base for students who do not live in University-owned housing. Facilities include a study lounge, television lounge, and room to rest and socialize. A tech lab includes Macintosh and IBM personal computers, electric typewriters and computer software. Other services include storage lockers, a ride board for carpools and emergency weather assistance. The Campus Escort Service is housed in the center and can be reached by calling 372-8360. Also housed in the center are the Commuter Off-Campus Organization (COCO) and the Nontraditional Student Association (NTSA).

## On-campus Mailboxes

A mailroom for on-campus mailboxes is located in 208 Moseley Hall. Mailboxes 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 session.) A listing posted outside 208 Moseley Hall indicates the mailbox numbers for students 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.

## Handicapped Services

The Office of Handicapped Services, 705 Administration Building, provides disabled persons with assistance 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 with physical and/or learning disabilities, are encouraged to contact the office for consultation and assistance.

## Student Mealth Service

The Student Health Service, located in the University Health Center (372-2271), provides outpatient care to all currently registered students. The staff consists of over 35 health professionals; physicians, nurse practitioners, registered nurses, pharmacists, laboratory and x-ray technologists and physical therapists. Services include: health care for illnesses and accidents; sports, employment and school physicals; allergy injections; immunizations; and Women's Clinic.
Regular clinic hours are 8 a.m. to $4: 30$ p.m. Monday through Friday when classes are in session.
Students are charged for laboratory, $x$ ray, pharmacy and physical therapy services of the Student Health Service. 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 report to the emergency room of the Wood County Hospital. Students who use this service will be expected to pay for the cost of treatment
Nonemergency transportation service to and from the Student Health Service or Wood County Hospital may be obtained, at no cost, by calling Campus Security, 372-2346. 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 policies. Students are encouraged to carry some form of health care insuranice.

## Unigraphics

This department offers a full range of design, typesetting and graphic arts services, including desktop publishing service bureau capabilities. ASCll and Postscript files are accepted for output on typesetter or high resolution laser Imagesetter. Image and text scanning and enhancement are available, as well as professionally designed and typeset resumes at nominal cost, to all members of the University community. Located in 211 West Hall, the phone number is 372-7418.

## Instructional Media

Center
The Instructional Media Center provides a variely of services to students, faculty and administrators on a campus-wide basis. The main office of the IMC is located in 101 Education Building
(372-2881).

The IMC's Materials Production Service can produce high quality presentation materials and specializes in graphics and photographic products. IMC also operates the Materials Production Laboratory (206 Education Building, 372-2883) for student and faculty use. The lab is equipped with two photocopiers (with enlarging and reducing capability), laminating machines in four sizes, a photographic copy stand, machines for making thermal transparencies and ditto masters, and other equipment. The lab is open weekdays, evenings and weekends.

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

The Audiovisual Distribution Service distributes audiovisual equipment and materials (especially films and videotapes) to classrooms and meeting rooms for faculty and students. Equipment includes film, slide and transparency projectors; lecterns and PA systems; videocassette playback equipment, etc. A film-video collection is maintained by AVDS and rental films are available from outside sources. In addition to the main service center at 102 Education Building, AVDS services are provided by two Extension Media Centers - in 112 Math Science Building and in 126 Technology Building.
Services to support credit-bearing classes are provided at no charge. Other services are provided for a fee (e.g., sound systems for conferences, materiais prepared under research contracts, consumption of materials in the Materials Production Laboratory, etc.).

## Parking and Traffic

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 $\$ 25$ per year (fall semester through summer session) is required of each student who registers an automobile with the Parking and Traffic Office, Commons Building (372-2776). A temporary registration can be obtained 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 instructions.

## Placement Service

University Placement Services, 360 Student Services Building (372-2356), provides planning and placement assistance to graduating seniors from all academic majors. The professionally trained staff offers a wide range of services which help students clarify and implement their career goals. In brief, these include: individual counseling appointments; workshops, professional development seminars and classroom presentations on all phases of the job search process; the Center for Career Resources; on-campus interviews conducted by more than 850 recruiters; career days and job fairs; job referrals; credential services; the Falcon Network; and alumni placement services.
University Placement Services is nationally recognized as a leader in educational programming. The College Placement Council, Inc., recently presented the office with its prestigious Award of Excellence for Educational Programming in Career Planning and Placement.

Students are highly encouraged to attend placement programs, utilize office services and register with University Placement Services at the beginning of their final year of study.

## Psychological Services Center

The Psychological Services Center, located in the psychology department; 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. The center may be contacted by calling 372-2540.

## Speech and Hearing Clinic

The Speech and Hearing Clinic, 338 South Hall (372-2515), provides screening, diagnostic and treatment services for students with communication problems such as stuttering, voice, foreign dialect, cerebral palsy, articulation or hearing loss. The clinic is open Monday through Friday, 8 a.m. to 5 p.m., and appointments are scheduled by individual arrangement. Fee schedule is arranged through the clinic. Anyone interested in making an appointment should contact the clinic directly. Services are also extended to children and adults throughout northwest Ohio.


# College of Arts and Sciences 

Andrew Kerek, dean, 205 Administration Building, 372-2015
Ralph N. Townsend, associate dean, 205 Administration Building, 372-2015
Michael T. Marsden, associate dean, 205 Administration Building, 372-2015
Department of Biological Sciences, Reginald D. Noble, Ph.D., chair, 217 Life Sciences, 372-2332
Department of Chemistry, Douglas C. Neckers, Ph.D., chair, 110 Hayes Hall, 372-2031
Department of Computer Science, Ann-Marie Lancaster, Ph.D., chair, 246 Mathematical Sciences Building, 372-2337
Department of English, Richard Gebhardt, Ph.D., chair, 202 University Hall, 372 2576
Department of Ethnic Studies, Robert L. Perry, Ph.D., chair, 117 Shatzel Hall, 72-2796 partment of Geography, Alvar W. Carlson, Ph.D., chair, 305 Hanna Hall, 372-2925
Department of Geology, Charles F. Kahle, Ph.D., chair, 170 Overman Hall, 372-2886
Department of German, Russian and East Asian Languages, Joseph L. Gray, Ph.D., chair, 139 Shatzel Hall, 372-2268
Department of History, Gary R. Hess, Ph.D., chair, 128 Williams Hall, 372-2030
Department of Interpersonal and Public Communication, Raymond K. Tucker, Ph.D., chair, 303 South Hall, 372-7168
Department of Journalism, F. Dennis Hale, Ph.D., acting chair, 319 West Hall, 372-2076
Department of Mathematics and Statistics, Hassoon S. Al-Amiri, Ph.D., chair, 450 Math Sciences Building, 372-2636
Department of Philosophy, Thomas W. Attig, Ph.D., chair, 219 Shatzel Hall, 372-2117
Department of Physics and Astronomy, Robert Boughton, Ph.D., chair, 270 Overman Hall, 372-2421
Department of Political Science, Michael Maggiotto, Ph.D., chair, 124 Williams Hall, 372-2921
Department of Popular Culture, Ray B. Browne, Ph.D., chair, Popular Culture Building, 372-2981
partment of Psychology, Charles J. Cranny, Ph.D., Chair, 207 Psychology Building, 372-2301

Department of Radio-Television-Film, Robert Clark, Ph.D., acting chair, 322 West Hall, 372-2138
Department of Romance Languages, Diane G. Pretzer, Ph.D., chair, 122 Shatzel Hall, 372-2667
Department of Sociology, Meredith D. Pugh, Ph.D., chair, 224 Williams Hall, 372-2294
Department of Theatre, Allen Kepke, Ph.D., chair, 322 South Hall, 372-2222
School of Art, Thomas Hilty, M.F.A., director, Fine Arts Building, 372-2786
School of Mass Communication, James H. Bissland, Ph.D., interim 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 College

Largest of the collegiate organizations of the University, the College of Arts and Sciences includes two schools (Art and Mass Communication), and twenty-one 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 humanities, the languages, the sciences and mathematics, and the social sciences.

A strong faculty 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 Journalism 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.

## 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 Arts and Sciences degree programs who meet the stringent criteria and are elected to membership. The BGSU chapter of Phi Beta Kappa was installed in 1983.

The College of Arts and Sciences offers opportunities 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.

Arts and sciences students who are undecided about a major are assigned to one of the college office advisers and thereby have access to a program designed to be of assistance to students 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 disciplinebased honor societies and interest groups. 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.

## Programs Offered

Majors and minors are available in all areas listed below unless otherwise noted. The following degree programs are available:
Bachelor of Arts
Individualized planned programs
American studies-planned program
Applied human ecology
Apparel design and history
. Fashion merchandising
Food science and nutrition
Home economics general
Interior design
Art
Art history
Asian studies
Business, general studies in
Classical studies-major only
Computer science
Consumer and family resource manage-ment-planned program
Economics
English
Environmental policy and analysisplanned program
Ethnic studies
Film studies
Folklore and folklife-minor only
French
Geography
Geology
German
History
Home Economics (see Applied Human Ecology)
International studies-planned program
Interpersonal and public communication
Italian-minor only
Journalism-minor only
Latin
Latin American studies-planned program
Library and educational media-minor only
Linguistics-minor only

Mass media-minor only
Mathematics
Music
Philosophy
Political science
Popular culture
Psychology
Radio-television-film
Russian
Scientific and technical communication
Sociology
Soviet studies-planned program
Spanish
Statistics-major only
Theatre
Women's studies
Bachelor of Science
Individualized planned programs
Astronomy-minor only
Biological sciences Microbiology
Chemistry Biochemistry
Computer science
Environmental science-planned program
Geology
Geochemistry
Geophysics
Paleobiology
Mathematics
Physics
Psychology
Science-minor only
Scientific and technical communication
Statistics-major only
Bachelor of Liberal Studies
Bachelor of Fine Arts
Creative writing
Bachelor of Arts in Communication
Interpersonal and public communication
Radio-television-film (see School of Mass Communication)
Theatre

## School of Art

Bachelor of Fine Arts
Ceramics
Computer art
Crafts
Design
Environmental
Graphic
Drawing
Fiber-fabric
Glass
Jewelry and metalsmithing
Painting
Photography
Printmaking
Sculpture
Teacher preparation
School of Mass Communication
Bachelor of Science in Journalism Journalism

Bachelor of Arts in Communication Radio-television-film
The College also offers the following special programs:
Preprofessional programs-four-year cur-
ricula providing preparation for:
Business
College teaching
Graduate study
Home economics careers
Library work
Mathematics and the sciences
Public administration
Religious work
Arts professional curricula
Preparation for dentistry
Preparation for law
Preparation for medicine
Preprofessional preparation for:
Engineering
Mortuary science
Occupational therapy
Optometry
Osteopathy
Pharmacy
Veterinary medicine
The college also offers an arts-educa-
tion curriculum and other programs lead-
ing to dual degrees, including certification to teach in the public schools: Combined baccalaureate-master's degree programs are offered in chemistry. For more information, see page 18.

## General Requirements

 for a Degreein addition to specific requirements listed on the following pages, a candidate for any degree in the College of Arts and Sciences must meet the general education requirements for the baccalaureate degree listed on page 19, including the following:

1. Meet the general education 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).
3. Meet the University's general education core curriculum requirement (pp. 9 10). Students wishing to apply general education core courses also to college 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 catalogue under specific degree being sought.
4. Students anticipating graduation Ist file for a senior audit two semesters hours) prior to graduating to ensure that all requirements will be met for the degree. Checksheets are available in the college office and must be submitted with the department/school adviser's signature, if required (see major description). Failure to file for senior 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 9.

## Academic Advising

Although the adviser and the dean's office advise 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 Catalog is essential.
BACHELOR OF ARTS DEGREE
Each student must complete the general education requirements listed below as nearly as possible in the freshman and sophomore years and must satisfy the
quirements for a major and a minor sa of specialization. Every student, however, must take English and physical education 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 freshman year.

## General Education 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). IPCO 102 is recommended.

## Group II: Foreign Language and Cultural Experience

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

1. graduation from a high school where all instruction was conducted in a language other than English; or
2. passing a proficiency examination in e language on the 202 course level; or 3. having completed four years of one language in high school; or
3. having completed one of the departmental options listed below (14 hours minimum in the same language area, or fewer by advanced placement).
Note: Students not required to take foreign language courses numbered 101, 102, 201, 202, 211, 212 because of exceptions listed in numbers 1,2 or 3 above will need to take at least one "multicultural studies" course from the general education core (p.10) to satisfy that requirement.
German, Russian and East Asian Languages (Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from: GERM 100, 117, 118, 201, 202, 217, 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 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312.
Romance languages (French, Italian, Latin, Spanish)
Option I:
FREN 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, 211 and 212;
LAT 101, 102, and two of: LAT 141, 142 or 201:
SPAN 101, 102, 211 and 212
A student may transfer at any point from option I to option II but not vice versa. If a student selects option II, all courses in that sequence must be completed subsequent to the first course in which the student is placed. 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 three courses elected from astronomy, biological sciences, chemistry, geology, physics or physical geography (including GEOG 125, 126, 127, 213, 404) including at least two courses approved for laboratory credit from a list of approved courses 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 $115,124,128,129$ or $130 ; * *$
3. MATH 111 or $120^{* \star}$ and one of the following: PHIL 103, CS 100 or CS 101;
4. three years of high school mathematics 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.

## Group IV: Social Sciences:

Economics, Ethnic Studies,
Geography, History, Political Science, Psychology, Sociology
Completion of six courses selected from at least 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 ethnic studies courses is printed in the College of Arts and Sciences Handbook.

## Group V: Arts and Humanities

Completion of five courses:
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 studies; ethnic studies; music appreciation, music history, music literature, philosophy (except PHIL 103 used to apply to group III), popular culture, drama, history of public address 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 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 subject. 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 in the following sections. 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.
*Or a B.S. laboratory sequence in one of the sciences meets this requirement. A list of approved courses is printed in the College of Arts and Sciences

## Handbook.

**See Department of Mathematics and Statistics for placement test.

## Individualized Planned Program Option

If educational objectives cannot be met by one of the departmental majors or minors or by one of the planned programs, students may create an individualized planned program in consultation with a faculty adviser or advisers to substitute for the major or minor or both. A student who has 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 by presenting a statement of rationale for an individualized planned program 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 group requirements remain the same.

## American Studies

211 Moseley Hall, 372-8110

## Planned program

An interdisciplinary program dedicated to the holistic study of American culture, society and institutions, American studies offers individualized programs using offerings in the humanities and social sciences which focus on the American experience. American 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 studies and the undergraduate adviser help students design programs 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:
AMST 200 and 400 (6)
AMST 230, 240, 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 iines 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.

A minor is required.

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

## Other programs

Programs in American studies also are available through the College of Education and Allied Professions.

## Applied Human Ecology

11 Home Economics Building, 372-7838 Six programs are available through the Department of Applied Human Ecology. These include planned professional programs in fashion merchandising, interior design and consumer and family resource management; major programs in food science and nutrition, and apparel design and history; and a general home economics major with a concentration in foods and nutrition or textiles and clothing. 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.

## Apparel Design and History

11 Home Economics Building, 372-7838
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. Suggested minors include art, art history, folklore and folklife, popular culture and history.
Core courses ( 10 hours)
AHE 100, F\&N 207, AMID 303, HDFS 305 or HDFS 107
Major ( 36 hours)
AMID 101, 103, 202, 204, 313, 401, 403, 389 or 489
Choose 12 hours from AMID 404, 412, 414, 418, 470, AHE 480

## Minor

Select course work in art, art history, folklore and folklife, popular culture or history.

## Consumer and Family Resource Management

11 Home Econonmics Building, 372-7838 The consumer and family resource management planned program examines American social and economic conditions as they affect families. Careers exist in such areas as consumer affairs, customer service, and consumer education and information. Students acquire an understanding of consumer behavior and management in a market economy as well as resource management for the individual and the family. Studies include consumers in the market, the legal system as well as consumer rights and how problems in a changing environment are influenced by public policy. An opportunity for field work in a consumer agency is included in the program.

Core courses
AHE 100, F\&N 207, AMID 303, HDFS 30

## Program courses

HDFS 107, HOEC 205, 206, 311, 405,
AMID 406, HDFS 407, HDFS 429, AHE 480, 489; STAT 200 or 211; ACCT 325;
LEGS 200 or 310; POLS 201, 302;
ECON 202, 203, 311, 323, 312 or 332 or 425 or 462.

## Fashion Merchandising

11 Home Economics Building, 372-7838 This is a planned program 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.
First year ( 21 hours)
ART 101 and ARTH elective (6)
AMID 101 and 103 (6)
SOC 101 (3)
IPCO 102 (3)
CS 100 (3)
Second year (13 hours)
ECON 202 (3)
PSYC 201 (3)
AMID 202 and 204 (6)
AHE 389 (1-5) optional
Third year (21 hours)
AMID 303 and 313 (6)
MKT 300 (3)
BA 203 or STAT 200 (3)*
ACCT 325 (3)
Business elective (3)
MGMT 305 (3)
*STAT 200 may be substituted for BA 203 if students have not completed MATH 127 or a higher level MATH course.
Fourth year ( 21 hours)
AMID 401, 402 and 403 (9)
MKT 410 and 430 (6)
Select two: AMID 404, 412, 414 or AHE 480 (6)

## Food Science and Nutrition

11 Home Economics Building, 372-7838
A major program designed for the student who wishes to specialize in the food science field preparatory to graduate study or for a career in business or indus. try. A minor is required.
First year ( 13 hours)
CHEM 125 and 126 (10)
SOC 101 (3)
Second year (24 hours)
CHEM 306, 308 and 309 (8)
ECON 202 and 203 (6)
F\&N 210 and 212 (6)
PSYC 201 (4)
Third year (10 hours)
F\&N 307, 326 and 480 (10)
Fourth year (18 hours)
HOEC 405; F\&N 431, 432, 435, 436 and AHE 480 (18)

erior Design

Home Economics Building, 372-7838 The interior design program trains students in the planning and executing of residential and contract interiors. Course work 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 associate membership in the American Society of Interior Designers (ASID). No minor is required.
First year (24 hours)
ART 102 AND 103 (6)
AMID 103, 119 and 219 (9)
CS 100 (3)
IPCO 102 (3)
SOC 101 (3)
Second year (22 hours)
ART 112, 146 and 213 (9)
AMID 303 (3)
ECON 202 (3)
CONS 235 (3)
PSYC 201 (4)
Third year (24 hours)
ACCT 325 (3)
ART 313 (3)
AMID 319 (3)
F\&N 333 or DESN 450 or ART 418 (3)
DESN 301 (3)
MKT 300 (3)
Select 6 hours from:
HDFS 105
AMID 313
AHE 389
AMID 406
MKT 410
MKT 430
Fourth year (21 hours)
ART 417 and 440 ( 6 hours)
AMID 417, 418, 419 and AHE 470 (3) (12)
MGMT 305 (3)
Also see School of Art for specializa-
tions in graphic and environmental design and College of Technology for a speciali-
zation in product design.

## Home Economics General

206 Johnston Hall, 372-2026
A program designed for the student who desires a general home economics background with a concentration in foods and nutrition or textiles and clothing or plans to continue in graduate school. A minor is required.
Core courses ( 18 hours)
AMID 103, HDFS 105, HOEC 205, HOEC
250, HDFS 321, AMID 303 or 406
Foods and nutrition concentration (17
hours)
HOEC 206, F\&N 210, 212, 307, F\&N 431
Textiles and clothing concentration (15
hours)
AMID 101, 202, 401, 404, 412
Minor (21-22 hours)
AMID 103, HDFS 105; HOEC 205 or 405; F\&N 207, 210, HDFS 321; AMID 303 or F\&N

## Other programs

Programs in home economics also are available through the College of Education and Allied Professions and the College of Health and Human Services.

## Art

120 Fine Arts Building, 372-2786
Major (33 hours)
First year (12 hours)
ART 102, 103 and 112 (9)
ARTH 145 (3)
Second year ( 15 hours)
ART 205 and 261 (6)
ARTH 146 (3)
ARTD 211, 212 or 213 (3)
select one: ART 277, 371, 373 or 325 (3)
Third and fourth years ( 6 hours) select one:
ART 263, 265, 321 or 267 (3)
Art elective (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 electives (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 Allied Professions. A Bachelor of Science in art therapy is offered through the College of Health and Human Services.

## Art History

120 Fine Arts Building, 372-2786
Major (33 hours)
ART 102 (3)
ARTH 145, 146 (6)
Studio electives ( 3 )
ARTH 440, 442 or 456 (3)
ARTH 445 or 446 (3)
ARTH 451 or 454 (3)
ARTH 458 or 459 (3)
Art history electives (9)
Minor (21 hours)
ART 102 (3)
ARTH 145 and 446 (6)
Art history electives (12)

## Asian Studies

124 Williams Hall, 372-2921

## Planned program

Through an interdisciplinary approach, the Asian studies program is designed to provide students with:

1. A broad and comparative view of Asia.
2. An in-depth knowledge of a selected country or region of Asia.
3. An ability to comprehend an Asian language: Chinese, Japanese or Korean.

Majors ( 36 hours selected from a list of courses available in the new Asian studies brochure or approved by the Asian studies adviser, and the completion of a Chinese or Japanese language sequence through the 202 level or completion of one year of intensive Korean language and culture courses through the student exchange program in Korea.)

Students majoring in Asian studies should work closely with the Asian studies adviser in the selection of courses and a second major or minor, such as in the field of international business, history, political science, education, geography, sociology, music or communication.
Minor (20 hours selected in consultation with the Asian studies adviser from the list of approved courses. Asian language sequence is not required.)

## Student exchange and internship programs in Asia

Every year upon the recommendation of the Asian studies faculty, the University sends two students to Nanzan University in Japan and one student to Yonsei University in Korea, and one student to Shandong University in China. Each student receives one academic-year, tuitionfree scholarship from the Asian university and the credit earned in Asia counts toward graduation from the University. Also a student who has completed one year of language training may participate in the student internship program at Teraoka Seiko Company in Tokyo or at Poongsan Metal Corporation in Korea for a period of up to six months. The student intern will receive up to 12 credit hours as well as free housing, workday lunch and a monthly allowance from the company.

## Financial aid

Students majoring in Asian studies may qualify for two scholarships awarded each year through the Kiyo Kitahara Fund for Asian Studies and the Hiroko Nakamoto Fund for Japanese Studies.

## Business, General Studies in

313 Business Administration Building, 372-8211
Planned program; no minor required. (53 hours)
MATH 124 and 125 (or MATH 131)
CS 100 or 101
ECON 202 and 203
STAT 211 and 212
ACCT 221 and 222
LEGS 301
MKT 300
MGMT 300 and 360
FIN 300
OR 380
Arts and sciences electives* (6)
MATH 124 and 125 are prerequisites for STAT
211 and 212
*Courses to be selected with approval of the College of Arts and Sciences. No additional business courses may be taken for credit towards graduation.

## Classical Studies

243 Shatzel Hall, 372-2667
Major (only) (24 hours)
Fourteen hours of Latin beyond the 202 level
including Latin 351 and at least two courses
at the 400 level.
ART 445 or 446 (3)
HIST 441 or 442 (3)
PHIL 211 (3)
Greek language courses recommended.

## Computer Science

246 Mathematical Sciences Bullding, 372-2337
Major (30 hours)
CS 101, 201, 202, 205, 305, 306, 307 (21)
Three CS electives at the 400 level, excluding CS 490 (9)
PHIL 344 or SOC 320 (3)
MATH 131 and MATH 222 (8)
MATH 247 or 313 (3)
Students with a minor or joint major in
MATH need not complete the listed MATH courses.
Minor ( 18 hours)
CS 101, 201 and 205 (9)
CS electives (9)
The following courses may not be applied to the 18 -hour minor requirement: CS $100,130,180,260,280,390,490$.

## necommended electives

ACCT 221, ENG 388, PHIL 303; it is recomrnended that the natural sciences requirement be completed by taking PHYS courses.

## 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 Allied Professions.

## Economics

3002 Business Administration Building, 372.2646

Maior (33 hours)
First year (7 hours)
MATH 126 or MATH 131 (5)
(prerequisites to STAT) Students are strongly urged to take MATH 131.
Second year ( 12 hours)
STAT 211 and 212 or equivalent (not included in major hours) (6)
ECON 202 and 203 (6)
Third year (9 hours)
ECON 302, 303, 473 (9)
Fourth year (18 hours)
ECON electives (18)*
Minor (20 hours)
Second year (6 hours)
ECON 202 and 203 (6)
Third year ( 6 hours)
ECON 302 and 303 (6)
Fourth year (8 hours)

ECON electives (8)
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.
*ECON 304 cannot be counted toward the requirements for the economics major without permission from the adviser.

## Other programs

Programs in economics also are available through the College of Business Administration and the College of Education and Allied Professions.

## English

202 University Hall, 372-2576
Major (35 hours beyond ENG 112)
First year
ENG 111, 112 (University 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 300 or another thematically organized course (if topic is appropriate), ENG 423, 470, 480 (3).
Any 300 or 400 level ENG literature course (except 342, 343, 442) (3) ENG 498 (4) English majors are required to include Arts and Sciences 200, Great ldeas, as one of the courses for either Group IV, Social Sciences, or 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).
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 orm 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 College of Education and Allied Professions.

## Environmental Policy and Analysis

## 124 Hayes Hall, 372-8207

Planned program; no minor required
The program emphasizes the multidisciplinary nature of the field of environmental studies and the roles of these disciplines which address environmental issues from a point of view other than natural sclence. The curriculum includes basic instruction in the ecosystem approach and an individually 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, 301, 401 and 402 (10)
CS 100 OR 101 (3)
ECON 200 or 202 (3)
SOC 101 or PSYC 201 (3-4)
PHIL 332 (3)
POLS 336 (3)
ENG 207, 388, or 488 (3)
LEGS 431 (3)
BIOL 101 and 104; or 204 and 205 (two courses) (7-10)
IPCO 205, 306 or 403
Two from: GEOG 125, 126, CHEM 115, 116, GEOL 100, 104, PHYS 100 (6-8) Statistics: MATH 115 or 247, or PSYC 270 , or SOC 369, or STAT 211 and 212, or STAT 200 (3-6)
Four from: ECON 332, 435; EDFI 416; ENVH 306; ENVR 421; GEOG 321, 325, 331, 333, 337, 412, 426, 442, 460; GEOL 304, 322, 418; HIST 306, 319 , 338; POLS 331, 335, 345, 430; PSYC 440 (environmental issues only); RED 304; SOC 312, 315, 414, 418 (12) Fifteen hours must also be taken in an area of emphasis such as environmental planning, 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.
Individualized planned minors in environmental studies are available also.


#### Abstract

er programs College of Arts and Sciences offers a planned program in environmental science leading to a Bachelor of Science. Environmental programs are also available in the College of Health and Human Services and the College of Education and Allied Professions. Students should contact the Center for Environmental Programs, 124 Hayes Hall, 372-8207, for help in selecting the program that most closely meets their career objectives.


## Ethnic Studies

117 Shatzel Hall, 372-2796
Ethnic studies is an interdepartmental and interdisciplinary program designed to provide a comprehensive study of the ethnic groups in America with particular attention given to the life and experience of each group in relation to their nativity. The program also provides opportunities for students to participate in internships throughout the nation and abroad
Major (32 hours)
ETHN 101 and either ETHN 110 or ETHN 120 (6)
Courses in approved departments outside of ethnic studies (9) (a list is available from the ethnic studies adviser).
Ethnic studies electives (17)
A student, in consultation with the dviser, may choose to focus on a speized area of ethnic studies (e.g. black udies, Latino studies)
Minor (21 hours)
Must include two introductory courses with remainder of courses relating to ethnicity, in consultation with the adviser.

## Film Studies

Popular Culture Building, 372-2981
Planned program; no minor required Film studies is an interdisciplinary program designed to provide a general education in all major aspects of film study and areas of specialization that meet an individual student's interests and needs. Students majoring or minoring in film studies may select courses from the following departments or schools: art, English, German-Russian-East Asian languages, history, technology, journalism, philosophy, popular culture, romance languages and speech communication.

The program consists of a minimum of 43 credit hours for a film major and 21 credit hours for a minor.

Major (43 hours)
After completion of 24 hours of course work in the basic core, the student selects an additional 19 hours of course work in the creative/technical track or in the history/theory/criticism track. The creative/technical track provides tools and techniques for the talented student to use in cinematic expression. The history/ theory/criticism track explores film in a variety of ways to prepare skilled film teachers or critics. The program for each student is individually planned in a series of conferences between the student and the director/adviser.
Core courses
RTVF 261, 264, 464 and 466 (12)
POPC 250 or ENG 200 (lit. and film) (3)
VCT 282 (3)
RTVF 469, POPC 350, ENG 385 or PHIL 335 (3)
GERM 415, RUSN 415, ROML 200 or ITAL 261 (3)
Creative/technical track-19 hours in addition to those courses taken for the core
RTVF 263, 364, 469, 490
THEA 241, 243, 341, 342, 343, 349, 443
JOUR 306, 307, 407, 430
ART 325
VCT 203, 382, 386, 460, 482
History/theory/criticism track-19 hours in addition to those courses taken for the core.
ENG 200, 251, 385, 485
HIST 391
PHIL 335
POPC 350, 355
ROML 200
ITAL 261
GERM 415
RUSN 415
RTVF 469
Minor (21 hours)
RTVF 261 and 464 (6)
ENG 200 (3)
POPC 250 (3)
GERM 415, RUSN 415, ROML 200 or ITAL 261 (3)
VCT 282 (3)
RTVF 466, RTVF 469, POPC 350, ENG 385 or PHIL 335 (3)

## Other programs

Programs in radio-television-film are offered by the College of Arts and Sciences as Bachelor of Arts sequences and by the college's School of Mass Communication as Bachelor of Arts in Communication sequences

## Folklore and folklife (minor only) <br> Popular Culture Building, 372-2981 <br> Minor (20 hours) <br> POPC 220 (3) <br> Oral folklore such as POPC 320 or $424^{*}$ (3) <br> Material or customary folk culture such as POPC 320 or $424^{*}$ or AMID 401 <br> Regional or distinctive folk group such as POPC 325 or RUSN 432

Distinct genre of folklore/folklife 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

122 Shatzel Hall, 372-2667
Major (27 hours at 300 and 400 level)
FREN 351, 361, 362, 371 and 372 (15)
Three courses including two 400 -level courses, at least one being literature. (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)
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, pre-meteorology), geo-data communications (cartography, aerial photo interpretation, computer mapping, remote sensing), urban/economic development and analysis (urban and regional planning), and social geography (elderly, population, delivery and planning of social services).

## Minor (21 hours) <br> Other programs

Programs in geography also are offered by the College of Education and Allied Professions.

## Geology

170 Overman Hall, 372-2886
Major ( 35 hours including GEOL 493 or 494)

Minor (20 hours)
Other programs
The College of Arts and Sciences also offers Bachelor of Science programs in geology. The College of Education and Allied Professions offers programs in earth science.

## German

132 Shatzel Hall, 372-7139
Major (27 hours on 300 and 400 level)
GERM 317, 318 and 417 (9)
GERM 311 and 313 (6)
One course from 315, 316 and 480 (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 215, 216 and 480 (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 Allied Professions.

## History

128 Williams Hall, 372-2030
Major (33 hours)
Nine hours chosen from the following: HIST
151, 152, 180, 205, 206 Twenty-four hours of $300-400$ level course including HIST 480 and at teast three hours af the 400 level in each of
the three categories:
European History
HIST $357,360,363,367,370,377,415$, $444,448,454,458,459,464,469,470$, 47
U.S. History

HIST $301,302,303,306,307,319,320$, $323,325,326,337,338,419,421,422$, $425,426,427,428,429,430,433,436$, 437
Other
HIST 304, 305, 309, 310, 311, 315, 316, $340,381,382,386,401,411,413,414$, $441,442,446,447,462,483,486$
(HIST 391, $395,400,495$ may be used to fuffill the requirements of the major and minor with approval of the department adviser)
Whinor ( 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.

## International Studies

120 Williams Hall, 372.7268
Planned program (57 hours)
International studies is an interdisciplinary program for students preparing for positions in public administration/policy, nonprofit agencies, research organizations, international organizations, teaching and international business. Students are encouraged to participate in appropriate programs of study abroad sponsored by Bowling Green or another university.
Students must:
(1) complete HIST 152, POLS 271 or 272, ECON 202, GEOG 230, GEOG 325 or SOC 312, SOC 231 and 369. CS 101;
(2) complete two courses taught in the same foreign language at the 300 level in FREN, GERM, ITAL, SPAN, RUSN, JAPN. The language must be appropriate to the area concentration in (3). In certain languages, an approved substitute below the 300 level can be used;
(3) select in consultation with the international studies adviser a minimum of 15 hours of courses which concentrate on one of the following areas: Asia, Latin America, the Middle East, the Soviet Union and Western Europe;
(4) complete a concentration of 12 hours of courses at the junior-senior level appropriate to the major.
No minor is required.

## Interpersonal and Public <br> Communication

303 South Hall, 372-2823
Major ( 36 hours)
IPCO 102 and 209 (6)
RTVF 103 (3)
CDIS 223 (3)
THEA 141 (3)
IPCO electives (21)
Minor (24 hours)
IPCO 102 and 209 (6)
IPCO electives (15)
THEA 141 or CDIS 223 or RTVF 103 (3)

## Other programs

Programs leading to the Bachelor of Arts in Communication degree also are offered through the College of Arts and Sciences.
Italian (minor only)
122 Shatzel Hall, 372-2667
Minor (15 hours beyond ITAL 202)
ITAL 361, 371 and 372

## Journalism

319 West Hall, 372-2076
Minor (22 hours)
JOUR 103, 300, 402, 412
Two additional skills courses (such as reporting, editing, photography or feature writing)
Two journalism concept courses (such as press management, magazine journalism or government and the press).

## Latin

122 Shatzel Hall, 372-2667
Major ( 21 hours beyond LAT 202)
No more than 6 hours from LAT 480, 481, 485 or 486
Minor (12 hours beyond LAT 202)

## Latin American Studies

205 Administration Building, 372.2015

## Planned program

An interdisciplinary planned program for those students who want to specialize in the Latin American area. The student must complete 33 semester hours of courses in HIST, GEOG, POLS, SPAN, ECON and SOC, along with a Latin American studies senior seminar. The student's foreign language is Spanish and an appropriate minor is selected in consultation with the Latin American studies adviser.
Core courses (21 hours)
HIST 309, 310
POLS 355
GEOG 349
SPAN 377, 378
LAS 401
The remaining 12 hours will be selected from the following: HIST 311, 411, 413, 415 SPAN $368,431,481,482,488$ and 489; ECON 454, 476; SOC 334.

## Library and Educational Media

Planned minor only
216 Hayes Hall, 372-2461
( 20 hours)
LEM 203, 403, 407, 408, 428, 491 and three hours of LEM electives. This minor prepares students for employment in nonschool settings such as libraries, and in instructional media and information science, as well as for graduate school programs in library science.

## Other programs

Both a major and a minor in library and educational media are offered by the College of Education and Allied Professions.

## Linguistics

## Planned minor only

305-A University Hall, 372-2576
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 course work 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 bu used as electives) (3-4):
GERM 482
ENG 380
SPAN 455
Electives (10-12)

## Mass Media

Planned minor only
This program is designed to give stu-dents-as consumers of the mass media-an opportunity to examine the role of the mass media in a democratic society. Primarily for students not planning careers in print, broadcast or film media, the program consists of a minimum of 20 hours. At least three departments are to be represented and no more than three courses are to be selected from any one department.
POPC $165^{*}, 250,270,290,350,355$ and 390 MKT 410
HIST 323
JOUR 103*, 340, 402, 435, 470 and 471
POLS 341, 342, 443
RTVF $255^{*}$ or $365^{*}, 261$ or $466 ; 103^{*}, 366,460$
*No more than one of the following courses may be
counted in the mass media planned program: POPC
165, RTVF 255, RTVF 103, RTVF 365 and JOUR 103.

## Mathematics

450 Mathematical Sciences Building, 372-2636
Major (34 hours)
MATH 131, 232, 233, 332 and 322 (19)

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courses* at the 300 or 400 level to tota
        hours including:
        hours in
    MATH 430 or 434 or 465
At least two courses from any one of the fol-
    lowing groups**:
    MATH 401, 403, 404, 432
    MATH 337, 437, 439
    MATH 451, 452
    MATH 402, 405
    MATH 313, 421, 422
    MATH 430, 434, 461, 465
    MATH 441, 442, 445, 447
    To graduate with a major in mathemat-
    ics, a grade point average of 2.0 or better
    is required in those courses used to meet
    the requirements for the major. (The Uni-
    versity policy for grades in repeated
    courses is used in computing this grade
    point average.)
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## Applied Mathematics

This option emphasizes the scientific computing and modeling aspects of applied mathematics. PHYS 211-212 and CS 101 are also required. The minimum grade point average in major courses given above also applies. A minor or double major in computer science or physics is recommended.
MATH 131, 232, 233, 322, 332 and 337 (22)

Five courses* at the 300 or 400 level to
total at least 38 hours*** including:
MATH 432
ATH 430 or 434
MATH/CS 451
MATH 441
A second course from one of the following groups**:
MATH 337, 437, 439
MATH/CS 451/452
MATH 441, 442, 445, 447
Minor (22 hours)
MATH 131, 232, 233 and 332 (16)
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 (9-12)

## Actuarial science

Students interested in a career as an insurance actuary should take the following recommended courses in addition to the core program:
MATH 403 or $432,426,427,430,441-442$, 451
CS 101, ACCT 221-222, INS 300
ECON 202-203 should be taken for Group IV credit.
Also see the department for a planned program.

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## Other programs

A double major in mathematics and computer science and a Bachelor of Science in mathematics are also offered by the College of Arts and Sciences. In addition, programs in mathematics are available through the College of Education and Allied Professions.

## Music

Moore Musical Arts Center, 372-2181
Students wishing to pursue a major or minor in music should contact the assistant dean of the College of Musical Arts. An audition is required.
Major I (38 hours)
MUCH 131, 132, 231, 141, 142, 241 (17)
MUSP, applied study (4)**
MUSP ensemble (4)
Music electives* (13)
Major II ( 38 hours)
MUCH 101, 110, 125, 221 (10)
MUSP, applied study (16)**
MUSP ensembles (8)
MUSP 305 (2)
MUSIC electives* (2)
Graduation recital
Minor or planned program in related area by advisement (20-24).
Suggested fields: business, computer science, film studies, interpersonal and public communication, journalism, mass media, popular culture, radio-television-
film, scientificic and technical communication, theatre.
Minor ( 25 hours)
MUCH 131, 132, 141, 142, 241 (14)
MUSP applied study (3)**
MUSP ensemble (3)
Music electives (5)*
*MUCH, MUED and MUSP excluding MUCH 316 , 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.

## Other programs

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

## Philosophy

202 Shatzel Hall, 372-8384
The Philosophy Department intends to serve the interests of a wide variety of students seeking the skills and understanding traditionally known as a philosophical perspective.
Major (33 hours)
The major requires work in the various areas of philosophic study: logic, history of philosophy, normative philosophy and metaphysics and epistemology. Requirements are:
Logic: PHIL 103 or 303
History of Philosophy: two from PHIL 211, $212,311,312,411$ and 412 , one of which must be at the 400 level.

Normative Philosophy: two from PHIL 318, $319,320,325,332,342,417,418$ and 425 , one of which must be at the 400 level.
Metaphysics and Epistemology: two from PHIL 317, 321, 330, 344, 345, 406, 414, $431,433,442,445$, one of which must be at the 400 level
Four other PHIL courses, one of which must be at the 300 or 400 level.
THE UNDERGRADUATE ADVISER MUST APPROVE THE COHERENCE OF THE 33 HOURS INCLUDED IN EACH MAJOR.

Eight separate tracks are available to serve students of varying interests. These include: Philosophy of Business, Philosophical Aspects of Health Care, Philosophy and the Law, Philosopy of Mind, Philosophy and Religion, Philosophy and Science, tradiational track and individually designed track.

## Political Science

124 Williams, 372-2921
Major (33 hours)
POLS 201 and 290 and 3 additional hours at the 200 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 201, 302, 331, 333, 334, 335, 336,
$337,341,342,345,346,347,374,431$,
434, 440, 443
Comparative Government
POLS 271, 335, 337, 351, 354, 355, 361, $366,368,434,452,453,454,458,460$, 462
International Relations
POLS 272, 335, 337, 372, 374, 434, 458, 460, 462, 473, 475
Political Theory
POLS 250, 301, 304, 402, 403, 404, 405, 452
Public Administration
POLS 221, 302, 330, 331, 346, 420, 421, 422, 423, 430, 431, 459
Public Law
POLS 347, 416, 417, 418, 419, 420, 424, 425
POLS 221 is a prerequisite 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 201 for American government, POLS 271 for comparative politics and POLS 272 for international relations. While all 200 -level course work completed satisfactorily will count toward the total number of hours necessary for the baccalaureate degree, no more than 9 hours at the 200 -level 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 200 level (6)
POLS at $300-400$ level (15)

## Oiter programs

A program in political science also is offered through the College of Education and Allied Professions.

## Popular Culture

Popular Culture Building, 372-2981 planned program (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 (43 hours)

## Required courses:

POPC 160, 165, 220, 480,426 and one of the following: 250, 270, 350,355, 370 (17)

Plus 26 hours selected from POPC courses and/or from the list of electives below. No more than 10 credit hours taken in any one department other than POPC count toward the major.
Minor (20 hours)
Required courses:
POPC 160, 165, 426 and one of the following: $250,350,355,370$ (12)
POPC 220 and 480 are recommended. Plus eight hours selected from POPC courses or from the list of electives below.
Courses approved as electives for
major or minor:
AMID 401, 403, 406
AMST 200, 300, 400
ART $146,440,441,442$
ARTD 419
CONS 235
CRJU 210
DESN 104
ECON 460, 462, 471, 472, 473
EDFI 408, 460
ENG 200: $251,265,266,267,272,300,322$,
$342,343,385,423,485,488$
ETHN 205, 210, 215, 304, 308, 410
F\&N 326
FREN 371, 372
GEOG 225, 230, 325, 327, 333, 335, 337, 426, 442, 451
GERM $315,316,415$

HIST 205, 208, 280, 302, 303, 306, 307, 323,
$326,377,386,419,420,421,422,425,426$, $427,428,429,430,436,448,459,462,464$, 470, 481, 483, 486
HDFS 105, 107, 302, 328, 407, 408, 428, 429
ITAL 261, 371
JOUR 306, 416, 423, 430, 433, 435, 471
LAT 480, 481
MKT 402, 410, 411, 412, 420
MUCH 125, 232, 236, 321, 401, 420, 431
PEP 356
PHIL 204, 245, 315, 333, 334, 335
POLS 341, 342, 434, 443
PSYC 306, 307, 309, 311
RED 380
ROML 200
RTVF 225 or 365; 261, 263, 360, 364, 460, 466
RUSN $312,315,415,432$
SOC 202, 210, 231, 301, 311, 312, 314, 315,
$316,317,318,331,334,342,352,361,404$,
$415,416,417,418,453,460,463$
SPAN 371, 377, 378
SMD 421, 425
TECH 152 or 322
THEA 350, 352
VCT 203, 208, 282, 386, 460
WS 200, 300

## Psychology

139 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 in which arts and sciences credit is given. A student who elects a cognate minor should select, after consultation 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 (7)
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 Allied Professions.

## Radio-Television-Film

322 West Hall, 372-2138 or 372-2224
Major ( 35 hours)
IPCO 102 (3)
RTVF 103, 262, 263, 364, 460, 464 and 466 (23)

CDIS 223 (3)

THEA 141 (3)

IPCO 305 (3)
Minor ( 21 hours)
RTVF 103 and 255 with grade point average of 2.5 (6)

Two 3 -credit hour courses from non-production RTVF courses at 200-300 level (6)
Three 3 -credit hour courses from non-production RTVF 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.

## Russian

128 Shatzel Hall, 372-2369
Major ( 25 hours beyond RUSN 202, or equivalent, and including RUSN 311, 312, $317,318,320,417$ and RUSN 303 or 319 )
Minor ( 12 hours beyond RUSN 202, or equivalent, and including RUSN 317, 318 and 320)

## Other programs

Programs in Russian also are offered by the College of Education and Allied Professions.

## Scientific and Technical Communication

219 University Hall, 372-2576
Technical communication conveys scientific and technical information precisely clearly and accurately. Although techn. writers are not expected to be scientists or engineers, they should have a good background in at least one technical area.
A combined major/minor (no formal minor required), this program consists of a communication core, including an internship; group requirements in computer science/technology, graphics and design, and project management; and a cognate in science, technology or other professional area appropriate to the student's career goals. Admission to the major requires adviser approval.

## Matriculation into Scientific and Technical Communication Major

Before being fully accepted as a scientific and technical communication major, the student must have completed 30 hours of course work and achieved an overall grade point average of 2.7 ; waivers of the grade point requirement may be granted on the basis of the student's unique educational or work experience.
Major (57-63 hours)
Communication core (18-24)
ENG 207, 388, 389, 488
ENG 484 or JOUR 301 or any 300 or 400 ENG literature course
ENG 489
Computer science/technology group (9)
Cone from three of thor
MIS 200 or CS 101 or 130
MIS 360 or CS 260 or 201
CS 360 or 205 or TECH 152 or ET 191
STAT 200 or MATH 115 or 247 or SOC 369 or PSYC 270
gn and graphics group (6)
two from DESN 104, VCT 203, 208, ART 102, 112
Project management (6)
Any two from PSYC 452, 454, MGMT 305,
IPCO 203, 303, 304, SOC 318, 415
Science or technology cognate (18)
A program of 18 hours, beyond any courses counting for college general education requirements, in one or two disciplines (such as biological sciences, chemistry, computer science, environmental sciences, foreign languages, geography, technology, mathematics, physics, psychology) worked out in consultation with and approved by the program adviser.
Scientific and technical communication majors are required to include Arts and Sciences 200, Great Ideas, as one of the courses for either Group IV, Social Sciences, or Group V. Arts and Humanities.
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
three courses chosen from computer scice/technology, graphics and design, and oject management groups above.

## Other programs

A Bachelor of Science program in scientific and technical communication also is also offered through the College of Arts and Sciences. Note: In addition, S\&TC majors are required to take Great ldeas, A\&S 200, as part of their college group IV or $V$ requirements.

## Sociology

224 Williams Hall, 372-2294
Major (32 hours)
SOC 101, 369 and 370
SOC 301 or 302
SOC electives are generally chosen to serve student career goals. Majors and minors are strongly encouraged to concentrate course selections in one of the following areas:

## Criminology/corrections

This concentration includes the nature of criminal law, the causes and consequences of criminal behavior and the ways in which society deals with criminal offenders. Criminology is appropriate preparation for careers in both the adult and juvenile justice systems: the police, the courts, probation and corrections.

SOC 301, 341, 342, 344, 352, 441, 442, 449

## Family and social services

This concentration is suited for students preparing for careers in agencies responsible for the planning, delivery and administration of services and resources for the well-being of individuals. Course work provides fundamental understandings for management decisions involving gender, the family, poverty, aging and other human service programs.

SOC 301, 316, 318, 361, 404, 417, 460 and 463

## Population studies

This concentration examines the composition of human populations, communities and organizations as they adapt to their environment. 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.

SOC $311,312,315,414,415,416$

## Survey research and planning

The collection, management and interpretation of social data are the primary concern of this concentration. Course work covers sampling techniques, data processing and statistical analysis as applied to research in areas such as public opinion, electoral behavior, consumer behavior, community planning, program evaluation, needs assessment and
environmental impact. Social research analysts hold a variety of positions in government agencies as well as in commercial firms specializing in market research and planning.

SOC 311, 312, 318, 369, 370, 371, 418

## Pre-professional program

This concentration is designed for the student who wishes a sociology background as preparation for an eventual career in one of the professions such as law, business or public administration. It is also an appropriate concentration for students intending to pursue advanced degrees in sociology or related disciplines such as social work, counseling, psychology or college student persorinel. The intent of the pre-professional program is to expose the student to a range of content areas within the discipline, and in particular those courses which emphasize the development of critical thinking, writing and research skills, and a broader understanding of the nature of society and social relationships.

## Research internships

All of the programmatic concentrations listed here 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.

Students can consult the undergraduate adviser in the Department of Sociology for the planning of other concentrations (e.g., pre-law and social science education) and for planned individual programs.
Minor (20 hours)
A student minoring in sociology is strongly encouraged to complete SOC 301, 302, 369 and 370.

## Other programs

A combination psychology/sociology major is offered in the College of Education and Allied Professions.

## Soviet Studies

125 Shatzel Hall, 372-2268
Planned program (59-72 hours), no minor required.

This program examines the society, history, politics and culture of the USSR and prepares persons for employment or graduate work in Soviet studies. The student combines either history or political science ( 21 hours) with a concentration in one of the social sciences ( 21 hours). There is an introductory course (RUSN 316, The Soviet Union Today) and a senior seminar (Soviet Studies 400) for all majors. The program includes training in Russian language through the advanced level ( 20 hours). Each student devises his or her own specific course of study in close consultation with the director and other faculty. A list of history and political science courses preferred for the program are available from the director and the college office.

## Spanish

122 Shatzel Hall, 372-2667
Major ( 30 hours at the 300 and 400 level) SPAN 351, 352, 367, 368, 371, 377 and 378 (21)

Electives at the 400 -level (9)
Minor (20 hours at 300 and 400 level)
SPAN 351, 352, 371 (9)
SPAN 367 or 368 (3)
SPAN 377 or 378 (3)
Electives with one course at 400 level (5)

## Statistics

450 Mathematical Sciences Building, 372-2636
This major should be combined with a minor or second major in an area of application or technique, such as psychology, science, computer science, business administration or business systems.
Major ( 36 hours)
MATH 131, 232, 233 and 332 (16)

## MATH 441 and 442 (8)

MATH 432 (3)
Plus three courses from the following, with at least two from statistics (9):
STAT 402, 404, 406, 410, 412 and 414
MATH 430, 445, 447, 451 and 461
CS 440 and 442

## Other programs

The College of Arts and Sciences also offers a program in statistics leading to the Bachelor of Science degree. A program in statistics is also offered by the College of Business Administration.

## Theatre

322. South Hall, 372-2222

Majer (39 hours)
IPCO 102 (3)
THEA 141, 201, 202, 241, 243, 244, 341, 347 and 348 (27)
THEA electives (300-400 level) (12)
Minor (24 hours)
THEA 141, 202, 241, 341, 243 (15)
Eloctives at 300-400 level (9)

## Other programs

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

## Women's Studies

4th floor, Union, 372-2620
Women's studies is an interdisciplinary program which allows students to design their own curriculum in consultation with the director and an advhser in their area of concentration. The field of women's studies is based on the new scholarship on women. This scholarship challenges traditional ideas about the nature of women, as our own and other cultures have imagined it. Women's studies courses deal with women's life dxperiences and viewpoints, women's cultural contributions and women's future prospects. A major or minor in women's studles provides the advantages of a liberal arts education along with useful preparation for a variety of careers. No minor is required.

## Major

WS 200 and 400 (6)
Eight courses chosen from the following representing at least six departments and a 16 hour concentration in one of the departments of the College of Arts and Sciences appearing in the following list
BA 305/HDFS 305
EDF 460
ETHN $300^{*}$
HED 301
HIST 326
HDFS 105, 302, 426, 427
IPCO 406*
PHIL 245
POLS 434
POPC 231, 424, 460, 470*
PSYC 306, 307
SOC 300*, 361, 460, 480, 490
SMD 425
THEA 449*
WS 300,470
*indicates variable topic courses which may be included in the program when the topic is appropriate to women's studies.

## Minor

WS 200,400
15 hours of courses chosen from the above list

## BACHELOR OF SCIENCE DEGREE

Each student must complete the general education requirements listed below, preferably in the freshman and sophomore years, and must satisfy the requirements for a major and minor area of specialization as outlined. Every student, however, must take English and physical education 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 freshman year.
A Bachelor of Science degree is only available in biological sciences, chemistry, computer science, environmental science, geology, mathematics, physics, psychology or statistics. The student also completes a minor area of specialization as outlined below.

## General Education Requirements

## Group 1: 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.) IPCO 102 is recommended for each student.

## Group il: Foreign language and cultural experience

Each student is required to demonstrate a proficiency in a language and language area by one of the options listed below:

1. having been graduated from a high school where all instruction was conducted in a language other than 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. having completed one of the departmental options listed below (14 hours minimum in same language area, or fewer by advanced placement).
Note: Students not required to take foreign language courses numbered 101 , $102,201,202,211,212$ because of exceptions listed in numbers 1,2 or 3 above will need to take at least one multicultural studies course from the General Education Core (p. 10) to satisfy that requirement.

German, Russian, East Asian Lanuage: (Chinese, Japanese)
Completion of GERM 101 and 102 plus a minimum of six additional hours from:
GERM 100, 117, 118, 201, 217, 231, 331, and/or GERM 215, 216, 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 100, $201,202,303,315,316,317,319,331$ and/or 311, 312.
Romance languages (French, Italian, Latin. Spanish)

## Option I:

FREN 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, 211 and 212:
LAT 101, 102, and two of: LAT 141 and/or 142 and/or 201;
SPAN 101, 102, 211 and 212.
A student may transfer at any point from option I to option II but not vice versa. If a student selects option II, all courses in that sequence must be completed subsequent to the first course in which the student is place. Course 202 is required for admission to 300 -level courses.
Credit toward a degree is not granterfor foreign language courses which du cate more than two units of high schoor study.
Group III: 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, or Department of Mathematics and Statistics for placement test.

Ip IV: Social sciences: economics,
hic studies, geography, history, political science, psychology, sociology
Each student is required to complete four courses in one or more of these areas (excluding GEOG $125,126,127,213$, 404). A psychology major may include two psychology courses in this group. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.

## Group V: Arts and humanities

Each student is required to complete one course in literature (American, English or foreign), one course in the fine arts (art, art history, music, theater, television and film), and two additional courses from the following areas: ART 101, art history; American, English, or foreign literature; American studies, ethnic studies, music appreciation, music literature, philosophy, popular culture, drama, history of public address and women's studies. 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.

## BACHELOR OF SCIENCE: AJORS AND MINORS

the beginning of the second year most students select a major and minor subject. 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 in the following sections. 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.

## Individualized Planned Program Option

If educational objectives cannot be met by one of the departmental majors or minors or by one of the planned programs, the student may create an individualized planned program in consultation with a faculty adviser or advisers to substitute for the major or minor or both. A student who has 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 by presenting a statement of rationale for an individualized planned program as well detailed list of courses to be taken. approval, the student is obligated to complete the program as planned unless changes are approved by the office of the dean. The general education requirements remain the same.

Astronomy (minor only)
270 Overman Hall, 372-2422
Planned program to substitute for minor (18-21 hours)
Five courses chosen from the following: ASTR 201, 212, 305, 307, 309, 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 should major in physics and choose astronomy courses as electives.

## Other programs

A program in astronomy also is offered by the College of Education and Allied Professions.

## Biological Sciences

217 Life Science Building, 372-2332
Major (32 hours)
First and second years
BIOL 204 and 205 (10)
CHEM 125 and 126 (10)
300 -level 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 equivalent
PHYS 201 (5)
A minimum of 10 hours at the 400 -level and 12 additional hours electives in BIOL .
At least one course in each of the following groups:
Group 1: Biology of Organisms
BIOL 220, 311, 312, 313, 322, 331, 332, 343, $405,406,409,410,414,415,416,421,424$, 426, 432, 434, 435, 440, 472, 473, 474, 475, 476, 477
Group 2: Ecology and Behavior
BIOL 321, 354, 412, 420, 422, 425
Group 3: Genetics and Evolution
BIOL 350, 404, 442, 447, 449, 451
Group 4: Cell Biology and Physiology
BIOL 407, 411, 417, 419, 431, 433, 438, 439, 443
Minor (20 hours)
First and second years
BIOL 204 and 205 (10)
CHEM 125 and 126 or equivalent (10)
Third and fourth years
Electives in BIOL (10)

## Microbiology

519 Life Sciences Building, 372-8568
BIOL 204, 205 and 313 (14)
CHEM 125, 126 and 201 (13); or CHEM 135 and 136 (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, 130 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, 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: $\mathrm{BIOL} 400,401$, 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 Allied Professions. A program in applied microbiology is available through the College of Health and Human Services.

## Chemistry

110 Hayes Hall, 372-2031
Students who take two courses in any one of the following groups may not receive graduation credit for both: CHEM 100, 104, 115, 125, 135; CHEM 126, 136; CHEM 116, 306, 341; CHEM 116, 308, 445; CHEM 321, 454; CHEM 352, 405.
Major (32 hours)
A chemistry major may follow several programs of study depending upon career aspirations. All chemistry majors must take the following:
CHEM 125, 126 and 201 (13):
or CHEM 135, 136 (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.
GERM or RUSN should be selected as the foreign language. 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 professional training standards and is the recommended program for students who plan professional careers in science.
First year
CHEM 125, 126 (10) or CHEM 135, 136 (10)
MATH 131 (5)
Second year
CHEM 201 (for those having taken CHEM 126) (3)
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 223 and 332 (306)
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, 126 (10) or CHEM 135, 136 (10)
MATH 139 (5)
Second year
CHEM 201 (3) (for those having taken
CHEM 126)
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 (5)
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, 126 (10) or CHEM 135, 136 (10)

## Second year

CHEM 201 (3) (for those having taken CHEM 126)
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, 447 and 449; BIOL 204, 205, 313, 350, and 411 or 439. CHEM 419 is recommended.

To complete either a standard chemistry major or the more rigorous ACS major, the student should consult the above guidelines for additional courses that are required to complete the major program of choice.
The student is urged to seek advice from departmental 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 graduate) and professional requirements.

## Other programs

Programs in chemistry also are offered by the College of Education and Allied
Professions.

## Computer Science

246 Mathematical Sciences Building, 372-2337
Major (30 hours)
CS 101, 201, 202, 205, 305, 306, 307 (21)
Three CS electives at the 400 level, excluding CS 490 ( 9 )

PHIL 344 or SOC 320 ( 3 )
MATH 131 and 222 (8)
MATH 247 or 313 (3)
Students 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 IV requirement and may choose electives such as ACCT 221 and 222, FIN 300, MATH 226. MGMT 300 or 305, MIS 371 and 472, and MKT 300. See the Department of Computer Science for details.

## Microcomputer systems specialization

A computer science major may choose to specialize in microcomputer systems. No minor is required in this program. The student should include CS 428 in the computer science major. In addition, the following courses must be taken:
PHYS 201, 303, 428 (11)
ET 358, 453 (6)
ET 490 or PHYS 429 (1-3)
A total of 19 hours is required.
Minor (18 hours)
CS 101, 201 and 205 (9)
CS electives (9)
The following courses may not be applied to the 18 -hour minor requirement: CS 100, 130, $180,260,280,390,490$.

## Recommended electives

ACCT 221, ENG 388, PHIL 303; it is recommended that the natural sciences requirement be completed by taking PHYS courses.

## 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 Allied Professions.

## Environmental Science

124 Hayes Hall, 372-8207
Planned program; no minor 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 the staff of the Center for Environmental Programs is essential. Required courses are:

ENVS 101 (2)
ENVS 301, 401 or 402 (choose two) (5-6)
CS 100 or 101 (3)
ECON 200 or 202 (3)
SOC 101 or PSYC 201 (3-4)
BIOL 204 and 205 (10)
CHEM 125 and 126 (10)
GEOL 104 (4)
MATH 131 (5)
ENG 207, 388, or 488 (3)
Two courses from PHYS 201, 202; 211, 212
(10) or CHEM 306 and one PHYS
course (7-9)
MATH 115, 247, PSYC 270 or SOC 369 (choose one) (3)
IPCO 205, 306 or 403 (choose one) (3)
Four courses from: ECON 332, 435; EDFI 416; ENVH 306*; ENVR 421; GEOG 321, 325, 331,
$333,337,412,426,442,460$; GEOL 304, 322,
418; HIST 306, 319, 338; LEGS 431*; PHIL
332*; POLS 331, 335, 336, 345, 430; PSYC
440; RED 304; SOC 312, 315, 414, 418 (12).
(No more than two courses with an asterisk may be chosen.)
Fifteen hours must also be taken in an area of emphasis such as energy use, chemical analysis, geography/geology, coastal studies or computer modeling. The area of emphasis is planned by the student with faculty members and academic advisers to reflect the student's occupational goals. Students should file an approved course list for their area of emphasis no later than the end of the junior year. An internship is highly recom. mended. Individualized planned minors environmental studies are available also.

## Other programs

The College of Arts and Sciences offers a Bachelor of Arts planned program in environmental policy and analysis. Environmental programs are also available in the College of Education and Allied Professions and the College of Health and Human Services. Students should contact the Center for Environmental Programs, 124 Hayes Hall, 372-8207, for help in selecting a program that most closely meets their goals.

## Geology

170 Overman Hall, 372-2886
Major (35 hours)
A geology major may foliow several programs of study depending upon career aspirations. All geology majors must take the following:
GEOL 104, 105, 300, 301, 309, 315, 316 and 494 (35)
MATH 131 (5)
CHEM 125 (5) or 135 (5)
PHYS 201 (5) or 211 (5)
One additional course from the following list: (5)
MATH 232, CHEM 126 (or 136), PHYS 202 (or 212) or BIOL 204

The degree required for most entrypositions as a professional geologist in government and industry is the master's degree. Accordingly, students who wish to gain admission to a gracluate program and/or pursue a professional career in geology should take the following:
GEOL 104, 105, 300, 301, 309, 315, 316, 494 (35)
MATH 131 and 232 (10)
CHEM 125 and 126 (or 135 and 136) (10)
PHYS 201 and 202 (or 211 and 212) (10)
CS 101 (3)

## Suggested program

First year
GEOL 104 and 105 (8)
CHEM 125 and 126 (10) or equivalent
Second year
GEOL 300 and 301 (9)
PHYS 201 and 202 (10) or equivalent
CS 101 (3)
Third year
GEOL 309 and 316 (8)
MATH 131 and 232 (10)
Summer session
GEOL 494 (6)
Fourth year
GEOL 315 (4)

## Geochemistry

A student concentrating in geochemistry should take the following courses:

OL 104, 105, 300, 301, 309, 315, 316, 431 hd 494 (38)
TuYS 201 and 202 (or 201 and 202) (10)
MATH 131 and 232 (10)
CHEM-see minor requirements in chemistry (10)
CS 101 (3)

## Geophysics

A student concentrating in geophysics should take the following courses:
GEOL 104, 105, 300, 301, 309, 315, 316, 432 and 494 (38)
PHYS 211, 212, 307, 401 and 427 (18)
MATH 131 and 232 (10)
CHEM 125 and 126 (or 135 and 136) (10)
CS 101 (3)
No minor is required.

## Paleobiology

A student concentrating in paleobiology is required to take the following courses:
GEOL 104, 105, 300, 301, 309, 315, 316, 419, 425 (40)
GEOL 490 (senior research problem to approved by paleobiology adviser) (1-3)

- GEOL 494 (or a substitute field course approved by the paleobiolog adviser) (3-6)
CHEM 125 (or 135) (5)
MATH 131 (5)
BIOL 204, 205, 350, 354, 451 (18)
No minor is required
Geology minor (20 hours)


## Other programs

A program in geology leading to Bachelor Arts also is offered by the College of and Sciences.

## Mathematics

450 Mathematical Sciences Building, 372-2636
Major (34 hours)
MATH 131, 232, 233, 332 and 322 (19)
Five MATH courses* at the 300 -or 400 -level to total 34 hours including:
MATH 403
MATH 430 or 434 or 465
at least two courses from any one of the fol
lowing groups**:
MATH 401, 403, 404, 432
MATH 337, 437, 439
MATH 451, 452
MATH 402, 405
MATH 313, 421, 422
MATH 430, 434, 461, 465
MATH 441, 442, 445, 447
To graduate with a major in mathemat-
ics, 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 courses is used in computing this grade point average.)

## Applied Mathematics

This option emphasizes the scientific computing and modeling aspects of applied mathematics. PHYS 211-212 and CS 101 are also required. The minimum grade point average in major courses given above also applies. A minor or double major in computer science or physics is recommended.
MATH 131, 232, 233, 322, 332 and 337 (22)
Five courses* at the 300 or $400-$ level to total at least 38 hours*** including:
MATH 432
MATH 430 or 434
MATH/CS 451
A second course from one of the following groups**:
MATH 337, 437, 439
MATH/CS 451, 452
MATH 441, 442, 445, 447
Minor (22 hours)
MATH 131, 232, 233 and 332 ( 16 hours)
Two electives at the 300 - or 400 -level* (6)
*except MATH 222, 226, 395, 414, 470, 489, 495
"*some of these courses may not be offered every year
**35 hours math required for students who have credit for CS 451

## 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 (9-12)

## Actuarial science

Students interested in a career as an insurance actuary should take the following recommended courses in addition to the core program:

MATH 403 or $432,426,427,430,441-442,451$
CS 101, ACCT 221-222, INS 300
ECON 202-203 should be taken for Group IV credit.
Also see the department about a planned program.

## Other programs

A double major in mathematics and computer science and a Bachelor of Arts in mathematics are also offered by the College of Arts and Sciences. In addition, programs in mathematics are available through the College of Education and Allied Professions.

## Physics

270 Overman Hall, 372-2422
Major ( 32 hours)
PHYS 211, 212, 301 and 313 (14)
PHYS 305, 307, 401, 406 and 418 (14)
PHYS 429 or 470 (1) and other 300 -or 400 -level courses in PHYS (3)
it is recommended that a student majoring or minoring in physics take the following: CHEM 125 and 126 (10)
MATH 332 (3)
For students expecting to continue on to graduate school, the following courses are recommended:
PHYS 303, 309, 402, 417 and 419 (15)

## 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 201, 202, 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 $411,417,428$ and 429 (21)
In addition, the following courses must be taken:
CS 101 (3), 201 (3)
CHEM 125 and 126 (10)
DESN 243 (3)
No minor is required.
Minor (22 hours)
PHYS 211, 212, 301 and 313 (14)
PHYS 305 and 406 (5)
and other 300 - and 400 -level courses in PHYS (3)

## Other programs

Programs in physics are also available through the College of Education and Allied Professions.

## Psychology

139 Psychology Building, 372-2301
Mejer ( 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, 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.)

## Note: The Psychology Department

 departs from the arts and sciences group requirements in the following aspects:Group III (science and mathematics): a minimum of 43 hours must be completed in two or more of the following fields: BIOL, CHEM, CS, GEOL, MATH, PHYS, PSYC. No more than 24 hours 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. Group IV (social sciences): two PSYC courses may be applied.
Group V (humanities): courses in logic and the philosophy of science are recommended.
First year
PSYC 201 and 270 (7)
Second year
PSYC 290 and 370 (7)
PSYC electives
Third year
Two 300 -level PSYC laboratory courses
PSYC electives
Fourth year
PSYC electives
Minor (20 hours in PSYC)

## Other programs

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

## 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

219 University Hall, 372-2576

## Major

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 57, including the Arts \& Sciences 200 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) general education requirement for the bachelor of science degree. A plan for these courses is worked out in consultation with and the 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 course work and achieved an overall grade point average of 2.7 ; waivers of the grade point requirement may be granted on the basis of the student's unique educational or work experience.

## Minor

See description under Bachelor of Arts Degree.

## Statistics

450 Mathematical Sciences Building, 372-2636
This major should be combined with a minor or second major in an area of application or technique, such as psychology, science, computer science or business administration.

## Major (36 hours)

MATH 131, 232, 233 and 332 (16)
MATH 441 and 442 (8)
MATH 430 or 465 (3)
Plus three courses from the following, with at
least two from statistics (9):
STAT 402, 404, 406, 410, 412, 414
MATH 432, 445, 447, 451, 461
CS 440 and 442

## Other programs

The College of Arts and Sciences also offers a program in statistics leading to the Bachelor of Arts degree. A program in statistics is also offered by the College of Business Administration.

## BACHELOR OF LIBERAL <br> 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 interdepartmental program. The degree's flexibility may make it an appropriate option, for example, for non-traditional 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 he/she has:
a. completed no less than 30 semester hours;
b. a minimum GPA of 2.25 or greater;
c. at least 45 semester hours of course work remaining to be completed before graduation;
d. submitted the application for admission into the BLS degree program within the first fourteen calendar days of the semester in which the last 45 hours of the degree program are begun;
e. submitted a personal essay of 3 to

5 pages which articulate specific corr spondences between the student's long and short term goals and objectives and the proposed curriculum;
f. Completed English 112 plus two PEG activities courses;
g. removed all high school articulation deficiencies (if appropriate);
h. completed the University's General Education Core Curriculum (page 9).
2. A BLS degree program may include within the 122 hours required 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 into the program;
b. completed 100 hours of course work 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.

## ACHELOR OF <br> FINE ARTS <br> DEGREE

103 Hanna Hall, $372-8370$
Each student must complete the group requirements listed below preferably in the freshman and sophomore years and must satisty the requirements for a major in creative writing and a minor in an area of specialization:

## General Education <br> Requirements <br> Group 1: 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 Language

 and Cultural ExperienceEach student is required to demonstrate a proficiency in a language and language area by one of the options listed below:

1: having been graduated from a high hool where all instruction was' conted in a language other than English;
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 same language area or fewer by advanced placement).
Note: Students not required to take foreign language courses numbered 101; $102,201,202,211,212$ because of exceptions listed in numbers, 1,2 or 3 above will. need to take at least one "mul ticultural studies" course from the Gen. eral Education Core (p, 10) to satisfy that requirement.
German, Russian, East Asian Languages (Chinese, Japanese)
Completion of "GERM 101 and 102 plus a minimum of six additional hours from:
GERM 100, 117, 118, 201, 202, 217, 234, 331 and/or GERM 215, 216, 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 ${ }_{2}$ of six additional hours from
RUSN 100, 201, 202, 303,-315,"316,
$317,319,331$ and/or RUSN $311,312$. nance languages (French, Italian, in, Spanish)
Option 1
FREN 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, 211 and 212; or,
LAT 101, 102 and two of: LAT 141, 142 and/or 201
SPAN. 101, 102; 211 and 212
A student may transfer at any point from option I to option II, but not vice versa. If a student selects option II, all courses in that sequence must be com pleted subsequent to the first course inwhich the student is placed. Course 202 is required for admission to 300 -level courses.
Credit toward a degree is not granted for foreign language courses which dupli cate 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 astronomy, biological sciences, computer science, chemistry, geology, mathematics, physics or physical geography (íncluding GEOG 125; $126,127,213,404$ ); 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, SociologyEach student must complete three courses 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, Philosophy, Popular Culture, Speech Communication

Each student must complete five courses chosen from at least four of the above disciplines. 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 College 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)
ENG 208, 209, 308a, 308b, 407a ănd 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 'Bach' elor of Arts in Communication (BAC) include completion of the general requirements for the baccalaureate listed on page 9 and;

1. Completion of the general education requirements the six areas listed below.
2. Completion of a specialized program in communication studies as defined below.

## General Education Requirements

Group I: Communication
Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equuivalent to that attained by the student who completess that course. (A penalty is imposed if ${ }^{*} E N G, 112$ is, not completed within the first 60 hours. See page 11.) IPCO: 102, THEA 202 and, IPCO 209 are also required.
Group II: Foreign language or cultural experience
Each student is required to demonstrate a proficiency in a language or langưage. area by one of the options listed below:

1. having been graduated 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 cómpleted 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 areá or fewer by advanced placement).

Note: Students not required to take foreign language courses numbered 101, 102, 201; 202, 211, 212 because of exceptions listed in numbers 1,2 or' 3 above will need to take at least one "multicultural studies" course from the General Education Core (p: 10 ) to satisty that requirement.
German, Russian, East Asian Languages (Chinese,; Japanese)
Completion of GERM 101 and 102 plus a minimum of six ádditional hours from:
GERM 100; 117, 118, 201, $202,217^{\circ}$
231,331 or GERM $215,216,260$ or
Completion of $\mathbb{C H} \mid N 101,102 ; 201,202$; or
Completion of JAPN 101, 102, 201,202
or
Completion of RUSN 101 and 102 plus a. minimum of six additional hours from
RUSN 100, 201, 202, 303, 315, 316
317, 319 , 331 and/or 311,312

Romance languages (French, Italian, Latin, Spanish)
Option
FREN 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, 211 and 212; or
LAT 101, 102 and two of LAT 141, 142 or 201
SPAN 101, 102, 211 and 212
A student may transfer at any point from option I to option II but not vice versa. If a student selects option II, all courses in that sequence must be completed subsequent to the first course in which the student is placed. Course 202 is required for admission to 300 -level courses.

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

## Cultural experience

Thase 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 an approved list printed in the Communication Handbook.

## Group Ifl Mathematics and Science

Each student must complete at least two courses elected from astronomy, biological sciences, computer science, chemistry, geology, mathematics, physics or physical geography (including GEOG 125, 126, 127, 213, 404), including at least one course approved for laboratory credit from a list of approved courses printed in the College of Arts and Sciences Handibook.
Group IV: Social sciences: economics, ethnic studies, geography, history, political science, psychology, sociology
Each student must complete three courses in two of these areas. Students may count two courses from their specialized program/support field in the groups as appropriate. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.
Group V: Arts and humanities: art, ilierature (American, English or toreign), film, music, philosophy, popular culture, theatre
Each student must complete three courses in at least two of these areas from an approved list of courses. A list of courses approved for Group $V$ requirements is printed in the College of Arts and Sciences Handbook.
Group VI: Cognate studies experience Students must complete, as specified by the nature of their specialized programs, six additional courses from at least two of the above groups.

## Specialized programs

Each student is expected to present a program of specialization in communication study from existing structured options (theatre, radio-television-film, interpersonal and public communication), or a previously approved individual program to approximate the equivalent of a range from 42-54 hours.

## Interpersonal and Public Communication

## Required IPCO courses

IPCO BAC students must complete a minimum of six three-hour courses ( 18 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 focus must define an occupational area. Some examples might include human resource development, community affairs liaison, customer service representative, communication consulting, information specialist, industrial and labor relations, corporate sales, fund raising, lobbyist, recreation and leisure time activities, and managerial communication. Any number of sequences can be used to define a career focus, but the choices must logically and clearly support the designated focus (Internships may not count). Students are expected to work closely with advisors in selection of courses.
Group I: Communication-Students must earn a $B$ average, minimum, in Group I requirements to gain admission to the IPCO program. Students who have not met this requirement will be advised in group sessions. Check IPCO office for the schedule. Students must also compiete in sequence IPCO 102 and IPCO 209 before they can take any other IPCO courses (except for IPCO 306, IPCO 403 and IPCO 406). This applies to majors and non-majors on the main campus, with the exception of communications majors in the College of Education and Allied Professions. Also, it does not apply to Firelands majors unless they seek admission to the IPCO program on the main campus.
Group VI: Cognate-IPCO courses may not be used to fulfill this requirement.

## Other programs

Programs leading to the Bachelor of Arts degree also are offered by the College of Arts and Sciences.
Radio-TV-Film
See School of Mass Communication.

## Theatre

All BAC students with a specialization in, theatre must take the following theatre core courses: THEA 201, 241, 243, 244,
341, 347 and 348. Students may develop specialized programs in consultation with their adviser in the following areas: musical theatre, acting, directing, design and technical theatre, developmental drama and theatre management.

## Other programs

Programs leading to the Bachelor of Arts 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 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, technical and directing to qualified undergraduates. The scholarships are awarded on a com. petitive basis with students submitting applications, letters of recommendation and doing a live audition. Students interested in obtaining a talent scholarship audition form should contact the theatre office in 322 South Hal!.
The theatre program also sponsors the Huron Summer Playhouse each year. Students must audition to be considered for membership in the company. Each year the Playhouse presents four plays and two 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.

## PRE-

PROFESSIONAL PROGRAMS
The College of Arts and Sciences provides five kinds of preprofessional programs:

## ur-year Curricula

se curricula, leading to the bachelor's degree, are planned to prepare the student for admission to a graduate or professional school for further specialized study. Curricular requirements and arts and sciences preparation for some special fields of work are discussed in the following section.

## Arts-Professional Curricula

These are offered in cooperation with the professional schools and colleges of other institutions of higher learning. The student spends three years at Bowling Green before entering a professional school. Upon satisfactory 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 preprofes. sional 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.

## ambined BaccalaureateBter's Program

following this program, the student may finish the course work 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 curric ula must meet all of the requirements for the degree including major, minor and group requirements.

## Four-year <br> Preprofessional Curricula

## Preparation for Business

The College of Arts and Sciences offers a major or minor in either economics or business administration leading to the degree of Bachelor of Arts. The student intersted in a career in business should consult the programs offered by the College of Business Administration.

## Preparation for College Teaching

The student who wishes to prepare for a career in college teaching should plan on attending graduate school, bearing in mind that many graduate schools require a reading knowledge of one or more of either French, German or Russian. It may be advantageous to take the combined baccalaureate-master's program described above. Specific curricula for teaching subjects in areas of technology at the community and technical college level are available from advisers in the Department of Applied Human Ecology and the College of Technology.
Students preparing for high school teaching should register in the College of Education and Allied Professions unless they elect the combined arts-education curriculum described on page 00 .

## Preparation for Graduate Study

All programs of the College of Arts and Sciences may be used as preparation for entrance to a graduate school. The student should bear in mind that a reading knowledge of one or two modern languages chosen from French, German or Russian is often required for the doctorate. A knowledge of statistics may be useful.

## Preparation for Careers in Applied Human Ecology

The College of Arts and Sciences provides a variety of programs in applied human ecology. The usual arts and sciences curriculum is followed with a major or minor in home economics. A student who is interested in teaching home economics in the public school or working as an agricultural extension agent should pursue a program in the College of Education and Allied Professions.

## Preparation for Library Work

The Bachelor of Arts degree is usually required for admission to a school of library science. A minor in library and educational media is available in the College of Arts and Sciences. The student completing such a minor can obtain a professional degree in library science in one additional year in an approved professional school. The major should be chosen from such fields as English, history, political science and sociology; for work in special libraries, a major or electives in the sciences may be useful. At least two years of a foreign language is strongly recommended.

## Preparation for Professional

Work in Mathematics and

## the Sciences

Professional work in the sciences is available to a student with a strong undergraduate degree program. A student whose academic record permits should consider graduate training.

The Department of Chemistry offers a program which meets the requirements of the American Chemical Society for professional recognition of a graduate.

## Preparation for Careers in <br> \section*{Actuarial Science}

Professional status in the insurance industry as an actuary is attained by passing a series of examinations administered by the Society of Actuaries and the Casualty Actuarial Society. Normally some of the examinations are taken while working for an insurance company. A strong mathematics major is required. A list of recommended courses is listed under the major. Up to four of these examinations can be taken while in school. There is a separate process for pension actuaries.

## Preparation for Professional

Work in Mathematics and Statistics
For careers in research and higher education, a graduate degree is required. The undergraduate preparation should have both breadth and depth. For careers in the application of mathematics or statistics, it is essential that a strong minor be selected in computer science or a field of application, such as business administration, psychology, physics or other sciences. Courses should also be taken to develop communication skills. A graduate degree may not be required, but students with talent should seriously consider graduate work.

## Preparation for Public Administration

A student should consult with the Department of Political Science to plan a program of courses in political science and related fields.

## Preparation for Religious Work

Most schools of religion recommend that a student have a broad, general education before starting professional training. The major and minor may be chosen from any area of study. A reading knowledge of at least one foreign language is essential.

## 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 arts-professional curricula are offered which enable the student to shorten the time required for the two degrees.

Combination curricula are offered in cooperation with the professional 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 professional 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 standing including two hours in PEG 100; 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 group requirements of the degree sought;
4. Meet the major and minor requirements of the general curriculum selected.

## Other programs

A combined arts-professional curriculum is also offered through the College of Education and Allied Professions.

## 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 shouid 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 electives 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 preprequisites, 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, 126 or 135, 136; 201 if 125
series is taken; 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 general education requirements for the particular degree program selected, PEG requirements and electives to total 122 hours. A science minor may be desirable.

## Preparation for Law

206 Williams Hall, 372-2030
All 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; 6 112 Hayes 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 to planning prerequisite courses for the Medical School Admission Test and for meeting the admission requirements of the medical school of the stu dent's choice.
Recommended course sequence
BIOL 204 and 205 (10)
CHEM 125, 126 or 135 and 136 (10) 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; general education group requirements for the degree sought; PEG requirements and electives. Total: 122 hours. Note: the science minor may be advantageous.

## Preprofessional

## Preparation

## Preparation for Engineering

270A Overman Hall; 372-2421
The two-year curriculum outlined below closely parallels the introductory course work 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 prem engineering program adviser early in tt. freshman year in order to plan a schedule to meet the requirements of the institution and branch of engineering in which he or she expects to receive a degree.

Finggineering is presently a high-opportucareer area, and a pre-engineering ram 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 specialities 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 aptitucle.
Recommended course sequence
MATH 131, 232, 233 and 332 (16)
CHEM 125, 126 or 135 and 136 (10)
PHYS 211, 212, 301 and 313 (14)
CS 101 (3)
CS 205 (3)
DESN 104 (3)
ENG 112 (3)
Electives

## Preparation for <br> Mortuary Science

503 Life Sciences Building, 372-8361
The Board of Embaimers and Funeral Directors of Ohio requires a minimum of 60 semester hours of general education to be eligible to register with the board prior to entering a college of mortuary nce. At least 30 hours must be in the wing 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, at least 3 hours of psychology and 3 hours of speech communication (offered in the department of interpersonal and public 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 Service Education can be obtained by writing to the agency at 201 Columbua 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 Bowling 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 IPCO 102 required, as part of the 60hour minimum requirement to enter. For e information, write to the American rd of Funeral Service Education, 14 Crestwood Drive, Cumberland, ME 04021.

## Preparation for

## Occupational Therapy

503 Life Sciences Building, 372-8361
Occupational therapy-an auxiliary medical service in which normal activities are used as remedial treatment in the rehabilitation of patients-is being used increasingly in hospitals, schools, rehabilitation centers and related institutions. Such therapy is prescribed by physicians and applied by trained therapists as part of the treatment of an adult or a child in the areas of orthopedics, psychiatry, tuberculosis, general medicine and surgery.

## Recommended course sequence for

 transfer to Ohio State.Students planning to attend any other professional school should consult an adviser.
BIOL 104, 331 and 332 (10)
CHEM 115 (4)
ENG 112 (3)
TECH 313 and 457 (6)
MATH 115 (3)
MRA 301 (2)
PHYS 201 (5)
POLS 101 (3)
PSYC 201 and 302 (7)
PSYC 303, 304 or 309 (3)
PSYC 403 or 405 (3)
SOC 101 or 202 (6)
Humanities (15)
PEG (2)

## Electives

In preparing for a career in occupational therapy, the student should complete two years of preprofessional courses, two years of academic instruction in an approved professional school and 10 months of clinical training.

## Preparation for Optometry

112 Hayes 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 program 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 pre-optometry are necessary before gaining admission.
Recommended course sequence:
(62 hours)
CHEM 125, 126, 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)
PEG 100 (2)
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

The requirements and recommendations. for entrance to schools of osteopathy are essentially the same as those for medical school.

## Preparation for Pharmacy

## 112 Hayes 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 five-year 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 University after one year.

A list of accredited colleges of phar-
macy 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)
PEG 100 (2)
Electives chosen from social sciences, literature and philosophy CHEM 125, 126 (10)
Some pharmacy schools require additional calculus.

## Preparation for

Veterinary Medicine
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 pre-veterinary 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 medicine in the United
States can be obtained from the American Veterinary Medical Assoication, 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)
PEG 100 (2)
CHEM 125, 126, 306, 308 (17) or 125 ,
126, 341, 341, 445 (23)
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

Arte-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 point average, a student may register in both the College of Education and Allied Professions and the College of Arts and Sciences for the combined degree as soon as eligible.
The student in the dual-degree program leading to the Bachetor 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 Allied Professions 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 dual degree 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;
2. meet the general education group requirements of both colleges;
3. earn a minimum of 142 semester hours for graduation (20 hours beyond the single degree requirement).

## Intracollege Curricula and Dual 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.
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
The student who holds a bachelor's degree in arts and sciences may become certified to teach in the public schools of Ohio with a four-year provisional certificate by fulfilling the state requirements for such certification. These requirements and degree-holder program applications are available in the progam advisement office of the College of Education and Allied Professions, 365 Education Building.
Several institutions including Bowling Green offer graduate programs whereby an arts and sciences graduate may take work leading both to certification to teach in the public schools and a master's degree. Announcement of such programs may be inspected in the College of Education and Allied Professions, 455 Education Building.

## Combined BaccalaureateMaster'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 que tative analysis, or both.

## Second year

A second-year student completes two semesters of physics and two semesters of organic chemsitry and finishes the requirements in social sciences and humanities as well as the physical education requirement. 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, kiretics, 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.
the final summer, the student would nally be expected to complete a formal thesis as part of the master of science program (plan l). 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.

## Other combined Baccalaureate-

## Master's programs

205 Administration Building, 372-2015
An undergraduate capable of maintaining high grades can take the undergraduate degree in the middle of the fourth year by carrying an average of 18 hours for seven semesters. The resulting total 126 hours is four more than the required minimum for the undergraduate degree. These four hours might be taken as graduate credit and followed by a full semester of graduate study. A candidate for a graduate degree may not become a candidate for a degree in an undergraduate college without the permission of the dean of the Graduate College.

# School of Art 

Thomas R. Hilty, M.F.A., director
116 Fine Arts Building
372.2786 or 372-2787

## BACHELOR OF PINE ARTS DEGREE

The School of Art is accredited by the National Association of Schools of Art and Design and offers several degree options in the 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 9 , include the completion of:

1. general education requirements; 2. 48 hours in the art core;
2. a major in either two-dimensional studies, three-dimensional studies or design studies, including:
a. 15 -hour specialization in either ceramics, computer art, crafts, drawing, environmental design, fiber/fabric, glass, graphic design, jewelry/metalsmithing, painting, photography, printmaking or sculpture.
b. 9 -hour art minor and 12 hours of support courses in art for studio majors; 15 hours of support courses in approved areas for design majors.

## General Education Requirements

## Group I: English 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 penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 11.)
## Croup it: Foreign language

## or cutural experience

Each student is required to demonstrate a proficiency in a language by one of the options listed below:

1. a two-year study of one language in high school: or
2. passing a proficiency examination in the language 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):

Note: Students not required to take foreign language courses numbered 101, 102, 201, 202, 211, 212 because of exceptions listed in numbers 1,2 or 3 above will need to take at least one "multicultural studies" course from the General Education Core (p. 10) to satisfy that requirement.
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, Italian, Latin, Spanish
Completion of FREN 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 military science needs to take more than the usual time to complete this degree.

## Group II: Science, Mathematics, Com-

 puter ScienceEach student must complete one course approved for laboratory credit listed in the College of Arts and Sciences advising handbook and one other course elected from astronomy, biology, computer science, chemistry, geology, mathematics, physics or physical geography (including GEOG 125, 126, 127, 213, 404).

## Group IV: Social Science

Each student must complete three courses, one or more from economics, ethnic studies, geography, history, political science, psychology or sociology. 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 literature area, American studies, ethnic studies, music, philosophy, popular culture, speech communication or women's studies. B.F.A. students are encouraged to elect a course in aesthetics, art criticism or film criticism, and will count two required art history courses in this area. Approved courses are listed in the College of Arts and Sciences advising handbook.

## Art Majors

120 Fine Arts Building, 372-2786
The School of Art offers studio majors in the areas of two-dimensional studies, three-dimensional studies, design studies and computer graphics. Each major requires completion of the art core, a 15hour specialization, a 9 -hour art minor (except for design) and 12 hours of support courses ( 21 for design). A student should consult each semester with the 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.
Art Core (48 hours)
Foundations: ART 102, 103, 112 (9)
Art History: ARTH 145, 146, two 400 level ARTH electives (12)
Design: ARTD 211 or 213 (3)
Studio: ART 205, 261; three from ART 277, 325, 371, 373; three from (design studio majors select one) ART 263, 365 or 366, 267 or 315, 320 or 321 (24); Design majors (18)

## Two-Dimensional Studies

Specializations (15)
Computer Art: ART 391, 392, 490, 491, elective
Drawing: ART 206, 305, 305, 405, 405
Painting: ART 372, 372, 471, 471, elective; or ART 374, 374, 473, 473, elective
Photography: ART 325, 425, 425, 470, elective
Printmaking: ART 277, 377, 377, 477, elective
Minor ( 9 hours, 3 courses in one area) Support Courses (12)
Senior Project/Portfolio (3)
Those students specializing in computer art must select their support courses from an approved list in consultation with their major adviser.

## Three-Dimensional Studies

Specializations (15)
Ceramics: ART 263, 363, 463, 463, elective
Crafts: ART 321, 363, 366; two of 267, 315, 320, 322, 365
Fiber/fabric: ART 365, 366, 465, 465 or elective, 466
Glass: ART 267, 315, 415, 415, elective

0velry/Metalsmithing: ART 320, 321, 421, elective
Sculpture: ART 361, 361, 461, 461, elective
Minor ( 9 hours, three courses from one area)
Support Courses (12)
Senior Project/Portfolio (3)

## Design Studies

Specializations ( 15 hours plus 9 hours of design core)
Graphic Design: ARTD 211, 319 (6); ARTD
311, 312, 411, 412, 413 (15); (213 in Art
Core-3)
Environmental Design: ARTD 213, 319 (6);
ARTD 313, 314, 419, 422, 424 (15); (211 in Art Core-3)

## Support Courses

A minimum of 21 hours must be elected from an approved list of courses in consultation with the School of Art design adviser.

## Senior Seminar

ARTD 414 (3)
Related design programs-A product design specialization is available in the College of Technology in cooperation with the School of Art. A major in design technology is also available through the College of Technology. A major in interior sign is available through the College of and Sciences.

## 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 Allied Professions and has the program approved by the School of Art B.F.A. teacher preparatory adviser.

In addition to the art core, the completion of a specialization in one area and the senior project/portfolio course, the following courses are required for teacher certification:
ARTE 252, 352, 353, 487; 2-3 hours of ARTE 470, 482, 483, 495; 10 hours of ARTE 492 and/or 497
Two crafts (ART) electives
SOC 101, PSYC 201, two social science electives, PHIL 204, a POPC elective, EDFI 302, 402 and 408, EDFI/EDC| 202, EDSE 311, IPCO 102

## Related Degree Programs

The School of Art sponsors a Bachelor of Arts program 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 Allied Professions, 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 course work.

# School of Mass Communication 

## 302 West Hall, 372-8349

Department of Journalism, 319 West Hall, 372-2076
Department of Radio-Television-Film, 322 West Hall, 372-2138

## The Field of Mass Communication

The study of mass communication encompasses all 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, videotext, corporate video and satellite transmissions. As a diversified profession, mass communication requires highly trained news reporters and editors for daily newspapers, weeklies, the wire services, radio and television; specialists in photojournalism; public relations practitioners, editors for a wide range of magazines; producers, directors and editors for televison and film; writers in special fields such as science, business, economics, education, medicine and politics; radio announcers and production experts; broadcast salespersons; audience researchers; and competent administrators to manage the editorial, advertising and business functions of publications, 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 and natural sciences; understand the social, political and economic roles of the mass media in a democratic sociely; be able to read intelligently the scholarly mass communication literature; have superb writing and thinking skills, and be proficient in the professional techniques demanded by employers.

## Majors

Students can major in one of the programs in the Department of Journalism or in one of the programs in the Department of Radio-Television-Film. Those choosing to major in one of the journalism programs may not also major in a radio-tele-vision-film 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 Radio-Television-Film.

## Campus Media

The BG News, the four-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 University Television Center contains public television stations 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 northwestern Ohio, broadcasts instructional television programs to elementary and secondary classrooms during the day and cultural and public affairs programs 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 for professional production experience in television.

The Closed-Circuit Instructional Television Office provides the campus community with telecourses and a variety of other educational television and film materiais used by academic department A campus-wide dual television cable sy tem carries commercial station programs and educational 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), broadcasts on 88.1 megahertz with 1350 watts. Programming consists of rock, jazz, classical and ethnic music, plus news, sports and public affairs programs. This noncommercial 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 halis on 680 AM.

Both WBGU and WFAL are organized operated according to professional 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 station WFAL and the University's FM station, WBGU. They may also participate in the feature and documentary productions of WBGU-TV.
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 Mass Communication occupies West Hall on campus. West Hall has recently undergone a $\$ 2$ million renovation designed to turn it into a modern mass communication laboratory. 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 laboratories classrooms dedicated to the teachof film. The lower floor contains still photography developing labs, printing labs and color labs, and the student yearbook. It also contains super 8 and 16 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, two 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 journalism honorary society. Two campus groups, the Benjamin Franklin Society and the Radio/Television News Association, are for students interested in magazine publishing and and broadcast journalism, respectively.

## 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 major to have a senior audit of his/her program during the junior year and 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 Mass Communication.

## Department of Journalism

The Department of Journalism is accredited by the Accrediting Council on Education in Journalism and Mass Communication. The department is a recipient of Readers' Digest Foundation funds, which pay travel and other expenses for students researching stories away from campus. Contacts with numerous professional organizations are maintained through individual faculty memberships. The Department of Journalism serves as secretariat for the Great Lakes Interscholastic Press Association (GLIPA), the high school press association serving portions of Ohio, Michigan and Indiana. The department also holds memberships in the Association of Schools of Journalism and Mass Communication.

## Bachelor of Science in Journalism

A candidate for the degree of bachelor of science in journalism must meet the following requirements in addition to those listed on page 9.

1. Be proficient in typewriting skills.
2. Complete approximately 58 semester hours of general education requirements, including 3 to 8 hours of English composition; 2 hours of physical education; demonstration of proficiency in a foreign language; 3 hours of a natural science laboratory course; 18 hours of social science courses including history, political science and economics; 15 hours of humanities and arts courses including A\&S 200 (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 general education requirements are listed in the Department of Journalism Requirements Sheet provided to incoming freshman and transfer students each year and available from the departmental office in 319 West Hall.
Foreign Language Requirement-Each student is required to demonstrate a proficiency in a language or language area by one of the options listed below:
a. having been graduated 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: Students not required to take foreign language courses numbered 101, 102, 201, 202, 211, 212 because of exceptions listed in numbers 1,2 or 3 above will need to take at least one "multicultural studies" course from the General Education Core (p.10) to satisfy that requirement.
GERMAN, RUSSIAN, EAST ASIAN LANGUAGES (CHINESE, JAPANESE) Completion of GERM 101 and 102 plus a minimum of six additional hours from GERM 100, 117, 118, 201, 202, 217, 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 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312.

ROMANCE LANGUAGES (FRENCH, ITAL(AN, LATIN, SPANISH)

## Option 1

FREN 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, 211 and 212; or
LAT 101, 102 and two of LAT 141, 142 or 201
SPAN 101, 102, 211 and 212.
A student may transfer at any point from option | to option II but not vice versa. If a student selects option II, all courses in that sequence must be completed subsequent to the first course in which the student is placed. 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 29 or 30 semester hours of journalism/mass communication courses, 14 or 15 hours of which are core journalism courses and the remainder of which are specific sequence courses and journalism electives. No more than 30 semester hours of journalism/mass communication courses may be counted towards a Bachelor of Science in Journalism degree. (Note: Courses taken in programs other than journalism, such as the radio-television-film program or the visual communication technology program, may count as part of the 30 semester hours allowed. Students should not enroll in mass commmunication courses in programs outside the Department of Journalism without permission of 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 300). 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 300 . Total hours earned and grade point average determine which journalism students are given preference. Students not majoring in journalism may find it difficult to gain admittance into many upper-division journalism courses, including JOUR 300. Non-majors may wish to consider enrolling in JOUR 301, Journalism Techniques for Nonmajors.

## Core courses in journalism required of all majors

(14 hours minimum)
JOUR 103, 300 and 402 (9)
HIST 323 (3)
JOUR 412 (2-3); 2 hours required, one of which must be with a campus medium

## Broadcast journalism

(15 hours)
RTVF (3)
JOUR 330, 331, 430 (9)
JOUR elective (3)
Note: Listed prerequisites for the above RTVF courses may not apply to journalism students who have completed JOUR 300. Students should check with their adviser before enrolling in RTVF courses listed as prerequisites for the above courses.

## Magazine journalism

(15 hours)
JOUR 303, 304, 404 (9)
JOUR electives (6)
News-editorial
(15 hours)
JOUR 302, 311, 312 (9)
JOUR electives (6)
Photojournalism
( 15 hours)
JOUR 206, 307 (6)
JOUR 302 or 303 (3)
JOUR electives (6)
Note: JOUR 407 and JOUR 305 are recommended as electives.

## Public Relations

( 15 hours of journalism courses and 9
hours of business courses)
JOUR 340, 380, 440 (9)
MKT 300 and 410 (6)
MGMT 305 (3)
JOUR electives (6)
Note: Two of the above three business courses may be applied to certain minors, in consultation with the siudent's adviser.

## Specialization: five sequences

In addition to other requirements, each journalism major chooses one of five areas of specialization called sequences. The news-editorial sequence is generally associated with training for reporting and editing positions on weekly or daily newspapers and the wire services.
Photojournalism combines skills in writing and photography to convey a message in words and pictures. Public relations includes inter-group commmunications and relating the interests of business, industry, government and public and private institutions to each other and to society. Broadcast journalism aims at competence in the electronic media of radio and television. Magazine journalism is concerned with the writing, editing and publishing of magazines and journals. A student interested in teaching should see the requirements for journalism certification in the College of Education and Allied Professions.

## Matriculation into journalism sequences

Before being admitted into JOUR 300, a student MUST:

1. complete at least 30 hours of course work consisting of general education requirements including ENG 112 and JOUR 103.
2. earn an overall grade point averag. of 2.7 in the abovementioned course work. The course work and GPA must be completed at the time admittance is sought into JOUR 300.
3. earn a minimum grade of C in JOUR 103.
4. pass a standardized test in English usage prepared by the Department of Journalism
5. officially matriculate into the chosen sequence by declaring a major near the completion of JOUR 300. Students must have an overall GPA of 2.5 before their major will be approved by the department. Public relations majors must have an overall GPA of 3.0 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 in every required journalism course. An overall GPA of 2.25 must be maintained for graduation.

6if transferring into the BGSU journalprogram, have a 2.5 grade point averin both.journalism and overall course work if JOUR 300 transfer credit is approved. The normal requirements for entry into JOUR 300 apply if a student does not receive transfer credit for JOUR 300. No more than 12 semester hours of course work in journalism will be accepted for transfer from junior colleges Transfer students must pass a standardized test in English usage prepared by the Department of Journalism. No more than 15 semester hours of course work in journalism will be accepted for transfer from any four-year institution.
NOTE: Students seeking entry into JOUR 300 who are not pre-journalism majors must meet all of the above-listed requirements. Pre-journalism majors have priority admittance into this class.

## Non-journalism electives

After completing their approximately 58 hours of required general education courses, their 29-30 hours of required journalism/mass communication courses and their 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 field of journalism/mass communicaStudents are encouraged to select these general electives carefully with the advice of their journalism adviser. General electives should be chosen with the goal of enhancing the student's overall education.

## Bachelor of Arts in Communication

## Radio-Television-Film

A candidate for the degree of bachelor of arts in communication with an emphasis in radio-television-film must meet the following requirements in addition to those listed on p .9 :

1. Complete the general education requirements for the Bachelor of Arts in Communication explained below.

## General education 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 ge 11.) IPCO 102, THEA 202 and IPCO are also required

## Group II: Foreign language or cultural experience

Each student is required to demonstrate a proficiency in a language or language area by one of the options listed below:

1. having been graduated 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: Students not required to take foreign language courses numbered 101 , 102, 201, 202, 211, 212 because of exceptions listed in numbers 1, 2 or 3 above will need to take at least one "multicultural studies" course from the General Education Core (p. 10) to satisfy that requirement.
GERMAN, RUSSIAN, EAST ASIAN LANGUAGES (CHINESE, JAPANESE)
Completion of GERM 101 and 102 plus a minimum of six additional hours from
GERM 100, 117, 118, 201, 217, 231,
331 and/or GERM 215, 216, 260; 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 100, 201, 202, 303, 315, 316, 317, 319, 331 and/or 311, 312.
ROMANCE LANGUAGES (FRENCH, ITALIAN, LATIN, SPANISH)
Option I
FREN 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, 211 and 212; or
LAT 101, 102 and two of LAT 141, 142 or 201; or
SPAN 101, 102, 211 and 212.
A student may transfer at any point from option I to option II, but not vice versa. If a student selects option II, all courses in that sequence must be completed subsequent to the first course in which the student is placed. 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 an approved list printed in the Communication Handbook.

## Group III: Mathematics and science

Each student must complete at least two courses selected from astronomy, biological sciences, computer science, chemistry, geology, mathematics, physics or physical geography (including GEOG 125, 126, 127, 213, 404), 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 three courses in two of these areas. Students may count two courses from their specialized program/support field in this group as appropriate. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.
Group V: Arts and humanities: art, literature (American, English or foreign), film, music, philosophy, popular culture, theatre
Each student must complete three courses in at least two of these areas from an approved list of courses. A list of courses approved for group $V$ requirements is printed in the College of Arts and Sciences Handbook.
Group VI: Cognate studies experience

- Students must complete, as specified by the nature of their specialized programs, six additional courses from at least two of the above groups.

2. Complete at least 30 hours in radio-television-film courses, 20 of which are core requirements.
3. Earn a grade of $C$ or better in all RTVF courses after RTVF 255 and 260 are completed.
4. Complete a support field of at least nine hours in one department other than radio-television-film. 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.

## Specialization: five sequences

In addition to other requirements, each radio-television-film major chooses one of five areas of specialization. In the television production sequence, students are exposed to theory and practice in the technical, electronic, artistic and logistical aspects of television production. Classes are divided into two parts: the theoretical basis through lectures and demonstrations, and laboratory sessions including hands-on experience. The radio production sequence is organized in a similar fashion, with a beginning course and an advanced course for individual and smallgroup endeavor. Students in the advanced course use the Universitylicensed station, WBGU-FM, as their workshop. In the film sequence, students study a combination of history and criticísm, as well as super-8 and 16 mm production. In the management and sales sequence, students combine classroom instruction with actual sales experience under the auspices of WFAL, the campus commmercial radio station. In the audience and programming research sequence, students learn to carry out the kind of research on which broadcast stations and other program suppliers depend to aid their decision-making.

## Matriculation into Radio-TelevisionFilm Sequences

Before being classified as a radio-televi-sion-film major, a student must:

1. complete at least 30 hours of course work consisting of general education requirements and RTVF 103 and 255.
2. earn an overall grade point average in the above-mentioned general education course work of at least 2.5 , and earn at least a 2.5 in RTVF 103 and 255.

To remain a radio-television-film major, a student must receive a grade of C or better in all RTVF course work. (Students are required to take all RTVF courses for a grade.)

Students transferring into the Department of Radio-Television-Film must have a 2.5 grade point average in both radio-tele-vision-film and overall course work. No more than 12 semester hours of course work in radio-television-film will be accepted for transfer from junior colleges. No more than 15 semester hours of course work in radio-television-film will be accepted for transfer from any four-year institution.

Core courses in Radio-Television-Film
RTVF 103, 255, 262, 263, 365, 366
Areas of Specialization
Television
RTVF 360, 460, 364, 468 (12)

## Radio

RTVF 360, 460, 368, 469 (10)
Film
RTVF 261, 264, 464, 466 (12)
Audience Research
RTVF 360, 460, SOC 369, 370 (12)
Sales/Management
RTVF 360, 460, 469 (Management), 469
(Promotion) (12)


# College of <br> Business Administration 

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Department of Accounting and Management Information Systems, Thomas G . Evans, Ph.D., Chair, 332 Business Administration Building, 372-2767 epartment of Applied Statistics and Dperations Research, James A. Sullivan, Ph.D., Chair, 344 Business Administration Building, 372-2363
Department of Business Education, David J. Hyslop, Ph.D., Chair, 242 Business Administration Building, 372-2901
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Department of Finance, Paul A. Mueller, Ph.D., Chair, 201 Business Administration Building, 372-2520
Department of Legal Studies, Bartley A. Brennan, J.D., Chair, 264 Business Administration Building, 372-2376
Department of Management, Peter A. Pinto, Ph.D., Chair, 3016 Business Administration Building, 372-2946
Department of Marketing, James S. West, Ph.D., Chair, 234 Business Administration Building, 372-2401
Department of Aerospace Studies, Lt. Col. Jon A. Bisher, Ph.D., Chair, 164 Memorial Hall, 372-2176
Department of Military Science, Lt. Col. John P. Debay, M.B.A., Chair, 151 Memorial Hall, 372-2476
Health Care Administration, Donald Boren, J.D., Director, 267. Business Administration Building, 372-8023.

Hospitality Management Program, Carl D. Riegel, Ed.D., Director, 369 Business Administration Building, 372-8713
International Business Program, Charles Chittle, Ph.D., Director, 312 Business Administration Building, 372-6868

## Program Philosophy

The goal of the undergraduate business administration degree program is to develop broadly educated business professionals. This goal is accomplished through a four year 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 American Assembly of Collegiate Schools of Business (AACSB). 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, worldwide dimensions and cultures other than one's own. 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 program of the College of Business Administration requires 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 American Assembly of Collegiate Schools of Business. 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 Gamma Sigma are to encourage and reward scholarship and accomplishment, to promote the advancement of education in the art 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 examination, page 15). 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 College

The College of Business Administration consists of eight departments of instruction in business administration. The eight departments-accounting and management information systems, applied statistics and operations research, business education, economics, finance, legal studies, management and marketing-offer 19 undergraduate areas of specialization and a comprehensive graduate program covering the major phases of business activity.

The following degrees and areas of specialization are offered:
College of Business Administration
Bachelor of Science in Business
Administration
Accounting
Administrative management
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
Operations research
Procurement and materials management
Production and operations management
Public and institutional administration
Secretarial administration Statistics
Bachelor of Science in Economics Economics
Associate in Applied Business
Two-year executive secretarial
Business administration-Education

## Study Abroad

The College of Business Administration offers an opportunity to enroll in a fiveweek 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. See page 19 for additional information.

## Academic Advising

Each student is assigned a faculty adviser in his or her area of specialization. Undecided pre-business students and those in general business are advised by the college advising staff in the Office of the Dean ( 371 BA ). The adviser helps students select courses most suitable for their specializations and discusses program requirements, career and educational goals, and job opportunities.

Students are responsible for meeting all graduation requirements. To facilitate student planning, degree audits indicating all unfuffilled graduation requirements are provided to all students each semester in which they are enrolied. After earning 75 hours, students may request a degree audit from the Office of the Dean.

## BACHELOR OF SCIENCE IN BUSINESS <br> ADMINISTRATION

All students who wish to pursue the Bachelor of Science in Business Administration degree will enroll in the pre-professional core (ordinarily during the sophomore year) prior to formal entry into the BSBA program. Admission to the BSBA program requires completion of the eight pre-professional core courses with a minimum grade point average of 2.25 .
Courses comprising the pre-professional core are ACCT 221-222, BA 203, ECON 202-203, MIS 200, and STAT 211-212.
In addition to successful completion of the pre-professional core with a minimum grade point average of 2.25, a candidate for the degree of Bachelor of Science in Business Administration must complete the general requirements for graduation listed on page 9 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 required to complete only three hours of English based on placement (ENG 112), three additional hours of nonbusiness electives are required. Additional hours will be required for graduation if ENG 112 is not completed within the first 60 hours. See page 11.

## Physical education

Generally each student is required to complete two hours of physical education activities courses (PEG 100), preferably during the freshman year. A maximum of two hours will be counted toward completion of the degree. See page 9 for exemptions to this general University requirement.

## College Requirements thematics

Each student is required to complete five credit hours in calculus. Unless stated otherwise in the area of specialization, a student may select either MATH 126 or MATH 131. 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 student is required to complete a three-hour communications course, IPCO 102.

## General Education Requirements

## Science/Mathematics/Computer Science

Each student is' required to complete six hours of science, mathematics or computer science beyond the college mathematics requirement. Courses used to satisfy this requirement may not have the same course prefix. At least three credit purs must be from the natural sciences. ist 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 six hours from the social and behavioral sciences. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

## Humanities

Each student is required to complete six hours of humanities electives. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

## Worldwide Dimensions/ Multicultural Studies

Each student is required to complete six hours of electives from the area of worldwide dimensions and multicultural studies. At least three hours must be taken in the area of worldwide dimensions. 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 four to seven additional hours (depending on ENG placement) in non-business fields. An academic adviser assists each student in selecting courses which broaden or deepen the student's general education. Courses chosen must not be in Business Administration. Credit received for CAO 131, CSP 480, EDCI 100, and EDCI 121 will not count toward the hours required for a BSBA.

## 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. Ordinarily a student would enroll in 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.

## 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 or 401; 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. 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.

## Free Electives

The remainder of the academic program ( $3-12$ 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 academic work in any department of the University in meeting this requirement.

## THE CURRICULA

The pages which follow describe the specific requirements 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:
First year (32 hours)
ENG 111 and/or 112 (3-6)
MATH 126 (5)
or
MATH 131 (5)
PEG 100 (2)
General education courses and/or electives (19-22)
Second year ( 30 hours)
MIS 200 (3)
STAT 211 and 212 (6)
ACCT 221 and 222 (6)
ECON 202 and 203 (6)
BA 203 (3)
General education 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 completion of FIN 300, MKT 300, MGMT 300 and 360, and OR 380)
Area of specialization (15-24)
Electives (9-18)
Although this represents the program for a typical student, the areas of specialization have more precise requirements. Refer to the areas of specialization in the following pages for the specific requirements in each area.

## Accounting

332 Business Administration Building, 372-2767
The curriculum in accounting is designed for the student who wishes to prepare for a career as a professional accountant with industry, government, nonprofit organizations or for public accounting practice as a CPA. Opportunities exist to work in such specialized areas as auditing, managerial reporting, cost, governmental systems and management advisory services. Students interested in specializing should consult their academic advisers for proper course selection.

## Statement of ObjectivesAccounting 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 weil-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 the 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 fieldauditing, financial accounting, managerial accounting, and tax accounting-and to acquire knowledge of general information system concepts. The program recognizes the need for adequate training to fulfill entry-level job requirements and to aid 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 totalcareer emphasis, students are expected to be motivated and well-qualified. They may expect upperlevel instruction from full-time professors who are regularly involved with course development, practical accounting issues and problems, and current professional and academic research in accounting.

## CPA Examination and

## Licensing Requirements

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, which may include 3 hours of computer-related training. Graduation from BGSU with an area of specialization in accounting fulfills these requirements, but additional elective courses in accounting may be desirable. Students may sit for the CPA examination (given in May and November) if they are within 80 days of graduation.

To receive the CPA certificate and license to practice in Ohio, a candidate also must complete two years in public accounting or four 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 the CPA Examination Processing Center, 545 Fifth Avenue, Suite 405, New York, NY 10017 (telephone 1-800-CPA-EXAM). 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 (CIA) examination is available from the Institute of Internal Auditors, P.O. Box 1119, Altamonte Springs, FL 32701.

## Matriculation into the Accounting Area of Specialization

Students who plan to obtain the bachelor of science in business administration degree with an area of specialization in accounting should enroll in the preaccounting program within the College of Business Administration. To be admitted as a candidate for the bachelor of science in business administration degree program with an area of specialization in accounting, 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.
3. complete ACCT 221 and 222 with a grade of $C$ or better in each.

The specific requirements for an area of specialization in accounting are as follows:
Third year - ACCT 321, 322, 331, 332, 360 (MIS
360 may be substituted for ACCT 360 by students who also have MIS as an area of specialization).
Fourth year - ACCT 441, 451
Students must attain a grade of C or better in all of the courses specifically required for the area of specialization. They also must take ECON 302 as part of the professional core.

Students planning to take the CPA exam are advised to take LEGS 401 rather than LEGS 301 as part of the professional core.

## Administrative Management

242 Business Administration Building, 372-2901
This program is designed for the student who wishes to specialize in the planning, organizing and controlling of office work. This curriculum introduces the student to the administrative functions of office systems and procedures, records managment, word and data processing, and office organization and management. Graduates of the program may obtain employment in a variety of office occupations involved in information processing or management.

The specific requirements for an area of specialization in administrative management are as follows:
First year - BUSE 111
Second year - BUSE 202
Third year - BUSE 302, 335
Fourth year - BUSE 455, MGMT 361
A student with one or more years of typing or keyboarding credit will have the keyboarding requirement (BUSE 111) waived. In place of the keyboarding course, the student must take MGMT 461.

## Business Pre-law

253 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, 490, and three addi-
tional hours in LEGS at the 300 or 400 level.
A\&S 200 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 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.

## conomics <br> 1 Business Administration Building, 372-2646

The student specializing in economics selects an area of concentration within the discipline. Areas of concentration are programs of related courses designed to provide the student with those occupational skills in each specialized field sufficient to analyze its unique, technical economic problems; a foundation upon which the future executive can develop capacities to formulate and analyze policy; and a background ideally suited for advanced professional training in law, administration or business, or for graduate students in economics. Students are encouraged, in consultation with their academic advisers, to select an area of concentration related to their individual career goals.

Specific requirements for an area of specialization in economics are as follows:

All economics majors and all students with an economics specialization 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.

Each student must complete a 15 -hour ncentration in economics; examples of - ssible concentrations are listed below.

ECON 302 or 303 must be taken in the professional core.
ECON 400 or 401 or 402 must be taken.

ECON 304 cannot be counted toward the area of specialization in economics without permission from the student's adviser.

## Areas of concentration (15 hours)

Two examples of areas of concentration are listed below. These are illustrative. Others can be designed with the advice and consent of your adviser.

## Business Economics

ECON 302 or 303 (whichever is NOT counted in the professional core)
ECON 400 or 401 or 402
ECON 404; 471, and one Economic elective
Labor economics and relations
ECON 302 or 303 (whichever is NOT counted in the professional core)
ECON 400 or 401 or 402
nine hours selected from the following:
ECON 321, 323, 422, 423, 424

## Other programs

The College of Business Administration also offers the bachelor of science in economics. Programs in economics also are ailable through the College of Arts and lences and the College of Education and Allied Professions.

## 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. Arèas 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 opportunities associated with this specialization include but are not restricted to investment banking, commercial lending, retail bank management, credit management, cash management, capital budgeting and investment analysis, securities analysis, portfolio management, real estate and securities brokering, risk management, pension and employee benefits management, and life, property, and casualty insurance brokering.

The specific requirements for an area of specialization in finance are as follows: Third year
FIN 420, 430, 440, and 450
Fourth year
Any four of ACCT 321, 322, FIN 422, 424, 426,
$428,435,445,447,455$
All 400 level Finance courses require a grade of C or better in any prerequisite Finance courses.

## General Business

371 Business Administration Building, 372-2747
This curriculum is for students who desire a broad business background with a minimum of specialization or who desire a program tailored to specific needs.

The specific requirements for an area of specialization in general business are as follows:

The student must select at least 18 hours but no more than 24 hours from a list of approved courses in ACCT, BUSE, ECON, FIN, MGMT, MIS, MKT, OR and/or STAT with no more than nine hours in any one area. A list of approved courses for the area of specialization is available in the College of Business Administration office.

General business may not be combined with any other area of specialization to form a double area of specialization.

## Health Care <br> Administration

This is an area of undergraduate studies which will provide a variety of career opportunities in community hospitals, extended care facilities, 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 health care administration are as follows:

## Third year - BA 325

Fourth year - LEGS 425, BA 429*, and 3 hours from a list of approved electives
In addition to the area of specialization, the student must complete a management concentration (a minimum of 9 semester hours) in selected areas of business management, such as staff planning and research, human resource management, accountancy, and general supervision. (These courses are taken in the junior and senior years.)

In the fourth year, students are expected to take LEGS 425, BA 429, and three hours selected from a list of approved electives. The list is available from the director of Health Care Administration. Students must consult with their adviser prior to selecting a course to fulfill the elective component of the health care administration specialization.

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

369 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. This preparation is complemented with specialized business courses in hospitality management and elective courses in food service management. Graduates typically start their careers as management trainees, assistant managers or supervisors in hotels, clubs, restaurants, cafeterias, catering firms 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 course work, students are required to complete a minimum of 800 clock hours of practical work experience in the hospitality industry. Study in a foreign language is particularly recommended as a means of fulfilling the general education humanities and/or multicultural studies requirement.

The specific requirements for an area of specialization in hospitality management are as follows:

## Third year

BA 310
HOEC 210
Fourth year
BA 480, FIN 450, HOEC 331, MGMT 452, and MKT 405
Any one of LEGS 450, FIN 420, HOEC 437
Students are required to complete 800 hours of practical work experience. Contact the program office for details.

## Human Resource Vuanagement

3018 Business Administration Building, $372-2946$
This curriculum prepares a student to enter the field of human resource management in either a staff position in personnel administration or a line position in management. Foundation courses examine theories of individual behavior, motivation, leadership, group formation and development, and organizational structure and processes. Within this area of specialization, a student elects one of two human resource management concentrations: personnel management or organizational development. Area concentrations develop advanced knowledge in such areas as staffing, performance measurement, job evaluation, commpensation, training, group development, organizational diagnosis, and organizational change and development. After choosing an area of concentration, a student selects either a supporting field. Area electives may be used to develop a supporting field that complements the chosen area of concentration or the student may choose either production management or purchasing management for the supporting field. In some cases, students may be permitted to substitute courses in legal studies, economics or industrial psychology for the area electives after receiving approval from their individual advisers.

Students are encouraged to enroll in the human resource management program as freshmen. However, to be admitted officially to the program, students must have completed the equivalent of 60 credit hours with a cumulative grade point average of at least 2.5. Students not meeting this requirement may petition the management department for conditional acceptance to the program.

The specific requirements for an area of specialization in human resource management are as follows:
Third year - MGMT 461

Fourth year - MGMT 463
Area of concentration: MGMT 450 and 451 or 465 and 468
Supporting field: MGMT 330 and 430, or 442 and 445 , or 450 and 451 , or 465 and 468, or electives approved in advance by the faculty adviser.
See your academic adviser for more detailed information about the requirements.

## Industrial and Labor Relations

## 3004D Business Administration Building, 372-6868

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 or 450 (students who take MGMT 361 cannot take MGMT 450 and/or 451).
Fourth year
Three courses chosen from the following, but no more than two courses in any one field: ECON 323, 422, 423; LEGS 414, 429; MGMT 365, 451, 461 LEGS 419

## International Business

312 Business Administration Building, 372-6868/372-2646
This curriculum is designed to provide students with an international perspecitve 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 - ECON 351, POLS 372, BA 390.
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 student's adviser. These courses may be taken during the third or fourth year.

Careful planning of the electives permits a wide range of specializations. A student may combine basic business studies with language, science or economics. 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 later career stages.

A foreign language is strongly suggested but is not required.

## Management InformatiopSystems

332 Business Administration Building, 372-2767
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, marketing, operations research or statistics.

## Matriculation into the MIS area of specialization

Students who plan to obtain the bachelor of science in business administration with an area of specialization in management information systems must be admitted to the program. The department will accept applications for admission to the MIS program during the last month of each semester. All applicants must satisfy the following criteria in order to be considered for admission.

1. Completed at least 51 semester hours by the end of the semester in which the application is processed.
2. Completed the English requirements (111 and/or 112), the math requirements ( 126 or 131), and CS 260.
3. Completed ACCT 221, 222, MIS 200, STAT 211, 212, ECON 202, 203, and BA 203 with a composite grade point average of at least 2.25
4. Earned at least a C in MIS 200 and CS 260, and average at least a 2.5 in these two courses.
5. Achieved an overall GPA of at least 2.5 for all courses (taken at Bowling Green State University and transferred to Bowling Green State University).

In order to ensure that the admitted students will obtain quality instruction, admission will be on a space-available basis. The available space in the program will be filled by automatically admitting first all applicants with a GPA of 3.5 or higher. If space is still available, then all remaining applicants will be admitted in order of their overall averages (starting with the highest), until space is no longer available. If not admitted, a denied applicant may apply in a later semester (and then will again be ranked using his/her current GPA).

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 of them.
Third year - CS 360, MIS 360, 370
Fourth year - MIS 412, 421, 471, 479

## arketing

Business Administration Building, 372-2041
Marketing consists of a wide spectrum of activities that involve the movement of products and services from producers to intermediaries to final customers. Not surprisingly, therefore, career opportunities in marketing are numerous as well as diverse, including such areas as advertising, brand management, industrial marketing, international marketing, marketing research, retailing, professional selling, sales management and wholesaling/distribution management. Accordingly, the curriculum offered by the marketing department is designed to acquaint the student thoroughly with the broad field of marketing and to allow focused study in one or more narrower sub-fields, depending on the student's interest.

In addition to the MKT 300 course in the Professional Core, each BSBA student selecting marketing as an area of specialization is required to take MKT 402 and 420 (normally in the junior year) and MKT 460 in the senior year. Additionally, each student selecting marketing as an area of specialization must take three more MKT courses (normally in the senior year) selected from the following list: MKT $400,405,410,411,412,421,430,436$,
, 442, and 450 . Students who have signated a BSBA marketing specialization must achieve a $C$ or better in each course they take as part of that specialization.

The three marketing electives chosen should be consistent with and contribute to the attainment of the student's career objectives. For example, students interested in career opportunities in advertising should consider MKT 410, MKT 411 and MKT 412. Students interested in career opportunities in retailing would be advised to select MKT 410, MKT 430 and MKT 436. Career opportunities in professional selling/sales management would call for MKT 440, MKT 442 and MKT 450. Finally, an interest in marketing research would suggest MKT 421 as one of the marketing electives. The possibilities are numerous. Accordingly, each student should meet and maintain contact with .his or her marketing faculty adviser throughout their program of study.

## Operations Research

344 Business Administration Building, 372-2363
This curriculum is for students with good mathematical backgrounds who wish to prepare for careers in which mathematical and scientific techniques will be used to $p$ solve business, social and other Jlems. This curriculum also provides an excellent preparation for graduate study in operations research, management science and related disciplines.

Operations research, mathematics and statistics requirements for the area of specialization in operations research are: Operations Research: OR 480, 482, 485 and one operations research course selected from OR 487, 488, 489
Mathematics: MATH 131, 232 and 332
Statistics: STAT 311 or STAT 414 or one course from STAT 402*, 404*, 406*, $410^{*}, 412^{*}$.
Note that MATH 131 must be taken in place of MATH 126 to satisfy the College of Business Administration mathematics requirement.
*Prerequisites are STAT 315 or MATH 441 or consent of instructor.

## Procurement and Materials Management

3018 Business Administration Building, 372-2946
This curriculum is for students who are interested in the field of procurement (or purchasing) and materials management. The course of study includes an integrated approach to the movement of goods from the supplier (vendor) to the final customer. The procurement/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 enroll in the procurement and materials management program as freshmen. However, to be admitted officially to the program, the student must complete the equivalent of 60 credit hours or more with an accumulative grade point average of at least 2.5 . Students not meeting this requirement may petition the management department for conditional acceptance into the program.

The specific requirements for an area of specialization in procurement and materials management are as follows: Third year - MGMT 330
Fourth year - MGMT 430, 439, 442, and 445 One of LEGS 440, MGMT 461, DESN 314 MKTG 402 (3)
See your academic adviser for more detailed information about requirements.

## Production and Operations <br> Management

3018 Business Administration Building, 372-2946
Students interested in a field of production and operations management should consider this specialization. This curriculum deals with methodologies for developing the most economical mix of materials, energy, human resources and capital equipment inputs to create desired goods and services. This function in a typical manufacturing or sevice organization is responsible for designing, operating and controlling a productive system.

Students are encouraged to enroll in the production and operations management program as freshmen. However, to be admitted officially to the program, the students must complete the equivalent of 60 credit hours or more with an accumulative grade point average of at least 2.5 . Students not meeting this requirement may petition the management department for conditional acceptance into the program.

The specific requirements for an area of specialization in production and operations management are as follows:
Third year - MGMT 441
Fourth year - MGMT 442, 445, and 449
MGMT 330 and 430 or
MGMT 361 and 461 or
Two courses ( 6 hours) from ACCT, MIS, CS, STAT, or OR with prior approval from the academic adviser.
See your academic adviser for more detailed information about requirements.

## Public and Institutional Administration

323 Business Administration Building, 372-0221
This program has an interdisciplinary curriculum keyed to management and administration in public and non-profit institutions. In addition to the general business courses taken by all candidates for the BSBA 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 non-profit 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 full 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 specialization in public and institutional administration are as follows:

First or second year
Students who have not had a strong course in government in high school are recom-
mended to take a political science course such as POLS 201 as one of their social and behavioral science general education courses.
Third and fourth years
POLS 221
MGMT 361
ECON 331
ECON 436
One 300 or higher level course selected from courses in the optional study areas or approved by adviser from courses in business, economics or political science.

## Ophional study areas (3-12 hours)

Each student will select at least one course from the following options to complete the area of specialization. Additional courses can be taken as elective courses.

## Administration

MGMT 330, 463
ECON 423
ACCT 423 (ACCT 321 and 322
prerequisites)
Policy Analysis
POLS 302, 431
ECON 321, 447, 447
LEGS 425, 431
Criminal Justice
LEGS 340
SOC 341, 441, 442
Urban Studies
ECON 460,462
POLS 330, 331
Mass Media and Public Opinion
JOUR 103, 340, 433, 435
POLS 341, 342
JOUR 103

## Secretamal

Acministration
242 Business Administration Building, $372-2901$
This curriculum is for students desiring to prepare for administrative level secretarial responsibilities in business or industrial establishments, professional offices or government agencies. The student develops competency in secretarial skills, office procedures and management, word processing, data processing, communication and decision making.

The specific requirements for an area of specialization in secretarial administration are as follows:
Second year - BUSE 202, 210
Third year - BUSE 302, 311, 314
Fourth year - BUSE 335, 401
A student with insufficient or no preparation in shorthand or typewriting must eleat the beginning or intermediate course.

## Statistics

344 Business Administration Building, 372-2363
This curriculum is for the student who is interested in a career in statistical analysis and research in government or business. It is an excellent preparation for graduate study in statistics or any disci-
pline that utilizes a quantitative component.
Statistics and mathematics require-
ments for the area of specialization in statistics are:
Statistics: STAT 315, STAT 402, and three statistics courses selected from STAT $404,406,410,412,414$ with at least one of the three being STAT 406 or STAT 410
Mathematics: MATH 131, MATH 232, and MATH 233 or MATH 332
Note that MATH 131 must be taken in place of MATH 126 to satisfy the College of Business Administration mathematics requirement.
Recommended electives: CS 101, MATH
441, 442 and 432, ECON 402, OR
$480,482,485,487,488$ and 489 . For further information, a student should consult an adviser.
STAT courses are listed under "Applied Statistics." See page 164.

## Other Programs

Two programs in statistics are offered by the College of Arts and Sciences.

## BACHELOR OF SCIENCE <br> IN ECONOMICS

3001 Business Administration Building, 372-2646
This flexible program is especially suited for the student who wishes to combine a major in economics with concentrated study in one or more other disclipines. The program can easily be adapted to accommodate a major in economics and in a cognate field and hence it is ideally suited for those seeking a dual major in sociology, political science, history, mathematics or psychology. Students who wish to combine a major in economics with one in such functional fields of business as accounting, finance, marketing or management will find that the bachelor of science in economics also permits maximum freedom for the individual's study of business applications. This program is designed to provide students with a meaningful educational experience that stresses professional training in economics, but which recognizes the multidimensional demands placed upon practicing economists in a constantly changing society. It seeks, through an adaptabie structure, to provide the student with the necessary training for employment in a wid variety of occupations in business or go ernment in which the skills of the economist are especially useful, or for continued study in professional schools or at the graduate level in econemics or business.
A candidate for the bachelor of science in economics must complete the general requirements for graduation listed on page 9 and meet the group 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 elec. tives are required. Additional hours will be required for graduation if ENG 112 is not completed within the first 60 hours. See page 11. 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 required. Details are available in the Ea nomics Department Office.

## Multicultural Studies

h student is required to complete hours from the area of multicultural studies. An approved list of courses satisfying these requirements is available in the College of Business Administration office.

## Mathematics, science, and quantitative measurements

Each student is required to complete MATH 126 or MATH 131, STAT 211 and 212 and a three-hour course in natural sciences plus $3-6$ hours from MATH (except 241,242 , or 243 ), CS, MIS, or the biological and physical sciences. Students are strongly urged to take MATH 131 rather than MATH 126.

## Social and behavioral sciences

Each student is required to complete ECON 202 and 203 plus 6 hours of social or behavioral sciences outside ECON. An approved list of courses satisfying these requirements is available in the College of Business Administration office.

## Humanities

Each student is urged to complete PHIL 103 or 303. Eight hours of credit must be earned in the areas of ART, foreign languages, literature, music, PHIL and THEA. A list of acceptable courses is available in the Department of Economics office.

## ajor and Cognate Concentration

Each student is required to complete a major in economics consisting of ECON 302, 303, 473, three hours of quantitative economics (ECON 400, 401 or 402) and 15 additional hours of ECON or approved related courses. ECON 304 cannot be counted toward the requirements for the economics major without permission from the student's adviser. To complete the professional area of study a cognate concentration of 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.

## ASSOCIATE IN APPLIED BUSINESS

242 Business Administration Building, 372-2901
A student interested in secretarial administration may prefer a shorter program than the four-year curriculum leading to the bachelor of science in business administration. Upon completion of this two-year executive secretarial program, the student receives the associate in applied business degree. If students should decide to continue their education after completing one or two years of this program, they may apply full credit for all courses satisfactorily completed toward the four-year degree program in secretarial administration.

A candidate for an associate in applied business degree must complete the general requirements listed on page 11 and complete, at Bowling Green immediately before graduation, at least 30 of the 62 hours required.
First year (31 hours)
ENG 111 and/or 112 (3-6)
PEG 100 (2)
BUSE 101, 111, 202, 210, 213, 215, (18)* Electives (5-8)
Second year ( 31 hours)
BUSE 240, 302, 311, 314, 321, 335, 401 (19)
ACCT 220 or 221 (3)
ECON 200 or 202 (3)
LEGS 301 (3)
BA 203 (3)
Suggested electives include IPCO 102, ENG 207, SOC 101, ECON 203, HDFS 105, POLS 201, PSYC 201, humanities, mathematics and sciences.
*A student with two semesters of high school typewriting and/or shorthand should enroll in BUSE 210 and/or BUSE 215. Those who choose to enroll in lower level courses will not receive credit toward graduation. A student who enrolls in the advanced courses in typewriting or shorthand must substitute electives for the beginning courses to complete a minimum of 62 hours for graduation.

## Other Programs

A four-year program in secretarial administration is offered by the College of Business Administration leading to the bachelor of science in business administration degree. Other two-year degree programs are offered by Firelands College.

## 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 adminstration 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 Allied Professions 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 comprehensive major in 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 Allied Professions and participate in a semester of professional concentration which includes student teaching (BUSE 497).
A student interested in teaching business or marketing education in high school should consult with the Department of Business Education in planning the program.


# College of Education and Allied Professions 

## Office of the Dean

Roger V. Bennett, Ph.D., dean, 444 Education Building, 372-7403
Donald Chase, Ph.D., associate dean, 444 Education Building, 372-7402
Patricia L. Reed, Ph.D., assistant dean, 444 Education Building, 372-7401
Larry D. Wills, Ph.D., assistant dean, 455 Education Building, 372-7407

## Office of Field Experiences

Margaret Ishler, Ed.D., director of field experience and standards compliance, 318 Education Building, 372-7389
Patricia Folkerth, Ph.D., assistant director, 318 Education Building, 372-7389

## Office of Undergraduate and Graduate Student Services

 ry D. Wills, Ph.D., assistant dean, 455 Education Building, 372-7407
## Office of Program Advisement and Teacher Certification

Jane Wood, M.S., director, 365 Education Building, 372-7372

## Schools and Departments

School of Health, Physical Education, and Recreation, Ronald Russell, Ph.D., acting director, 220 Memorial Hall, 372-2334
Department of Applied Human Ecology, Deanna Radeloff, Ph.D., chair, 202 Johnston Hall, 372-2026
Department of College Student Personnel, Carney Strange, Ph.D., chair, 332 Education Building, 372-7388
Department of Educational Administration and Supervision, Eugene Thompson, Ed.D., chair, 515 Education Building, 372.7377

Department of Educational Curriculum and Instruction, Robert Oana, Ed.D., chair, 529 Education Building, 372-7314
Department of Educational Foundations and Inquiry, Trevor J. Phillips, Ph.D., chair, 550 Education Building, 372-7305
Department of Special Education, Edward Fiscus, Ph.D., chair, 451 Education Building, 372-7358

## Aims and Purposes

The College of Education and Allied Professions has two primary purposes: to provide course work 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, child and family development, child and family community services, restaurant and institutional food service management and dietetics.

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 fieldbased professional experiences.
The College of Education and Allied Professions 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 Allied Professions. To qualify for any of these degrees, a candidate must complete the requirements listed on page 9, complete 42 hours of general education as indicated on page 92, 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 Allied Professions. Unless otherwise noted, the areas indicated are majors only.
American Studies
Aquatics (minor only)
Art (non-certifiable minor also available)
Athletic coaching (minor only)
Athletic training (minor only)
Bookkeeping and basic business (minor only)
Business education

Child and family development (minor also available)
Child and family services
Communication disorders
Dance (minor also available)
Dietetics
Early childhood education
Elementary education
Elementary/special education (Dual Program)
Environmental education (minor only)
French
German
Health education (minor also available)
Home economics (minor also available)
Industrial technology education (minor also available)
Latin
Marketing education
Music (minor also available)
Philosophy (minor only)
Physical education (three programs available) (minor also available)
Reading language arts (minor only)
Recreation (three options available) (minor also available)
Restaurant and institutional food service management
Russian
Sales communications (minor only)
Secondary education
American studies
Biological sciences
Chemistry
Communications
Computer science
Earth science
Economics
English (minor also available)
Environmental science
General science (minor only)
Geography
History
International studies
Journalism
Mathematics (minor also available)
Physics
Political science
Psychology/Sociology
Science comprehensive
Social studies
Spanish
Special education
Developmentally handicapped
Hearing impaired
Multihandicapped
Severe behavior handicapped

Special education (minor only)
Specific learning disabled
Sport Management (major only; five options available)
Stenography and typing (minor only)
Endorsements/Validations Leading to
Certification Offered in the College of
Education and Allied Professions
Adapted physical education
Driver education
Elementary school physical education
Gifted education (graduate)
Pre-kindergarten
Reading (graduate)
School nurse

## College Admission

Students accepted by Bowling Green State University may enroll in the Coilege of Education and Allied Professions when they have:

1. formally declared their desire to major within 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 Allied Professions; and
4. earned at least a 2.0 grade point average if transferring from another BGSU college.

## College Retention

## Non-Certification Programs

Students registered as majors in non-certification programs will be considered full members of the college when they have:

1. completed ENG 112;
2. completed IPCO 102 with a C or better; and
3. attained a 2.0 BGSU accumulative grade point average.

## Teacher Certification Programs

Students registered as majors in teacher certification programs will be considered full members of the college when they have:

1. completed ENG 112;
2. completed IPCO 102 with a C or better;
3. completed EDCI/FI 202 or a program alternative accepted by the college with a $C$ or better;
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 be designated "pre-education" and will not be permitted to enroll in the methods courses indicated on program area checklists.

Pre-education students will be reinstated as full members only upon completion of the above criteria.

## 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 on pages 101-103 of this catalog.

## Due process for academic decisions

The College of Education and Allied Professions 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 Program Advisement and Teacher Certification Office 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: appeais 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 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, a student may file an appeal with the chair of the department in which the course was taught. Each department follows its own appeals procedure which is consistent with the recommendations of the Faculty Senate.
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 Allied Professions-faculty advising and college office advising.

Upon enrolling in the college, each st dent 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, 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 faculty 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 available in the University or college offices and the Undergraduate Catalog, and to meet the established graduation and/or $\rightarrow$ certification requirements. Program revi sion, certification changes and shifts in the demands of the marketplace support a close adviser/student relationship.

## Degree audit

All 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 usuaily 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 page 91 ), or 3) when a student is following a set of degree requirements that no longer meets Ohio teacher certification standards (Since the State Depa ${ }^{-6-x}$. ment of Education has the authority to change certification requirements at any time, students may be required to complete additional requirements for certification.).

All candidates seeking Ohio teacher tification must complete the Applican(s) for Certification. These applications and directions for completing them are available from student teaching supervisors and/or the Program Advisement and Teacher Certification Office. Completed applications and money orders should be submitted to 365 Education Building by the end of the second week of the student's final semester 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-Kindergarten

A graduate completing the early childhood major or the child and family development major, possessing a 2.5 accumulative grade point average, and successfully completing the state-prescribed examination is eligible for a prekindergarten certificate.

## Elementary/Kindergarten Primary

A graduate completing the elementary ucation major, possessing a 2.5 acculative grade point average and sucCessfully completing the state-prescribed 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 also be eligible for a K-3 certificate. Students pursuing a K-3 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 state-prescribed 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, business education, chemistry, communications, computer science, earth science, economics, English, general science, geography, health, history, home economics, journalism, mathematics, music, physical education, physics, political science, psychology/ sociology, sales communication, science comprehensive, social studies, stenography and typing. Elementary education majors desiring high school certification must complete the subject area major or minor and a secondary methods course.

## 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 from kindergarten through the twelfth grade.

## Special for Education of the Handicapped

A graduate completing one of the following majors-developmentally handicapped, hearing impaired, multihandicapped, severe behavior handicapped, specific learning disabled-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 state-prescribed test. Communication disorders majors are not eligible for certification as speech and hearing therapists until the appropriate master's degree is also successfully completed.

## Vocational

A graduate completing a marketing education, home economics 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 state-prescribed test.

## Planned Program (Graduation without certification)

Some students in the College of Education and Allied Professions 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 or find they are unable to meet all requirements for certification. To accommodate such students, the college has a plan whereby students 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 official transcript in the Registrar's Office is stamped "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. 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 Allied Professions who desires a second degree from the College of Health and Human Services, College of Arts and Sciences, College of Business Administration or College of Musical Arts 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 before 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.

## General Education

The College of Education and Allied Professions has a strong commitment to general education and consequently requires all candidates for baccalaureate degrees to demonstrate, through satisfactory completion of a minimum of 42 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 computation, critical thinking and conflict resolution.
2. achieved an understanding of the humanities and arts, the natural sciences, the social and behavioral sciences, and cultural studies; and
3. experienced personal development through integration of physical development with the understanding of self and relationships to others.
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 integration will be incorporated in the student's personal development.

Of the 42 hours of general education required, 36 must be completed from the five categories indicated below; the minimum number of hours in each category is also specified. The remaining six hours may be selected from course work offered in any of the departments listed in any of the five categories and/or from courses approved by the College of Education and Allied Professions. To date, the additionally approved courses are RED 226 and RED 210, and PEP 356 and 360. it should be noted that no single course can be used to meet requirements in more than one category and that some programs may require more than the minimum number of hours in any given category.

The following categories and minimum hours are required:

## I. Communications and Physical Education

Minimum Total: 8 semester hours
A. Each student must satisfactorily complete ENG 112 (3); a penalty is imposed if ENG 112 is not completed befodre the junior year. (See page 11).
B. Each student must complete IPCO 102 (3).
C. Each student must complete two physical education activities courses (PEG 100). (See page 9).

## II. Natural Science/Mathematics

Minimum total: 9 semester hours
A. Each student must complete one of the following natural science courses: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 115, 116, 125, 126, 1.35, 136; GEOG 125; GEOL $100,104,105,205$; PHYS 101, 201, 202, 211, 212; or any other natural science course that is approved for the core at a later date.
B. Each student must also complete two more courses from the areas of natural science or mathematics or computer science. Acceptable mathematics courses are $115,116,120,124,125,126,128$, 130, 131, 232, 247. Acceptable computer science courses are 100 and 101. Acceptable natural sciences include any course listed in A. above or any other course from BIOL, CHEM, GEOL, PHYS, ASTR, or BUSE 101, or PEP 230. NOTE: All teacher education students must include at least one college-credit mathematics course in their programs; some programs require more than one mathematics course.

## III. Social and Behavioral Sciences

Minimum total: 9 semester hours
A. Each student must complete PSYC 201 (4).
B. Each student must complete two additional courses selected from: A\&S 200; ECON 100, 200, 202, 203, 323; ENVS 101, 301; ETHN 101, 410; GEOG 121, 122, 225, 230, 325, 331, 337, 343, 344, 346, $349,426,452$; HIST 151, 152, 180 , 205, 206, 310, 319, 370, 382, 411, 429, 470; POLS 201, 250, 271, 272, 301, 372 , 402; SOC 101, 202, 231; TECH 302; any Honors social science courses; GERO 405: HDFS 107.

## IV. Humanities and Arts

Minimum total: 5 semester hours
A. Each student must complete one of the following literature courses: ENG 150, 200, 261, 262, 264, 265, 266, 267, 269; ETHN 220; FREN 284; GERM 260.
B. Each student must complete one of the following courses: AMST 200, 230, 300; ART 101, 102; ARTH 145, 146; A\&S 100,200 ; foreign languages (ARAB, CHIN, FREN, GERM, GRK, ITAL, LAT, JAPN, RUSN and SPAN) 101, 102, 201, 202; GERM 117, 118, 131; LAT 141, 142 ; MUCH 101, 125, 221, 431; PHIL 101, 102, 103, 204, 207, 211, 212, 230; POPC 160, 165, 220; RTVF 261; THEA 141, 202, 347, 348; WS 200.

## V. Cultural Studies

Minimum total: 5 semester hours
A. Each student must complete one of the following courses: ETHN 101, 220, 410; ARAB, CHIN, FREN, GERM, GRK, ITAL, LAT, JAPN, RUSN, SPAN 101, 102, 201, 202; FREN 284; GERM 117, 118, 131, 260; SOC 231; GEOG 121, 122, 225,230 , $325,331,337,343,344,346,349,426$, 452; POLS 271, 272, 372; HIST 151, 152, 180, 310, 319, 370, 382, 410, 470; MUCH 125, 233, 234, 235, 237, 431; HDFS 107; GERO 405; ENG 269; WS 200.
B. Each teacher education students must also compete EDFI 408; each nonteacher education student must select an additional course from Group A above.

## Professional Requirements

All students pursuing programs leading to teaching certification must complete a sequence of courses in professional education. This course work is integrated with directed observation and participation in school settings (field experiences) and is accompanied by on-campus clinical experiences. Professional education course work required in each of the teacher education program areas is shown below.
Business education: BUSE 497; EDCI 202 or EDFI 202; EDSE 311; EDCI 360; EDFI 302, 402 and 408; EDAS 409; and BUSE 314, 352, 354, 358 and 468. BUSE 356 also required if shorthand certification is desired.
Child and family development: HOEC 322 , 423, 491; EDCl 202 or EDFI 202; EDFI 302, 408, 429; EDAS 409; EDSE 421.
Communication disorders: CDIS 497; EDCl 202 or EDFI 202; LEM 301; EDFI 302, 402, 408; EDAS 409; EDSE 431, 433, 451; EDCl 349; CDIS 401, 411, 421, 431, 481.

## Developmentally handicapped: EDSE 492 or

 497; EDCI 202 or EDF 202; EDF 302; EDFI 402 or EDF 429, and 408; EDAS 409; and EDSE 431, 437, 442 and 457.Elementary education: $E D C I$ 492; $E D C I 202$ or EDFI 202; EDSE 311; EDFI 302, 402 and 408; EDAS 409; and EDCI 350, 351, 352, 353, 355 and 356.
Foreign languages (French, German, Latin, Russian, Spanish): EDCI 497; EDCI 202 or EL. 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 360; EDFI 302, 402 and 408; EDAS 409; and HED 348, 393, 409 and 481.
Hearing impaired: EDSE 492 or 497; EDCl 202 or EDFI 202; EDFI 302, 402 or 429 , and 408; EDAS 409; EDSE 431, 442, 451, 457; EDCl 365.

Home economics: HOEC 497; EDCI 202 or EDFI 202; LEM 301; EDSE 311; EDCI 360; EDFI 302, 402, 408; EDAS 409; and HOEC 250, 352, 353 and 354 .
Industrial technology education: TE 497;
EDCI 202 or EDF1 202; VCT 203; EDFI 302, 402 and 408; EDAS 409; and TE 252, 352, 447, 449 and 462.
Marketing education: BUSE 497; EDCl 202 or EDFI 202; EDFI 302, 402, 408; EDSE 311; EDCl 360; BUSE 314, $364,461,462,463$ or 465 ; EDAS 409.
Multihandicapped: EDSE 492 or 497; EDCl 202 or EDFI 202; EDFI 302, 402 or 429 and 408; EDAS 409; and EDSE 431, 437, 442 and 457.

Music education: MUED 497; EDF| 302, 402 and 408; EDAS 409; MUED 240 and 340 . Music education is a major within the College of Musical Arts. See page 97 for content and general education requirements.
Physicai education; K-12 with elementary . emphasis: PEP 497; PEP 233 or EDCl 202 : EDFI 202; LEM 301 or VCT 203; EDFI 302 ar. 408; PEP 402; EDAS 409; and PEP 238, 241, $332,337,428,433$ and 438.

Physical education, K-12 with secondary phasis: PEP 241, 247, 332, 362, 402, 433, ; EDF 302 and 408; EDAS 409; LEM 301.
Physical education, athletic coaching and health: PEP 497; PEP 247; EDFI 302 and 408; EDAS 409; LEM 301; HED 348 and 409; PEP 433 ; PEP 402; and PEP 362, 392 and 412.
Secondary education: EDCI 202 or EDFI 202; LEM: 301 ; EDFI 302,402 and 408 ; EDAS 409 ;
EDCI 370; and completion of the Secondary Professional Semester comprising the following courses: EDSE 311; EDCI 360; EDCl 497; and one of the following $\operatorname{EDCl} 371,372,374,375$, 376 or 378
Severe behavior handicapped: EDSE 492 or 497: EDCl 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 or 497; EDCI 202 or EDFI 202; EDF 302,402 or 429, 408; EDAS 409; and EDSE 431, 437, 442 and 457 :
Visual arts: ARTE 497; EDCI 202 or EDFI 202 EDSE 311; EDFI 302, 402 and 408; EDAS 409; and ARTE 252, 352, 353, 487; and one of the following: ARTE 482, 483 or 495.

## 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 participating in the school's activi ties under the guidance of a cooperating eacher and campus field supervisor. The dent progresses from .observation and ected participation to responsibility for full-time teaching. Students in physical education, music or art ordinarily teach in both elementary and secondary schools. Student teaching assignments for the student in public school music are individu ally planned to give proper balance or concentration in vocal or instrumental experiencé.

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 responsiblefor their own transportation to student teaching stations.

Student teaching in ä major area can only be repeated once: Thus only two opportunities to complete successfully 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 sschool system to which they have been assigned; the University spring break is forfeited.

Upori completion of student teaching, istudents receive a copy of their'student teaching evaluation report. Students should retain this copy for their records $\checkmark$ future reference since the University es 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 in the Field Experience Office, 318 Education Building, not later than the first week of the semester preceding anticipated student teaching
2. Been fully admitted into the College of Education and Allied Professions (see College retention, p. 90).
3. Been fully accepted in a certification program either as an undergraduate or baccalaureate degree holder
4. Completed 90 hours of university crédit, including
a. EDCl 202 or EDFI 202 or a pro-
gram alternative accepted by the Col-
lege with a $C$ or better. an,
b. ENG 112
c. IPCO 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 theProgram 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 Expe: rience Appeals Committee.

Upon the recommendation of the Field Experience Appeals Committee, student teaching may be deferred, denied or approved by the dean of the College of Education and Allied Professions

## International Teacher Education Programs

The College of Education and Allied Professions 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 10 -week student teaching program. Student teaching abroad enables individuals to understand aspects of another country and their ramificiations on the western world Interested students should direct -initial inquiries to the Office of Field Experi ences, 318 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 Allied Professions. Offerings in the Sctiool of - Health, Physical Education and Recreation and in the Department of Applied Human Ecology are grouped by unit with selective cross-referencing in this list 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 course work as well: The course work indicated has been approved by the College of Education and Allied Piofessions.

Checksheets indicating all required course work (content, professional, general) for each major and/or minor are available in the Program Advisement and Teacher Certification Óffice, 365 Education Building. These checksheets also indicate College retention requirements and, when appropriate, student teaching eligibility requirements, prograḿ area. admission/retention requirements, and certification eligibility requirements

## American Studies

214 University Hall, 372-8110
Major (Option i) (does not lead to certification) (51-60 hours)
AMST 200 and 400 (6)
HIST 205 and 206 (6)
ENG 266 and 267 (6)
Select nine hours: ARTH'441, ARTH 442. PHIL 315. PHIL . 415 (9)

Select three hours: POLS 201, 301, 304, 331, $341,345,346,347,416,417,418,421,422$, 430, 440 (3)
Select one: SOC 101; GEOG 225, 230, 350 (3)
Select one of these if SOC 101 selected above: :SOC 231, 311, 315; 316, 418 (3)
Select one of these if GEOG: 225, 230 or 350 selected above: GEOG 325, 326,333, 335, 337 ; 351, 402, 425, 426, 436, 451 (3)
Electives in specialization, chosen in consultation with adviser (15-24)
Major (Option III) (does not lead to certification) (79 hours)
AMST 200, 400 (6)
HIST 205 and 206 (6)
SOC 101 (3)
ENG 266 and 267 (6)
Select 9 hours from this group: PHIL 415, PHIL 315, ARTH 441., ARTH. 442 (9)
Select 3 hours from this group: POLS 201, 301 $304,331,341,345,346,347,416,417,418$, 421, 422, 430, 440.(3)
Select 3 hours: SOC 231, 311, 315, 316, 418 (3)
History and English concentration, chosen in consultation with adviser (43),

## Other programs

Programs in American Studies also are available through the College of Arts and Sciences.

## Art

116 Fine Arts Building, 372-2786
Major (meets special certification, kinder-garten-twelfth grade) ( 50 hours)
ART 102, 103, 112, 145, 146, 205, 263 (21)
Seleot two of these: ART 261; 267, 320 or 321; 213, 366, 466 (6)
Select two of these: ART 325; 371 or 373; 277. 211 (6)
ART history elective (3)
ART electives (8)
ART sequence study in one area (6)
In addition to the aforementioned
courses offered by the School of Art, art education majors must include SOC 101, PHIL 204 and a POPC elective in the general education portion of their programs.
Minor (does not lead to certification) (24 hours)
ART 102, 103, 112, 145, 146, 205 (18); select one of these-ART 261, 263, 267, 320, 321, 365 (3); select one of these-ART 211, 212, 213, 325, 371, 373, 277 (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 back-
ground 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.

## Athletic coaching

See School of Health, Physical Education, and Recreation, page 109.

## Athetic training

See School of Health, Physical Education, and Recreation, page 109

## Biological sciences

365 Education Building, 372-7372
Major ( $34-38$ hours)
BIOL 204, 205, 301, 350, 352, 451 (21)
CHEM 116 or $308 / 309$ (4)
BlOL 313 or 343 (3-4)
Select one: BIOL 332, 407, 411, 417, 431, 443 (3-5)
Select one: BIOL 331, 321, 322, 343, 405, 409, $410,414,415,416,420,422,424,425,434$,
$435,472,473,474,476,477$ (3-4)

## Other programs

Programs in biological sciences are also offered through the College of Arts and Sciences.

## Business Education

242 Business Administration Building, 372-2901
Magor-Comprehensive business education ( 60 hours)

BUSE 101, 321, 210, 202, 240, 302, 335, 455 (24)
ACCT 221, BA 203, ECON 202, LEGS 301 (12)
MGMT 305, MKT 300, MIS 200 (9)
Select one: ACCT 222, ECON 203, LEGS 302 (3)
Select 12 hours from MKT 402, 410, 430, 436;
ECON 302, 303, 304, 311; MGMT 361; FIN 300; BUSE 311, 401; CS elective; MIS elective (12)
Upon graduation a student is eligible for vocational certification and is certified to teach business education in grades 7 and 8 and bookkeeping/basic business and typing in grades 9-12. Careful selection of the 12 hours of business electives could also lead to certification in economics, information processing, sales communication 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 certification indcated above.
Minor-bookkeeping and basic
business ( 30 hours)
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 communication ( 30 hours)
BUSE 240 and 321 (6)
BA 203 (3)
MKT 300, 402, 410, 430 (12)
ECON 202 and MGMT 305 (6)
Approved elective in ACCT, ECON, MKT, MGMT, LEGS (3)
Minor-stenography and typing ( 23 hours)
BUSE 202, 210, 302, 311, 321, 335, 401, 455 (24)
BA 203 (3)
Elective selected from ECON, MKT, MGMT, LEGS (3)

## Chemistry

365 Education Building, 372-7372
Major (33 hours)
CHEM 125, 126 (10) or CHEM 135, 136 (10)
CHEM 201 (for those having taken CHEM 125, 126) (3)

CHEM 341 and 342 (10)
CHEM 352 (3) or CHEM 405 (3-4)
CHEM electives selected from CHEM 321, 442, $413,463,308 / 309,406,407,408,445(7-10)$

## Other programs

Programs in chemistry also are offered through the College of Arts and Sciences.

## Child and Family Community Services

See Department of Applied Human Ecology, p. 102.

## Child and Family Development

See Department of Applied Human Ecology, page 102

## Communication <br> Disorders

338 South Hall, 372-2515
Major (will meet pupil personnel certifica-
tion for a school speech-language
pathologist if the appropriate master's
degree is also completed)
First year ( 33 hours)
BIOL 101 or 104 (3-4)
Science elective (3)
PEG 100 (2)
PSYC 201 (4)
ENG 112 (3)
PCO 102 (3)
CDIS 223 and 224 (6)
EDCl 202 or EDFI 202 (3)
Math elective ( 3 )
Social science elective (3)
Second year ( 41 hours)
EDFI 302 (3)
PSYC 270 and 305 (6)
IPCO 203 or 306 (3)
CDIS 301, 311, 351 (11)
THEA 340 (3)
ENG 342 and 380 (7)
Social science elective (3)
Literature elective (3)
Humanities/arts elective (2-3)
Third year ( 35 hours)
EDSE 431 and 433 (6)
EDFI 402 or 429 (3)
EDFI 408 (3)
PSYC 303 or 304 (2-3)
LEM 301 (2)
CDIS 321, 331, 361, 401, 411, 421 (19)
Fourth year (37 hours)
EDCl 349 (3)
CDIS 497 (10)
EDSE 451 (3)
CDIS 341, 431, 461, 481 (13)
PSYC 405 (3)
EDAS 409 (3)
Cultural studies elective (2-3)

## Communications

365 Education Building, 372.7372
Major ( $62-65$ hours plus EDCl 420 and 349)

IPCO 102 and 306 (6)
ENG 201 or 205 and 206 (4)
ENG 380 (4)
IPCO 203, 205 and 308 (9)
JOUR 103 and 414 (6)
JOUR 300 or 301 (3)
Select two, one of which must be ENG 266 or 267: ENG 264, 265, 266, 267 (6)
In addition to the 41 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 certified to teach communications in grades 7 and 8 and the two areas of concentration selected in grades 9-12.
pmputer Science
Education Building, 372-7372
Major (30 hours)
CS 101, 201, 202, 205, 305, 306, 307 (21)
Two CS electives at the 400 level, excluding CS, 490 (6)
PHIL 344 or SOC 320 (3)
MATH. 131 and 222 (8)
MATH 247 or 313 (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, Physsical Education and Recreation,.p. 105.

## Developmentally Handicapped

451 Education Building; 372-7293
Major (meets special certification for teaching the-developmentally handicapped child, K-12. See full admission, retention and student teaching eligibility requirements, page 100.) The following four-year plan indicates all the general education, curriculum content, specializacourse work and professional educacourse work specifically required for graduation as a developmentally handicapped maor The four-year plan indicates one way the course work can be sequenced
First year (31 hours)
ENG 112 (3)
SOC 101 . (3)
PEG 100 (2)
Humanities/arts elective (2-3)
Math/science elective ( $3-4$ )
Approved science elective (3-4)
IPCO 102 (3)
GEOG. 121, 122 or 230 (3)
Approved general edúcation electives (6)
HIST 151, 152;' 205, 206 or 180 (3)
Second year (31 hours)
PSYC 201 (4)
EDFI 302 (3)
Literature elective (3)
EDCI 202 or EDFI 202 (3)
MATH 241 (3)-
EDSE 431 (3)
CDIS 223, 451 or 471 (3-4)
MATH elective (3)
MUED 248 or ARTE 482 (3)
One of the following: EDSE 421, 456, 459;
PSYC 405; SOC 341; ARTT 230;
EDCI 365 (3)
Third year (33 hours)
EDSE 451 (3)
PEP. 433 (3)
ENG 342 or 343 (3)
HED 346 (3)
I 349 (3)
E: 433, 437, 454, 457, 484 (15)
EDFI 402 or $429^{\circ}(3)$
Fourth year (31 hours)
EDSE 447 and 443 (4)
EDSE 448 and 443 (4)
EDSE 453 and $443^{\circ}$ (4)

EDSE 442 (3)
EDAS 409 (3)
EDFI 408 (3)
EDSE 492/497 (10)

## Dietetics

See Department of Applied Human Ecology, p. 103.

## Driver Education

See School of Health, Physical Education, and Recreation, p. 105:

## Dual Certification- <br> Elementary and an area of Special Education

365 Education Building, 372-737.2
A special dual certification program is available for students desiring certification in both elementary education and of of of the following areas of special educationspecific learning disabled; developmentally handicapped, severe behavior handicapped. Students desiring this program must meet all of the full admission requirements for both the elementary and special education programs; see p. 99 and p. 100. The following plan indicates all the general education, professional education, cuirriculum content, specialization and area of concentration course work specifically required, and indicates one way the course work can be sequenced. Because the program requires 166 semester hours, approximately 11 semester's are required for * completion of the program.
First year (42 hours)
ENG 112 (3)
GEOG 121 or 122 (3)
HIST*151, 152, 205 or 206 (3)
ART 101 or MUCH 101 (2:3)
BIOL 101 or 104 (3-4)
PEG 100 (2)
IPCO 102 (3)
GEOL 100, 101 or 104 (3-4)
Approved social science elective (3)
PSYC 201 (4)
MATH 241 (3)
Area of concentration (10)
Second year ( 45 hours)
EDCI/FI 202 (3)
PHYS 104 or 100 (2-3)
Approved literature elective (3)
MATH 242 (3)
CDIS 223, 451 or 471 (3-4)
HED 346 (3)
EDFI 302 (3)
EDCI 349 .(3)
MUED 248; ARTE 343 or ARTE 482 (3)
ENG 342 or 343 (3)
EDSE 431 (3)
PEP 342 (3)
Area of concentration (10)
Third year (48 hours)
EDSE 433, 451, 484 (9)
EDFI 408 (3)
EDFI 402 or 429 (3)
EDCI $350,351,352,353,355,356,365$ (21)
EDSE 454, 437, 457 (9)
EDAS 409 (3)
Fourth year (31 hours)
EDSE 447, 443, 448, 453, 442 (15)
EDCI 492 (8)

EDSE 492/497 (8)

## Early Childhood Education

See Department of Applied Human Ecology, p. 102.

## Earth Science

365.Education Building, 372-7372

Major (31 hours)
GEOL 104, 105 (8)
GEOG 125, 213 (6)
GEOL 304, 306 (8)
GEOL 493 (6).
Select one: GEOL 305,310 or 322 (3:4)

## Economics

455 Education Building, 372-7407
Major (30 hours)
ECON 202, 203,-302 (9)
ECON 303 or 311 (3)
ECON electives (18)

## 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 Büilding, 372-7372
Major (meets elementary education, certification, grades 1-8) See full admission, retention and student teaching eligibility requirements on $p .99$

The elementary program requires completion of course work in four areas-general education, professional education, curriculum content and an area of concentration. All elementary education majors must complete specifically desig nated courses to fulfill the general educa-: tion, professional education and curriculum content aspects of the program. They may, however, choose the area of concentration from the areas of concentration indicated on the elementary checksheet, available in 365 Edučation Building.
(The following four-year plan indicates all of the general education, curriculum content, and professional education course work specifically required for graduation as an elementary education major. The four-year plan indicates one way this course work and the area of concentration can be sequenced.)
First year ( 32 hours)
ENG 112 (3)
PEG 100 (2)
GEOG 121 or 122 (3)
IPCO 102 (3)
BIOL 101 or 104 (3-4):
ART 101 or MUCH 101 (2.3)
HIST 151, 152, 205 or 206 (3)
PSYC 201 (4).
ECON 100, 200, 202, 203 or POLS 201, 250, 271 (3)
GEOL 101, 101 or 104 (3-4)
Area of concentration (3)
Second year ( 34 hours)
EDCI/FI: 202 (3)
PHYS 100, 101. or 104 (2-3)

1 lerature elective (3)
ETHN 101, 220, foreign language, SOC 231 or GEOG 230 ( 3 )
MATH 241 (3)
CHEM 100, 104 or 115 (2-4)
EDFI 302 (3)
EDCI 349 (3)
MATH 242 (3)
Area of concentration (9)
Thirg year ( 35 hours)
HED 346 (3)
ENG 342 (3)
MUED 248 (3)
PEP 342 (3)
ARTE 343 (3)
EDCI $350,351,352,353,355,356$ (18)
Area of concentration (2.3)
Fourth year ( 33 hours)
EDFI 402 (3)
EDF 408 (3)
CDIS 471 (3)
EDSE 311 (2)
EDAS 409 (3)
EDCI 365 (3)
EDCI 492 (10)
Area of concentration (6)
Completion of EDCI 357, HDFS 224, EDCI 348, EDFI 342 or PSYC 303 or
HDFS 321, completion of student teaching or methods field experience in a kindergarten, first, second or third grade setling and satisfactory completion of the state-prescribed test will qualify an elementary education major for K-3 certification as well as $1-8$ certification.

Elementary education majors also desiring developmentally handicapped, specific learning disabled or severe behavior handicapped certification, should follow the dual certification program indicated on page 95.

## English

216 University Hall, 372-2576
Major (38 hours beyond English 112, plus EDCI 420)
Group 1
Select one: ENG 201 (or 205 or 206) (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 300 or if topic is appropriate 423,470 or 480 (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 1 and 11 before taking EDCI 371.
Minor ( 29 hours of English beyond ENG 112 plus EDCl 420)
Group 1
Select one: ENG 201 or (205 and 206) (4)
Group It
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 300 and 343 are also recommended.
Group III
ENG 380, 381, 483 (10)
One of the following courses is also recommended-ENG 207, 208, 251, 388, 481, 482, 484.

## Environmental Education

562 Education Building, 372-7339
Minor (does not lead to certification) (2122 hours)
BIOL 101 (3)
Select two of these-EDFI 415, 490, 416 (6)
Select four of these-BIOL 104, GEOG 331, GEOG 442, HIST 338, ECON 435, POLS 335 , POLS 336, PHIL 332, ENVR 421 (12-13)

## Environmental Science

365 Education Building, 372-7372
Major ( 60 hours)
BIOL 204, 205 and 350 (13)
Select 12 hours from BIOL 301, 313, 354, 420, 422, 425, 451, 472 (12)
In addition to the 25 hours specified above, one 35 -hour area of concentration must be completed. The areas of concentration from which a student may choose are chemistry, earth science or physics.
Students must follow the checksheet given them; the checksheet indicates the courses appropriate for the areas of concentration. Upon graduation a student is certified to teach science in grades 7 and 8 and biology, general science and the area of concentration selected in grades 9-12.

## Other programs

Environmental programs are also offered through the College of Arts and Sciences and the College of Health and Human Services. Contact the Center for Environmental Programs, 124 Hayes Hall, for additional information.

## French

365 Education Building, 372-7372
Major (meets special certification in French, kindergarten-twelfth grade provided appropriate professional course work is also completed.) ( 31 hours of French beyond 202)
FREN 351, 352, 353, 361, 362, 371, 372 (21)
FREN electives at 400 -level (10)

## Other programs

Programs in French also are available through the College of Arts and Sciences.

## Geography

455 Education Building, 372-7407
Major ( 30 hours)
Select two from this group: GEDG 125, 126 , 127, 213, 404, 405, 427, 433, 460, 471 (6)
Select two from this group: GEOG 225, 230, 337, 325, 327, 326, 331, 333, 334, 335, 402, $425,426,436,442,451,452(6)$
Select two from this group: GEOG 341,342, $343,344,345,346,347,349,350,351$ (4-6)

Geography electives (12-15)

## Other programs

Programs in geography also are offered through the College of Arts and Sciences.

## German

365 Education Buidling, 372-7372
Major (meets high school certification in German, kindergarten-twelfth grade provided appropriate professional education course work is also completed.) (31 hours of German beyond 202)
GERM 317, 318, 417 (9)
Select two: GERM 315, 316, 480 (Contempo-
rary Austrian Life) (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, p. 105.

## Hearing Impaired

451 Education Building, 372-7293
Major (meets special exceptional child for teaching the hearing handicapped child $\rightarrow$ K-12. See full admission, retention and student teaching eligibility p. 100. The for lowing four-year plan indicates all of the general education, curriculum content, specialization course work and professional education course work specifically required for graduation as a hearing impaired major. The four-year plan indicates one way the course work can be sequenced.)
First year (33 hours)
Social science electives (6)
BIOL 100 or 104 (3-4)
PEG 100 (2)
Science elective (3)
Humanities elective (3)
IPCO 102 (3)
ENG 112 (3)
PSYC 201 (4)
EDCI/FI 202 (3)
Approved literature elective (3)
Second year ( 37 hours)
EDSE 431 and 451 (6)
CDIS 301 (4)
HED 346 (3)
MUED 248 (3)
MATH 241 (3)
EDCI 349 (3)
PEP 164 (2)
Cultural studies elective (3)
ENG 380 (4)
EDFI 302 (3)
Science elective ( 3 )
Third year (36 hours)
EDSE 442 (3)
EDFI 402 or 429 (3)
EDFI 408 (3)
CDIS 361 (4)
EDSE 461 and 462 (6)
EDSE 464 and 466 (6)

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        482 (3)
        342 (3)
        from EDSE 459, EDSE 460, PSYC 324 (6)
        Fourth year ( 35 hours)
        EDSE 463 and 465 (6)
        EDAS 409 (3)
        EDSE 492/497 (10)
        EDSE 457 and 467 (6)
        CDIS 461 (4)
        EDCl 365 (3)
        PEP 433 (3)
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## History

455 Education Building, 372-7407
Major (33 hours)
HIST 205, 206, 480 (9)
Select one: HIST 151, 152 or 180 (3)
Select one: HIST 301, 302, 303, 306, 307, 320 , $323,325,326,338,419,421,422,425,426$, $427,428,429,430,433,436,437$ (3)
Select one: HIST 357, 363, 367, 377, 415, 444, $448,454,458,459,464,469,470,471$ (3)
Select one: HIST 304, 305, 309, 310, 311, 315, $316,340,360,381,382,386,401,411,413$, $414,441,442,462,483,486$ (3)
HIST electives, at least three of which must be at 400 level (21)

## Other programs

Programs in history are also offered through the College of Arts and Sciences.

## Home Economics

See Department of Applied Human Ecology, p. 102.

## Justrial Technology Education

See College of Technology, p. 145.

## International Studies

455 Education Building, $372 \cdot 7407$
Major (does not lead to certification)
( 66 hours)
HIST 152; 454; 205 and 206 OR 437 and 438 (12)
ECON 202, 203, 351 (9)
POLS 201, 301, 371, 372 (12)
SOC 101, 202, 231 (9)
GEOG 452; 121 and 122 OR 230 (6.9)
Social science electives (9-12)
Modern foreign language beyond 202 (6)

## Other programs

A program in international studies also is offered by the College of Arts and Sciences.

## Journalism

365 Education Building, 372-7372
Major (31 hours)
JOUR 103, 300, 414 (9)
JOUR 206, 303, 304, 330, 331, 340, 404 (21) JOUR 412 (1-3)
Minor (does not lead to teacher certification) (22 hours)
JOUR 103 or RTVF 103 (3)
JOUR 300, 402, 412 (7)
two: JOUR 206, 302, 303, 304, 305, 307, $312,330,331,380,404,407,430$ (6)
Select two: JOUR 315, 340, 414, 416, 423, 432, 433, 435, 470, 471, 490 (6)

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 LAT 480, 481, 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 Education

250 Business Administration Building, 372-8039
Major ( 45 hours)
BUSE 101 and 240 (6)
BA 203 (3)
ECON 202 (3)
MKT 300, 402, 410, 430 (12)
BUSE 321 or MIS 200 (3)
ACCT 221 or 325 (3)
MGMT 300 or 305 (3)
Select $12-13$ hours of electives from the 44 courses specified on checksheet available in 365 Educ. Bldg. (12-13)

## Mathematics

365 Education Building, 372-7372
Major (35 hours)
MATH 131, 232, 233, 332, 339, 421, 441 (29)
MATH elective at $300 / 400$ level, excluding 395, 414, 490, 495 (3)
MATH' 402 or 405 (3)
Minor (31 hours)
MATH 131, 232, 332, 339 (16)
MATH 402 or 405 (3)
MATH elective at $300 / 400$ level (excluding 395, 414, 490, 495) (3)
Select three: MATH 226, 233, 247, 311, 322 (9)

## Other programs

Programs in mathematics also are offered by the College of Arts and Sciences.

## Multihandicapped

451 Education Building, 372-7293
Major (meets special exceptional children certification for teaching the multihandicapped child, K-12. See full admission, retention and student teaching eligibility requirements, p. 99. The following fouryear plan indicates all of the general education, curriculum content, specialization course work and professional education course work specifically required for graduation as a multihandicapped major. The four-year plan indicates one way the course work can be sequenced.)
First year (31 hours)
ENG 112 (3)
SOC 101 (3)
PEG 100 (2)
Humanities/arts elective (2-3)
Math/science elective (3-4)
Approved science elective (3-4)
IPCO 102 (3)
GEOG 121, 122 or 230 (3)
General education electives (6)
HIST 151, 152, 180, 205 or 206 (3)

Second year (31 hours)
PSYC 201 (4)
EDFI 302 (3)
Literature elective (3)
EDCI 202 or EDFI 202 (3)
MATH 241 (3)
EDSE 431 (3)
CDIS 233, 451 or 471 (3-4)
Math elective (3)
MUED 248 or ARTE 482 (3)
One of the following: EDSE 421, 456, 459;
PSYC 405; SOC 341; ARTT 230;
EDCI 365 (3)
Third year (33 hours)
EDSE 451 (3)
PEP 433 (3)
ENG 342 or 343 (3)
HED 346 (3)
EDCI 349 (3)
EDSE 437 (3)
EDFI 402 or 429 (3)
EDSE 433, 454, 457, 484 (12)
Fourth year ( 31 hours)
EDSE 440 and 443 (4)
EDSE 445 and 443 (4)
EDSE 470 and 443 (4)
EDSE 442 (3)
EDAS 409 (3)
EDFI 408 (3)
EDSE 492/497 (10)

## Music

1031 Musical Arts Buidling, 372-2181
Major (see College of Musical Arts,
p. 121)

All prospective music minors must com-
plete 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)

## 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
Minor (does not lead to teacher
certification) (25 hours)
PHIL 101, 103, 470 (7)
EDFI 408 (3)
PHIL electives (6)
Select one: PHIL 318, 245, 325, 327, 332, 342, 425 (3)
Select one: PHIL 102 or 204 (3)
Select one: PHIL 211, 311, 212, 313 (3)
The following endorsements lead to a strong background in philosophy, but do not lead to teacher certification:

Endorcement-teaching courses in
philosophy ( 15 hours)
PHHL 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, p. 105.

## Physics

365 Education Building, 372-7372
Malor ( 30 hours of physics plus MATH

## 232)

PHYS 211 and 212 (10)
PHYS 301, 305, 313 (5)
PHYS 303 and 307 (6)
MATH 232 (5)
PHYS electives at 300/400 level (9)

## Other programs

Programs in physics also are offered
through the College of Arts and Sciences.

## Political Science

455 Education Building, 372-7407
Major ( 30 hours)
POLS 201, 331, 416 (9)
Select two: POLS 345, 346, 342, 440, 443 (6)
Select two: POLS 351, 354, 355, 361, 366, 368, 458, 462 (6)
Select one: POLS 272, 460, 473, 475 (3)
Select one: POLS 301, 221, 422, 423, 459 (3)
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, 342, 361 (9)
Select either option A or option B (9-10)
Option A-PSYC 270, PSYC 290,
SOC 301 (11)
Option B-SOC 369, SOC 370, PSYC 311 (9)

## Other programs

Programs in psychology are also offered
by the College of Arts and Sciences.

## Reading and Language <br> Ates

365 Education Building, 372-7372
Minor (does not lead to teacher certifica-
tion) (26-27 hours)
EDCI $355,356,359,365,420(15)$
ENG 291 and 342 (6)

Select two-LEM 441, THEA 340, THEA W395 and ENG 442 (5-6)

## Recreation

See School of Health, Physical Education and Recreation, p. 107.

## Restaurant Management

See Department of Applied Human Ecology, p. 103.

## Russian

365 Education Building, 372-7372
Major (meets special certification, kinder-garten-twelfth grade in Russian provided appropriate professional education course work is also completed) ( 29 hours beyond 202)

RUSN 317, 318, 417 (9)
RUSN 319, 320 (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.

## Science Comprehensive

365 Education Building, 3727372
Major ( 60 hours)
GEOL 104, 105 (8)
GEOG 125 or 213 (3)
CHEM 125, 126 OR 135, 136 (10)
BIOL 204, 205 (10)
PHYS 201, 202 OR 211, 212 (10)
In addition to the 41 hours specified above, TWO areas of concentration of 910 hours each must be completed. The areas of concentration from which a student may choose are biology, earth science, chemistry, physics. Students must follow the checksheet given them; the checksheet indicates the courses appropriate for the areas of concentration.
Upon graduation a student is certified to teach science in grades 7 and 8 and the areas of concentration selected in grades 9-12.
Minor (general science) (34-37 hours)
BIOL 204, 205 (10)
PHYS 201, 202 OR 211, 212, 301 (10-13)
CHEM 125, 126 OR 135, 136 (10)
GEOL 104 (4)

## Secondary Education

365 Education Building, 372-7372
Major (Biology, Chemistry, Communications, Computer Science, Earth Science, Economics, English, Environmental Science, Geography, History, Journalism, Mathematics, Physics, Political Science, Psychology/Sociology, Science Comprehensive, Social Studies.) See individual heading for course work leading to certification in the above areas.

During the senior year, students are enrolled in the Secondary Professional Semester (SPS) which involves the following courses: EDSE 311, EDCI 360, one of the following advanced methods courses ( $\operatorname{EDCl} 371,372,374,375,376$ or 378 ) and student teaching EDCl 497. During the first six weeks students spend three days on campus enrolled in the professional education courses and two days in the schools where their student teaching experience will be completed the last ten weeks of the semester.

## Severe Behavior Handicapped

451 Education Building, 372-7293
Major (meets special children certification for teaching the severe behavior handicapped child K-12. See full admission, retention and student teaching eligibility requirements, p. 100. The foliowing fouryear plan indicates all of the general education, curriculum content, professional education and specialization course work specifically required for graduation as a severe behavior handicapped major. The four-year plan indicates one way the course work can be sequenced.
First year (31 hours)
ENG 112 (3)
SOC 101 (3)
PEG 100 (2)
Humanities/arts elective (2-3)
Math/science elective (3-4)
Approved science elective ( $3-4$ )
IPCO 102 (3)
GEOG 121, 122 or 230 (3)
Approved general education electives (6)
HIST 151, 152, 205, 206 or 180 (3)
Second year (31 hours)
PSYC 201 (4)
EDFI 302 (3)
Literature elective (3)
EDCI 202 or EDFI 202 (3)
MATH 241 (3)
EDSE 431 (3)
CDIS 223, 451 or 471 (3-4)
Math elective (3)
MUED 248 or ARTE 482 (3)
One of the following: EDSE 421, 456, 459; PSYC 405; SOC 341; ARTT 230;
EDCI 365 (3)
Third year (33 hours)
EDSE 451 (3)
PEP 433 (3)
ENG 342 or 343 ( 3 )
HED 346 (3)
EDCI 349 (3)
EDSE 437 (3)
EDFI 402 or 429 (3)
EDSE 433, 454, 457, 484 (12)
Fourth year ( 31 hours)
EDSE 447 and 443 (4)
EDSE 448 and 443 (4)
EDSE 453 and 443 (4)
EDSE 442 (3)
EDAS 409 (3)
EDFI 408 (3)
EDSE 492/497 (10)

## Social Studies

Education Building, 372-7372
Major (60 hours)
SOC 101 and HIST 205 (6)
GEOG 230 (3)
ECON 202 or 203 (3)
POLS 201 (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, geography, political science, sociology/psychology. In addition, 8-9 hours of additional social science must be completed OUTSIDE the areas of endorsement for a minimum total of 60 semester hours.

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.

## Spanish

365 Education Building, 372.7372
Major (meets special certification, kinder-garten-twelfth grade provided appropriate professional education course work is also completed) ( 31 hours beyond 202)
SPAN 351, 352, 367, 368, 371 (15)
377 and 378 (6) electives at 400 -level (10)

## Other programs

Programs in Spanish also are offered by the College of Arts and Sciences.

## Special Education

See hearing impaired; developmentally handicapped; multihandicapped; severe behavior disorders; 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, 438, 440, 441, 442, 443, 445, 447, $448,453,456,457,461,462,463,464,465$, 470 (7)

## Specific Learning Disabilities

451 Education Building, 372-7293
Major (Meets special certification for teaching the specific learning disabled child K-12. See full admission, retention and student teaching eligibility requirements, p. 100. The following four-year plan indicates all of the general education, curriculum content, professional education and specialization course work specifically required for graduation as a specific learning disabilities major. The four-year plan indicates one way the course work can be sequenced.
First year (31 hours)
ENG 112 (3)
SOC 101 (3)
PEG 100 (2)
Humanities/arts elective (2-3)
Math/science elective (3-4)
Approved science elective (3-4)
IPCO 102 (3)
GEOG 121, 122 or 230 (3)
Approved general education electives (6)
HIST 151, 152, 205, 206 or 180 (3)
Second year (31 hours)
PSYC 201 (4)
EDFI 302 (3)
Literature elective (3)
EDCI 202 or EDFI 202 (3)
MATH 241 (3)
EDSE 431 (3)
CDIS 223, 451 or 471 (3-4)
Math elective (3)
MUED 248 or ARTE 482 (3)
One of the following: EDSE 421, 456, 459;
PSYC 405; SOC 341; ARTT 230
EDCI 365 (3)
Third year ( 33 hours)
EDSE 451 (3)
PEP 433 (3)
ENG 342 or 343 (3)
HED 346 (3)
EDCI 349 (3)
EDSE 437 (3)
EDFI 402 or 429 (3)
EDSE 433, 454, 457, 484 (12)
Fourth year ( 31 hours)
EDSE 447 and 443 (4)
EDSE 448 and 443 (4)
EDSE 453 and 443 (4)
EDSE 442 (3)
EDAS 409 (3)
EDFI 408 (3)
EDSE 492/497 (10)

## Sport Management

See School of Health, Physical Education and Recreation, page 108.

> College of Education Retention/Full Acceptance Requirements

Several programs in the College of Education and Allied Professions have established retention/full acceptance requirements in addition to those specified by the College on page 90 . Following is an alphabetical listing of these program areas and the additionally specified requirements.

## Elementary Education and Early Childhood Education

All students desiring full acceptance to the elementary education program must meet specific admission criteria. Prospective elementary education majors will be assigned an elementary education adviser, given an elementary education checksheet to follow 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 EDCI 350, 351, 352, 353 , 355 and 356 methods courses will be permitted.

## Prerequisites for Full Acceptance

1. Completion of the following courses with a grade of C or BETTER:

ENG 112
IPCO 102
EDCI/FI 202
EDF| 302
MATH 241
MATH 242
2. Proficiency in written communication
skills as demonstrated by the following:
Spelling-must pass test with $80 \%$
proficiency
Grammar-must pass test with $80 \%$
proficiency
Writing-an essay
The spelling, grammar and writing tests are given the third Saturday of fall and spring semesters and the second Saturday in June. It is recommended that these tests be taken EARLY in the sophomore year, immediately after the completion of ENG 112. Students must register to take the tests the first week of the semester in 529 Education Building and must check the bulletin board opposite the elevator on the first floor of the Education Building the beginning of the semester for the time/place of the tests.

Students who do not successfully complete the grammar and/or spelling test(s) must retake the test(s) in a subsequent semester. Students who do not successfully complete the writing test must enroll in ENG 207, 251 or 483. If a grade of $B$ or better is received in one of these classes, the writing test will not need to be retaken; if a grade of $C$ or lower is received, the test must be retaken. Unsuccessful completion of any test(s) the second time will result in denial of admission to the elementary program.
3. Possession of at least a 2.50 accumulative grade point average in the semester preceding enrollment in methods courses (EDCI 350, 351, 352, 353, 355 and/or 356).
4. Completion of an Application for Full Admission. These application forms are avialable in 529 Education Building and must be returned there by the 10 th class day of the semester in which the candidate wishes to have his/her eligibility determined. Applications received after the 10th day will not be reviewed/ processed until the following semester. Since full admission to the program is required prior to enrollment in EDCI 350, $351,352,353,355,356$, students must apply for admission no later than the second week of the semester PRECEDING the semseter in which they plan to take methods courses. Applicants will be notified in writing of their acceptance/denial of full admission.

## Student Teaching Eligibility <br> Requirements

1. Full acceptance into elementary program (this includes $C$ or better in ENG 112, IPCO 102, EDCI/FI 202, MATH 241, MATH 242 and EDFI 302) and satisfactory completion of reading/writing/speling/ grammar tests.
2. 90 semester hours of college credits.
3. Completion of all methods courses $(350,351,352,353,355$ 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 filed in the Office of Field Experiences, 318 Education Building, before the end of the first week of the semester that PRECEDES the student teaching semester.
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, 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 study abroad in a country in which the language is spoken or acceptable equivalency, and must have successfully completed the state-mandated test.

## Industrial Technology Education <br> (see page 145)

## Physical Education (see page 106)

## Secondary Education

Biology, Chemistry, Communications, Computer Science, Earth Science, Economics, English, Environmental Sicence, Geography, History, Journalism, Mathematics, Physics, Political Science, Psychology/Sociology, Science Comprehensive, Social Studies majors

All students desiring 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 better.

ENG 112
IPCO 102
EDCI/EDFI 202
3. Attainment of a minimum BGSU GPA of 2.5 .

To be permitted to student teach, a secondary education major must meet the following student teaching eligibility requirements:

1. Full acceptance into the secondary education program.
2. Completion of 90 semester hours of University credits.
3. Completion of the following courst with a grade of $C$ or better:
EDCI 370
EDCI 37X (Content Methods Course)
EDCI 360
EDFI 302
4. No incompletes in courses that are prerequisites for student teaching
5. Recommendations of content methods course instructor, clinical supervisor and cooperating teacher(s).
6. Attainment of a minimum GPA of 2.5 .
7. Attainment of a minimum 2.2 in 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:
8. Completion of all professional education courses with C or higher.
9. Attainment of a BGSU GPA of 2.5 .
10. Satisfactory completion of the stateprescribed teacher test.
All appeals will be processed through the normal departmental and college processes.

## Special Education

(Developmentally Handicapped; Specific Learning Disabilities; Severe Behavior Handicapped; Multihandicapped; Hearing: Impaired).
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.

## Prerequisites for Full Accepiance

1. Completion of a minimum of 60 semester hours.
2. Completion of the following courses with a grade of C or better:

ENG 112
IPCO 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 minimum of 6 hours of special education (EDSE) course work 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 pria upon attaining junior status (60 lester hours) will not be permitted to enroll in the following methods coursesEDSE 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, IPCO 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 EDFI 302.
4. Completion of EDSE 431, 433, 437, $440,443,447,448,451,453,464,465$ 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 appeals procedure
5. Application filed with the Office of Field Experiences no later than the end of the first week of the semester that PRECEDES the student teaching semester. It is strongly recommended, however, that the application be filed TWO SEMESTERS in advance.
6. An accumulative grade point average of 2.5 with no incompletes 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 skills deficiency, poor interpersonal communication and unprofessional behavior by the written recommendation of two or more EDSE faculty members, supported by the department appeals committee.

# Department of Applied Human Ecology 

206 Johnston Hall, 372-2026
Degree programs offered by the Department of Applied Human Ecology address the several functions used by individuals in a family environment: clothing, shelter, nutrition, care of the elderiy, development of young children, management of resources. Degrees in applied human ecology are offered through the Colleges of Education and Allied Professions, Arts and Sciences, and Health and Human Services. The department provides students with the opportunity to major in foods and nutrition; home economics education; child and human development; child and family community services; and textiles, clothing and interior design.
There are 12 undergraduate majors, which are identified below by college and degree.

Individuals completing degree requirements within applied human ecology must meet the general education requirements specified by the college in which the program is housed. Advisers are avilable within the department to meet with students and to discuss admission standards, degree requirements and employment opportunities related to each of the major programs.

## BACHELOR OF <br> SCAENCE IN EDUCATION

## Teacher Certification

## Programs

(See introduction to College of Education and Allied Professions for general education requirements.)

## Early Childhood <br> Eclucation

206 Johnston Hall, 372-2026
Mafor (meets pre-kindergarten, kindergarten and elementary certification requirements. This triple certification requires the completion of 161 semester hours, which will invoive $10-11$ semesters of fuil-time enrollment to complete. Also see full admission requirements on page 99.)
First year ( 32 hours)
ENG 112 (3)
PEG 100 (2)
HIST 151, 152, 205 or 206 (3)
BIOL 101 or 104 (3-4)
GEOG 121 or 122 (3)
IPCO 102 (3)
ART 101 or MUCH 101 (2-3)
GEOL 100, 101 or 104 (3-4)
PSYC 201 (4)

ECON 100, 200, 202, 203 or POLS 201, 250, 271 (3)
Area of concentration (3)
Second year ( 40 hours)
EDCI/FI 202 (3)
PHYS 100 or 104 (3-2)
Literature elective (3)
Area of concentration (3)
ETHN 101, 220, foreign language, SOC 231 or GEOG 230 (3)
MATH 241 and 242 (6)
CHEM 100, 104 or 115 (2-4)
EDFI 302 (3)
EDCI 349 (3)
Area of concentration (6)
HDFS 224, 320 (6)
Third year (50 hours)
HED 346 (3)
ENG 342 (3)
MUED 248 (3)
PEP 342 (3)
ARTE 343 (3)
Area of concentration (2-3)
EDCl 348, 350, 351, 352, 353, 355, 356, 357 (24)
HDFS 321, 322, 421 ( 9 )
Fourth year ( 39 hours)
EDFI 402 (3)
EDFI 408 (3)
CDIS 471 (3)
Area of concentration (6)
EDSE 311 (2)
EDAS 409 (3)
EDCI 365 (3)
EDCI 492 (10)
HDFS 422, 423 (6)

## Pre-Kindergarten Validation

(leads to pre-kindergarten validation for students who are majoring in or who hold a valid teaching certificate in kindergar-ten-primary, elementary, home economics or the special certificate for education of the handicapped.) ( 21 hours)
HDFS 224, 320, 321, 322, 421, 422, 423

## Home Economics <br> Education

206 Johnston Hall, 372-2026
Major-homemaking and consumer education
The program options in home economics education are designed to prepare those who wish to teach home economics 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 homemaking and consumer 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 general home economics.
First year ( 31 hours)
CHEM 115, 116 (8)

ENG 112 (3)
AMID 101 and 103 (6)
HDFS 105 (3)
SOC 101 (3)
IPCO 102 (3)
PEG 100 (2)
ART 101 (3)
Second year ( 34 hours)
F\&N 210, 212 and 307 (9)
HOEC 205 and 250 (6)
AMID 202 and 303 (6)
PSYC 201 (4)
Approved literature elective (3)
EDFI 302 (3)
EDCI/FI 202 (3)
Third year ( 30 hours)
HOEC 206, 311, 352 and 353 (12)
HDFS 321 and 322 (6)
ECON 200 (3)
EDCI 360 (2)
EDSE 311 (2)
LEM 301 (2)
Approved science or math elective (3)
Fourth year ( 33 hours)
HOEC 354 and 405 (6)
AMID 406 (3)
HDFS 302 (3)
EDFI 402 (3)
HOEC 497 (10)
EDAS 409 (3)
EDFI 408 (2)
Cultural studies elective (2-3)
A home economics 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 course work. In addition to the course work specified, occupational work experience for three hours is also required.
Child care services-job training ( 32 hours)
AHE 389 (3)
ENG 342 (3)
MGMT 305 or ACCT 325 (3)
PEP 342 (3)
HDFS 224, 320, 421, 422, 423 (15)
AHE 489 (5)
Community and home services-job
training ( 32 hours)
HOEC 311, 405 (6)
HED 209 (3)
MGMT 305 or ACCT 325 (3)
HED 313 (3)
AHE 389 (3)
AHE 489 (8)
ECON 200 (3)
F\&N 335 (3)
Fabric services-job training ( 30 hours)
AHE 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)
AHE 389 (3)

N 331, 333, 431 and 433 (12)
N 230, 437, 335 (9)
DESN 104 (3)
MGMT 305 or ACCT 325 (3)
Multi-area job training ( 6 hours) AHE 389 (3)
MGMT 305 or ACCT 325 (3)
A home economics education major with the preceding program may also qualify for a pre-kindergarten validation by completing HDFS 224, 320, 421, 422, 423 (15)
Minor (meets high school certification provided appropriate professional education course work has also been completed) ( 40 hours)
AMID 101, 202, 303 (9)
HDFS 105, 302, 321 (9)
F\&N 207, 210, 212 (9)
HOEC 205, 250, 352, 405 (13)

## Other professional options

206 Johnston Hall, 372-2026
The emphases of the program are on human development, social relationships and the family life cycle. Practical experience in the nursery school and other community facilities provides opportunities for supervised observation and field work with various age groups.

Possible careers include teaching in rsery schools 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. This program provides an option for pre-kindergarten certification. A foundation is provided for graduate study and for professional careers in which additional work is required, such as child and family counseling, and the
administering of programs for families and children.
Major-Child and family
community services
(non-certification)
First year (30 hours)
HDFS 105 (3)
ENG 112 (3)
PEG 100 (2)
IPCO 102 (3)
BIOL 104 (4)
SOC 101 (3)
Content specialty selections* (9)
General education elective (3)
Second year (31 hours)
HDFS 302 or 305 (3)
Approved humanities elective (2-3)
Content specialty selections* (15)
PSYC 201 (4)
Approved social science electives (2-3) proved literature elective (3) proved science elective (2-3)
Third year (29 hours)
HDFS 321 and 407 (6)
Content specialty selections ${ }^{\star}$ (9)
Electives (6)
Approved cultural studies electives (5)

Approved science elective (3)
Fourth year ( 32 hours)
Ten hours from HDFS 322, AHE 389,
AHE 489 (10)
Content specialty selections* (7)
Electives (15)
*Content specialty electives -40 hours must be elected from these courses: HDFS 120, 224, 305, 320, 328, 421, 422, 424, 425, 426, 427, 428, 429; PSYC 305, 306, 307, 403, 406; IPCO 306; SOC 202, 301, 341, 342; PHIL 319; BIOL 311; ARTT 230, 330; HDFS 107 or 408: HOEC 205: F\&N 207.
Major-Child and family development (meets pre-kindergarten certification, which prepares students to work with public or private preschool programs, day care or Head Start, as well as other agen-
cies serving young children.)
First year (31-33 hours)
ART 101, MUCH 101 or PHIL 102 (2-3)
ENG 112 (3)
PEG 100 (2)
Approved social or behavioral science elective (2-3)
HDFS 105 and 123 (6)
BIOL 104 (4)
IPCO 102 (3)
SOC 101 (3)
Approved concentration courses (6)
Second year ( 33 hours)
PSYC 201 (4)
HDFS 224, 305 and 320 (9)
Approved natural science, mathematics or computer science elective (2)
Approved concentration courses (6)
Approved literature elective ( 3 )
EDCI 348 (3)
EDCI/FI 202 (3)
Approved math elective (3)
Third year (31-32 hours)
EDFI 302 (3)
HDFS 321, 322, 421 and 424 (11)
Approved cultural studies elective (2-3)
Approved concentration courses (9)
Approved general education electives (6)
Fourth year ( 31 hours)
HDFS 407, 422, and 423 (9)
EDFI 408 and 429 (6)
EDSE 421 (3)
EDAS 409 (3)
HOEC 491 (10)

## BACHELOR OF SCIENCE IN TECHNOLOGY

The Department of Applied Human Ecology 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. Also see page 9 for degree requirements.

## Dietetics

206 Johnston Hall, 372-2026
A student who completes the course work below will qualify for an internship or pre-planned work experience in an institution approved by the American Dietetic
Association. Upon completion of this postgraduate training and passing an examination, the student will be eligible for membership in that professional association and for national registration.
First year ( 30 hours)
AHE 100 (1)

BIOL 205 (5)
ENG 112 (3)
SOC 101 (3)
CHEM 125 and 126 (10)
F\&N 210 (3)
PEG 100 (2)
IPCO 102 (3)
Second year ( 34 hours)
BIOL 313 (4)
CHEM 306 and 308 (7)
MATH 115 or STAT 200 (3)
F\&N 212, 307 (6)
MIS 200, CS 100 or CS 101 (3)
PSYC 201 (4)
Approved literature elective (3)
MATH 124 or 126 (4-5)
Third year (30 hours)
ECON 200 (3)
F\&N 331, 432 and 436 (9)
MGMT 305 and 361 (6)
ACCT 325 (3)
BIOL 332 (3)
EDFI 302 (3)
AMID 303 (3)
Fourth year ( 28 hours)
SOC 231 (3)
HOEC 431, 433, 434 and 435 (12)
Cultural studies elective ( 3 )
Approved humanities elective (2-3)
HDFS 305 or HOEC 405 (3-4)
F\&N 438 (3)
Choose 2-3 hours from: F\&N 326, 333; AHE 389, 489; MRA 301; ENG 483; CHEM 201,
309; DESN 104; BIOL 350; FIN 200; LEGS
419, 421; or HDFS 107 (2)
A dietetics program also is offered in
the College of Health and Human
Services.

## 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.
First year ( 31 hours)
BIOL 104 or 205 (4.5)
CHEM 100 or 115 (3-4)
F\&N 210 (3)
MATH 115 or STAT 200 or STAT 211 (3)
MATH 120, 124, 126 or 131 (4-5)
SOC 101 (3)
IPCO 102 (3)
ENG 112 (3)
PEG 100 (2)
Cultural studies elective (3)
Second year ( 33 hours)
IPCO 203 (3)
ECON 200 (3)
DESN 104 (3)
Approved literature elective (3)
F\&N 207 and 212 (6)
PSYC 201 (4)
MIS 200 (3)
Cultural studies elective (2-3)
Humanities elective (3)
F\&N 230 (3)

Third year (30 hours)
ACCT 221 and 222 (6)
F\&N 331 and 333 (6)
MGMT 360 and 361 (6)
BA 203 (3)
Electives (3)
F\&N 335 (3)
LEGS 301 (3)
Fourth year ( 28 hours)
BIOL 313 (4)
FRN 431,433 and $480(7-8)$
Electives (9)
AHE 489 (5)
F\&N 437 (3)

## Applied Human Ecology <br> Programs In Other Colleges <br> COLLEGE OF ARTS AND SCIENCES

## Bachelor of arts degree

Five programs in applied human ecology are available through the College of Arts and Sciences. These are planned professional programs in fashion merchandising and interior design; major programs in food science and nutrition, and apparel design and history; and a general home economics major with a concentration in foods and nutrition or textiles and clothing. 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. Programs must be planned with the adviser no later than the second year. After the second year students may participate in a supervised field experience during the summer or academic year. The following programs are available.

## Fashion Merchandising

206 Home Economics Building, 372-2026
This is a planned program 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. No minor is required. See page 50.
Food Science and Nutrition
206 Johnston Hall, 372-2026
A major program designed for the student who wishes to specialize in the food science field preparatory to graduate study or a career in business or industry. A minor is required. See page 50.

## Home Economics General

206 Johnston Hall, 372-2026
A major program designed for the student who desires a general home economics background with a concentration in foods and nutrition, textiles and clothing, or plans to continue in graduate school. A minor is required. See page 51.

## Interior Design

209 Home Economics Building, 372-2026
The interior design program trains student in the planning. and executing of residential and contract interiors. Course work 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). See page 51.

## Apparel Design and History

101 Home Economics Building, 372-2026
A major program designed for the student who wishes to specialize in the textiles and clothing field preparatory to graduate study or for a career in business and industry. A minor is required. See page 50.

## Dletetics

206 Johnston Hall, 372-2026
A professional program leading to membership and registration in the American Dietetic Association is offered through the College of Health and Human Services. See page 114.

# School of Health, Physical Education and Recreation 

Ronald Russell, acting director,
200 Memorial Hall, 372-2334
The School of Health, Physical Education and Recreation is organized into the divisions of general physical education (PEG), health education (HED), physical education-professional (PEP), recreation and dance (RED), sport management (SSM), and intramurals and club sports (IM/CS).
Students successfully completing teacher education programs and the state competency examination will be certified to teach K-12 physical education elementary emphasis, K-12 physical education secondary emphasis, 7-12 physical education, 7-12 health education or driver education. Physical education majors may have their certificate validated to include adapted physical education. Preparation in athletic coaching and athletic training are also available. The health education program may also lead to careers in health promotion in corporations, community health agencies and other non-school ettings.
Concentrations in recreation or sport management programs are designed to prepare students for management, supervisory and leadership positions in private enterprise, public agencies and comrnunity organizations. A program in dance prepares individuals in dance education or in dance as a performing art.

In addition, the School of Health, Physical Education and Recreation provides opportunities for active participation in a broad spectrum of instructional physical education offerings and participation in intramural and club sports, as well as performance opportunities in the University Performing Dancers
Students seeking enrollment in any of the program offerings of the school are advised to consult a specific program area adviser for current program admission standards and retention procedures.

## General Physical Education

PEG 100-General physical education Each freshman must fulfill the University requirement of two units in activities that include archery, badminton, bowling, curling, dance, jogging, tennis, horseback riding, racquetball, skiing, swimming, ice skating, diving and weight training. Transportation to off-campus sites for some physical education activities may become the responsibility of the student. Students may contact the School of HPER for transportation information regarding the off-campus activity of their choice. In addition, students will be informed the first week of classes whether transportation is provided. Most activities are coeducational, graded $S / U$, and meet two hours per week.
PEG 200-General physical education Elective program in diverse activities, open to any student who has completed the University requirement of two hours of PEG 100. Two hours per week.

## Intramurals and Club Sports

Organized intramural and club sport competition is available through participation in:

1. coed activities-indoor, outdoor;
2. recreational sports for men;
3. recreational sports for women;
4. club sports units and performance groups in aquatics and dance.

## 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

202 Eppler North, 372-2395
(neither the dance major or the dance minor lead to teacher certification)

## Major

The major program gives a strong core in movement technique with a concentration in modern dance or ballet. An interdisciplinary curriculum leads to an emphasis in one of the following areas: performance, education, production, history, philosophy and criticism, and ethnographic or scientific research in dance. General Education (42 hours) MUCH 101, PHIL 204 and HUM 101 must be included.

Core requirements (54 hours)
DANC 115-215 (4)
DANC 120-220 (4)
DANC 106 or 111 (2)
PEP 137 (1)
ARTH 145 or 146 (3)
DANC 224 (1)
DANC 226 (1)
PEP 230 (3)
MUCH 221 (2)
DANC 315 or 320 (4)
DANC 325 (1)
DANC 326 (2)
DANC 327 (1)
HED 313 (3)
DANC 424 (3)
DANC 426 (3)
RED 487 (1)
RED 488 (15)
Specialization emphasis (21 hours electives in consultation with adviser)
Electives (4 hours)
Minor (24 hours)
DANC $115 / 215,120 / 220,326,424$ and 426
Select one of the following concentrations:
Dance education ( 12 hours)
DANC 106, 111, 215/315, 325 and RED 387/ 487
Dance performance ( 12 hours)
DANC 220/320, 224, 215/315, 325 and 327

## Driver Education

Certification pattern (6 hours)
HED 362 and HED 462 (6)

## Health Education

202 Eppler North, 372-2395
Major (Option 1-meets special certifica-
tion, kindergarten through twelfth grade)
First year (31 hours)
HED 209 or 215 (3)
PSYC 201 (4)
SOC 101 (3)
BIOL 104 (4)
ENG 112 (3)
IPCO 102 (3)
HED 216 or EDCI/FI 202 (3)
PEG 100 (2)
General education elective (3)
Humanities elective (3)
Second year ( 30 hours)
HED 348 (3)
F\&N 207 (3)
BIOL 331, 332 (6)
Social science elective (2)
Approved literature elective (3)
Free electives (7)
EDFI 302 (3)
Cultural studies elective (3)
Third year ( 32 hours)
HED 313, 338, 340, 393, 409 (15)
EDSE 311 (2)
EDCI 360 (2)
PEP 360 (3)
SMD 250 (3)

Electives (7)
Fourth year (29 hours)
HED 481 and 497 (12)
EDFI 402 and 408 (6)
EDAS 409 (3)
Electives (8)
To be fully admitted the student must have:

1. completed IPCO 102 and ENG 112
with a grade of $C$ or better;
2. attained 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 eligibil-
ity requirements;
2. successfully completed EDCl 202 or

EDFI 202 or HED 216, HED 209, 313, 338,
340 and F\&N 207 :
3. received a C or better in HED 348 and 393.

While 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 two (2) or three (3) additional certificates, such as physical education, driver education, general science or biology.
Major (Option II-does not lead to certification; health in non-school settings)
First year ( 30 hours)
HED 209 or 215 (3)
PSYC 201 (4)
SOC 101 (3)
BIOL 104 (4)
ENG 112 (3)
IPCO 102 (3)
HED 216 (3)
PEG 100 (2)
Humanities elective (2)
ETHN 101 (3)
Second year (31 hours)
HED 348 (3)
F8N 207 (3)
BIOL 331, 332 (8)
Approved literature elective (3)
EDFI 302 (3)
Cuttural studies elective (2-3)
ECON 200 (3)
SOC 202 (3)
HED 313 (3)
Third year (30 hours)
HED 310, 338, 340, 393 (12)
PEP 360 (3)
SMD 250 (3)
POLS 334 (3)
HED 411 or JOUR 340 (3)
SOC 335 (3)
ACCT 221 or 325 (3)
Fourth year (31 hours)
HED 481 and 489 (17)
EDFI 402 (3)
EDAS 409 (3)
Electives (5)
ENG 388 (3)

School Health Minor (meets seven
through twelve certification provided
appropriate professional education course work is also completed.)
First year (14 hours)
HED 209 or 215 (3)
SOC 101 (3)
BIOL 104 (4)
PSYC 201 (4)
Second year (6 hours)
BIOL 332 (3)
F\&N 207 (3)
Third year ( 12 hours)
HED 313, 338, 340 (9)
PEP 360 (3)

## Heaith Education Minor in other settings

First year (6 hours)
HED 209 or 215 (3)
HED 216 (3)
Second year ( 6 hours)
HED 313 and 348
Third year (7-8 hours)
Select minimum of two courses from:
HED 338, 340, 481 or F\&N 207 (5-6)
HED 393 (3)
Fourth year (6 hours)
HED 310 and 411 (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)

## Physical Education

200 Eppler South, 372-6905
K-12 Physical Education with Elementary Emphasis
(meets special certification, in physical education kindergarten-twelfth grade)
First year (30-31 hours)
PEP 116, 121, 124, 137 and 138 (8)
PEP/RED electives (1-2)
PEP 164 (2)
PEP 233/EDCI 202 (2-3)
ENG 112 (3)
BIOL 104 (4)
General education electives (10)
Second year (29-30 hours)
PEP 203, 230, 238, 241 and 433 (11)
PEP activity electives (2-3)
IPCO 102 (3)
BIOL 332 (3)
Literature elective (3)
HED 313 (3)
General education electives (4)
Third year (32-33 hours)
PEP 303, $332,337,340,350$ and 428 (18)
DANC 106/111/115/120 (2)
LEM 301 or VCT 203 (2-3)
PSYC 201 (4)
EDFI 302 (3)
HED/PEP elective (3)
Fourth year ( 31.33 hours)
PEP 402 and 438 (5)
EDFI 408 (3)
EDAS 409 (3)
PEP 497 (student teaching) (16)
Electives (4-6)

Students are encouraged to enroll in the elementary school physical educations. concentration as freshmen. However, to be admitted officially to the program, the student must have completed the equivalent of two semesters and the following:

1. completed ENG 112 and IPCO 102 with a grade of C or better;
2. earned a University accumulative point average of 2.5 and a 2.5 in all PEP, DANC, HED or SMD courses;
3. completed PEP 137, 138, 233 or EDCI 202, 238 or 337, and 241 with a 3.0 grade point average;
4. completed a minimum of three additional PEP 100 and/or 200 level activity courses.
5. presented written recommendations from two faculty members; and
6. received affirmative action for admittance of $2 / 3$ of faculty in elementary school physical education program area. In addition, the following traits are deemed essential for those expecting to contribute positively as a teacher and/or as a member of a community. The candidate must:
7. be capable of critical thinking, selfdirection and motivation for the purpose of selecting and attaining individual and professional goals;
8. demonstrate professional drive and commitment to education and teaching; and
9. develop a set of values which reflects a character worthy of working with young children.

To be eligible for student teaching the student must have:

1. been accepted into K-12 physical education elementary emphasis;
2. completed 90 credit hours including: ENG 112, IPCO 102, PEP 332 and 428;
PSYC 201, and EDFI 302;
3. achieved a 2.5 University accumulative grade point average;
4. attained a major point average of 2.5; and
5. filed an application for student teaching with K-12 physical education cocrdinator and College of Education and Allied Professions field experiences office.
Major-K-12 Physical Education with Secondary Emphasis
(meets special certification, in physical
education kindergarten-twelfth grade)
First year (31 hours)
PEP 137, 138, 164 and 256 (2)
ENG 112 (3)
BIOL 104 (4)
PEP 110 or $112,116,121,123,124$ (10)
Social/behavioral science electives (5)
IPCO 102 (3)
Second year ( 31 hours)
PEP 230 and 241 (5)
LEM 301 (2)
BIOL 332 (3)
PSYC 201 (4)
DANC 106, 111, 115 or 120 (2)
Approved literature elective ( 3 )
Humanities and arts electives (3)
elective (3-5)
DANC activities (3)
Cultural studies elective (3)
Third year ( 32 hours)
PEP 247, 303, 332, 350, 356, 360, and 362 and 402 (23)
HED 313 (3)
HED elective (3)
EDFI 302 (3)
Fourth year (29 hours)
PEP 412 and 433 (6)
PEP 497 (10)
EDFI 408 (3)
EDAS 409 (3)
Electives or minor (7) (Student teaching or practicum at elementary level suggested)
A candidate must apply for admission.
To be admitted the student must have:
6. completed IPCO 102 and ENG 112
with a grade of C or better;
7. successfully completed PEP 137,

138, 241 and 256 ;
3. completed PEP 247 with a grade of

C or better;
4. earned a 2.5 University accumulative
grade point average;
5. have earned a PEP accumulative
grade point average of 2.5 , including all
HED/PEP/DANC courses which are K-12
physical education with secondary
emphasis program requirements;
6. have demonstrated attainment of
minimal standards in four required (100
yel) professional and one elective (200
el) professional competencies; and
7. have completed 10 PEP credit hours on the BGSU main campus.

To be eligible for student teaching the
student must have:

1. completed 90 credit hours including

ENG 112, IPCO 102, PSYC 201, EDFI 302 and PEP 362
2. been officially accepted into K-12
physical education with secondary emphasis program;
3. attained a University accumulative grade point average of 2.5;
4. attained a major accumulative grade point average of 2.5 ;
5. successfully completed all profes-
sional activity competencies (six required
100 -level and three elective 200 -level
activity courses); and
6. filed an application for student teaching with PEP Division during second semester of year prior to year of antici-
pated student teaching (in addition to filing application in Field Experiences Office).
Major-Physical Education, Athletic Coaching and Health
(meets high school certification in physical education and health education)
Semester I (16 hours)
PEP 110 or 112 (2)
GEP 218 (1)
ocial science elective (3)
BIOL 104 (4)
ENG 112 (3)
SOC 101 (3)

Semester II (16 hours)
PEP 164 (2)
PEP professional activities elective (2)
DANC 106 or 111 or 115 or 120 (2)
PSYC 201 (4)
IPCO 102 (3)
Math elective (3-5)
Semeseter III (16 hours)
PEP 230 (3)
PEP 247 (3)
PEP professional activities (4)
HED 209 (3)
EDFI 302 (3)
Semester N (17-19 hours)
PEP professional activities elective (2)
BIOL 332 (3)
F\&N 207 (3)
Humanities elective (2-3)
Literature elective (3)
Coaching skills (1-2)
Cultural studies elective (3)
Semester V (16 hours)
PEP 350 (3)
PEP 360 (3)
HED 313 (3)
HED 340 (3)
PEP 328 (3)
Officiating elective (1)
Semester VI (15-16 hours)
PEP 303 (2)
PEP 362 (3)
HED 338 (3)
HED 348 (3)
SMD 429 (2)
Coaching elective (2-3)
Semeseter VII (18 hours)
PEP 392 (2)
PEP 402 (3)
PEP 412 (3)
PEP 433 (3)
HED 409 (3)
SMD 310 (2)
LEM 301 (2)
Semester VIII (16 hours)
PEP 497 (10)
EDFI 408 (3)
EDAS 409 (3)
To be admitted officially into this program, the student must have:

1. matriculated in the College of Education and Allied Professions;
2. completed IPCO 102 and ENG 112 with a grade of C or better;
3. attained a University accumulative grade point average of 2.5 or higher; and
4. completed PEP 247 with a grade of

C or better.
To be eligible for student teaching the student must have met College of Education and Allied Professions requirements for student teaching and must have:

1. completed PEP 362, 392 and HED 348;
2. earned an accumulative grade point average of 2.5 ; and
3. filed an application for student teach ing with PEP division during second semster of year prior to year of anticipated student teaching (in addition to filing application in Field Experiences office).
Adapted Physical Education Valida-
tion-for physical education majors only.

A candidate must be interviewed by the area coordinator before declaring this validation. This is an officially validated area for K-12 physical education certificate holders recognized by the state.
(24 hours)
PEP 164 (2)
PEP 340 or 350 (3)
PEP 433, 435, 387, 487 (10)
EDSE 431 (3)
PSYC 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.
PEP 164, 340 or $350,387,433$ (10)
SMD majors may substitute SMD 240 for PEP 433.

## Elementary School Physical Education Endorsement (30 hours)

(certification as an endorsement for elementary physical education on a standard elementary, music, physical education or
special education teaching certificate)
PEP 137, 138, 233, 238, 241, 332, 337 ,
402, 428 and 492 (19-22)
HED 313 (3)
Minor-Secondary Physical Education Minor
(meets secondary certification in physical education provided appropriate profes-
sional education course work is also completed) ( 33 hours)
Select four (8) from: PEP 110 or 112, 116, 121, 123, 124; RED 106 or 111 or 115 or 120
PEP 200-level elective professional activities (1)
PEP 230 (3)
PEP 303 (2)
PEP 350 (3)
PEP 362 (3)
PEP 412 (3)
HED 313 (3)
SMD 310 (2)
Select a minimum of 5 hours from: PEP 214, 360, 433, HED 209, PEP 306A, 306B, 306C, 306D, 306E, 306F, 306G, $306 \mathrm{H}, 328,329,330,331,332,410,431$

## Recreation

200 Eppler South, 372-6906
All recreation majors must fulfill the College of Education and Allied Professions general education requirements. There are three recreation options, each having a set of professional core classes and diverse career emphases. All majors are required to complete a semester-long internship as part of their professional preparation.

## Pecreation Administration

The recreation administration option prepares students for supervisory and management positions in public and voluntary organizations which are nonprofit in nature and also for positions in private and commercial employment settings which are profit motivated. Employment settings include governmental recreation services, community organizations such as YMCA's, Girl Scouts, services for special populations and the aging, and those agencies found in the private sector such as resorts, convention centers and the travel/tourism industry. The student enrolled in the recreation administration option focuses on business skills such as financial management, marketing and promotion, public relations and personnel management. Career emphases are commercial recreation, public/voluntary services, leisure/wellness and performing arts/entertainment.
First year (30 hours)
ENG 112 (3)
IPCO 102 (3)
PEG 100 (2)
Natural science/mathematics elective (3)
PED 190 and 210 (6)
PSYC 201 (4)
Approved literature elective (3)
Cultural studies elective (3)
Other general education elective (3)
Second year (31 hours)
Natural science/mathematics electives (6)
Social and behavioral science electives (5)
Humanities and arts elective (2)
Cuitural studies elective (2)
Other general education elective (3)
SMD 250 (3)
HED 313 (3)
RED 384, 385 and 387 (7)
Third year ( 31 hours)
SMD 390 (3)
PEP 433 (3)
RED 386, 487 (2)
Career-focus electives (20)
Elective (3)
Fourth year (30 hours)
RED 482, 483 and 488 (21)
Careerfocus electives (3)
Electives (6)

## Recreation Programming

The recreation programming option is designed to prepare students for programming and leadership positions in public and voluntary organizations which are nonprofit in nature and also for positions in private and commercial employment settings which are profit motivated. Employment settings include governmental recreation services, community organizations such as YMCA's, Girl Scouts, services for special populations and the aging, 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 emphases are public/voluntary services, leisure/wellness, special populations and leisure aging.
First year ( 30 hours)
ENG 112 (3)
IPCO 102 (3)
PEG 100 (2)
Natural science/mathematics elective (3)
RED 190 and 210 (6)
PSYC 201 (4)
Approved literature elective (3)
Cultural studies elective ( 3 )
Other general education elective (3)
Second year (31 hours)
Natural science/mathematics elective (6)
Social and behavioral science electives (5)
Humanities and arts elective (2)
Cultural studies elective (2)
Other general education elective (3)
SMD 250 (3)
HED 313 (3)
RED 384, 385 and 387 (7)
Third year ( 31 hours)
SMD 390 (3)
PEP 433 (3)
RED 260, 386, and 487 (4)
Careerfocus electives (18)
Electives (3)
Fourth year ( 30 hours)
RED 482, 483 and 482 (21)
Careerfocus electives ( 3 )
Electives (6)

## Outdoor Recreation

The outdoor recreation program prepares students for programming and administrative positions in profit and nonprofit organizations which focus on the use of the natural environment for recreation experiences. Students may prepare for one of the following career emphases: adventure programming, organized camping, inter-pretive-naturalist, historical-cultural interpretation and outdoor recreation
management.
First year ( 30 hours)
ENG 112 (3)
IPCO 102 (3)
PEG 100 (2)
Natural science/mathematics elective (3)
RED 210 (3)
PSYC 201 (4)
Approved literature elective (3)
Cultural studies elective (3)

Other general education electives (6)
Second year (31 hours)
Natural science/mathematics electives (6)
Social and behavioral science electives (5)
Humanites and arts elective (2)
Cultural studies elective (2)
Career-focus elective (3)
SMD 250 (3)
HED 313 (3)
BIOL 101, 204, or 301 (3-5)
RED 304 and 387 (4)
Third year ( 30 hours)
RED 380, 384, 386 and 487 (9)
PEP 433 (3)
SMD 390 (3)
Careerfocus electives (12)
Electives (3)
Fourth year ( 31 hours)
RED 482, 483 and 488 (21)
Career-focus electives ( 8 )
Electives (2)

## Recreation Minor (20 hours)

A candidate must be interviewed by the area coordinator before declaring this minor.
RED 190, 210, 384 and 385 (12)
RED 482 or 483 (3)
Select two hours from RED 387 and/or 487 (2)
Select 3 hours from this group - RED 260, 294, 304, 323, 380, 482, 483, 484, PEP 433, SMD 390 (3)

## Sport Mianagement

201 Memorial Hall, 372-2876
The sport management major is offered through the sport management division (SMD) of the School of Health, Physical Education and Recreation (HPER).

In the SMD program, one major (with five options) and two minors are available. Some of the curricula are currently undergoing revision. The Program Advisement and Teacher Certification Office, 365 Education Building, and the SMD Office, 201 Memorial Hall, have listings of all updated requirements.

To be formally accepted into the sport management major a candidate must meet the following criteria:

1. Completion of 45 semester hours including a $C$ or better in ENG 112 and IPCO 102, SMD 201 and SMD 250 or 298; 3 hours in PEP/RED activity courses (Option I and V students must see their advisers concerning activity courses); and 30 hours in additional College of Education and Allied Professions general studies courses.
2. University GPA of 2.5 .
3. Formal application and acceptance into the sport management program (see Division Office, 201 Memorial Hall, 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.

1. SMD 387-Formal acceptance into the sport management program.

SMD 489-52 hours in major field, isfactory completion of SMD 387, GPA of 2.5 and major GPA of 2.7. Option 1 majors must also satisfactorily complete HED 313.
Major-Option I, physical fitness specialist Option I represents a first step in preparation for taking the Fitness Instructor Certification Examination offered by the American College of Sports Medicine. Graduates of this area of concentration might seek careers in clinical (hospital, rehabilitation) settings, in which case they would need to earn advanced degrees, or in less sophisticated settings such as YM-YWCA's, fitness centers, health clubs and/or community exercise programs.
Major requirements ( $95-98$ hours)
SMD 201, 250, 298, 375, 390, 421, 489 and 490 (36)
SMD 387/487 (3-6)
SMD 310, 361, 423, 429 and 440 (13)
HED 313 (3)
PEP 164, 230, 303 and 360 (10)
ACCT 325 (3)
BIOL 331 and 332 (6)
BUSE 101 (3)
CHEM 115 (4)
F\&N 207 (3)
SOC 300 or 341 or 352 or 404 (3)
Activity requirement (8)
Yajor-Option II, sports information, marting and promotion
Students concentrating in this area may seek careers in sport marketing in the commercial sector or as sports writers, sports broadcasters, sports information directors, sports promotion directors or ticket sales agents.
Major requirements (101-104 hours)
SMD 201, 250, 298, 375, 390, 421, 489 and 490 (36)
SMD 387/487 (3-6)
SMD 240, and 425 (6)
JOUR 103, 206, 300, 303 and 340 (15)
MKT 400 or 442 (3)
ACCT 325 or 221 (3)
MATH 115, 120, 124 or 126 (3-5)
ECON 100, 200, 202 or 203 (3)
ART 102 and ARTD 211 (6)
PEP 328 (3)
SOC 300 (3)

BIOL 332 93)
MKT 300, 402 and 410 (9)
Activity requirement (5)
Major-Option III, sport administration and management
This program, with a strong business component, provides opportunities for students to develop skills applicable to management-level positions in sport. Examples of such positions are public relations director, corporate administrator of sporting events, contract adviser, tournament director or promoter, college athletic director, manager or owner of sports franchise and fund-raising director.
Major requirements (101-104 hours)
SMD 201, 250, 298, 375, 390, 421, 489 and 490 (36)
SMD 387/487 (3-6)
ACCT 221 and 222 (6)
MKT 300 and 402 (6)
SOC 300 (3)
SMD 240 and PEP 328 (6)
Select 12 hours from BUSE 335, ECON 202, MKT 412, MKT 430, ECON 321, BA 406, PHIL 320, IPCO 203, IPCO 307, F\&N 212, FIN 300, RED 384 (12)
ART 102 and ARTD 211 (6)
IPCO 205 (3)
ENG 388 (3)
BIOL 332 (3)
MATH 115, 120, 124 or 126 (3-5)
MKT 410 or 442 (3)
JOUR 340 (3)
Activity requirements (5)
Major-Option IV, sport specialist
Option IV is designed to prepare students for leadership roles in programs, related to intramurals, recreational sports, club
sports, youth sports and other similar settings. Since entry-level positions usually require instruction and/or coaching, the curriculum seeks to provide skill in these areas as well as in management.
Major Requirements (93-96 hours)
SMD 201, 250, 298, 375, 390, 421, 489 and 490 (36)
SMD 387/487 (3-6)
BIOL 332 (3)
SMD 306 (2)
SMD 240, 423, 431 and 440 (12)
HED 313 (3)

PEP 164, 230, 303, 340, 360, 328 (16)
ACCT 325 (3)
BUSE 101 (3)
SOC 300 or 341 or 352 or 404 (3)
Activity requirements (9)
Major-Option V, aquatics specialist This curriculum provides students with preparation in the primary skill and knowledge demanded by entry-level positions in aquatics: instruction, coaching, operations, organization, supervision and management. Students pursuing this option should be qualified to take various pool operators certification courses and examinations.
Major Requirements (94-97 hours)
SMD 201, 250, 298, 375, 390, 421, 489 and 490 (36)
SMD 387/487 (3-6)
SMD 240, 245, 423 and 440 (12)
HED 313 (3)
PEP 164, 230, 322, 360, 306H, 336 (14)
ACCT 325 (3)
BUSE 101 (3)
CHEM 115 (4)
BIOL 332 (3)
SOC 300 or 341 or 352 or 404 (3)
Activity requirement (10)
Minor-Athletic Coaching
May lead to coaching endorsement if cer-
tain criteria are met. See checksheet
available in 365 Education Building. (33-36 hours)
SMD 310, 391, 429 (6)
PEP 329 or 333 (2-3)
PEP 330, 332 or 334 (2-3)
PEP 331 or 336 (2)
Select two hours from: PEP 306A, B, C,
$D, E, F, G, H(2)$
HED 313 (3)
PEP 164, 230, 412, 360, 328 (14)
Select two hours from: SMD 391, 423, 425; PEP 303, 350; SOC 300 (Soc. of Sport) (2-3)
Minor-Athletic Training
May lead to NATA Certification Examination. ( 32 hours and 800 hours of clinical experience)
SMD 291, 310, 391, 410, 411, 429 (15)
HED 313, 314 (4)
PEP 164, 230, 303, 360, 328 (13)


# Sollege of Health and Human Services 

Clyde R. Willis, Ph.D., dean, 100 Health Center, 372-8242
Michael Rastatter, Ph.D., associate dean, 102 Health Center, 372-8242
Barbara Keeley, RN, MSN, director of program advisement, 101 Health Center, 372-8760

## Programs

Applied Microbiology, Gary Silverman, D.Env., director, 102 Health Center, 372-7774
Art Therapy, Michael Franklin, M.A., A.T.R., director, 114 Fine Arts Building, 372-2786
Criminal Justice, Gerald Rigby, Ph.D., director, 102 Health Center, 372-2326
Dietetics, Elsa McMullen, Ph.D., director, 402 Johnston Hall, 372-7821
Environmental Health, Gary Silverman, D.Env., director, 102 Health Center, 372-7774
Gerontology, John Hiltner, Ph.D., director, 102 Health Center, 372-2326 hysical Therapy, Robert Livengood, M.S., T., director, Medical College of Ohio, 381-3518
Rehabilitation Counseling, Hal Henderson, Ph.D., director, 405 Education, 372-7358

## Departments

Communication Disorders, Wayne Secord, Ph.D., chair, 338 South Hall, 372-2517
Medical Technology, Bob Harr, M.A., 504 Life Sciences Building, 372-8109
Social Work, Evan Bertsche, M.A., chair, 413 South Hall, 372-2441
School of Nursing, Joyce Shoemaker, Ed.D., R.N., dean, Medical College of Ohio, 381-5858 or Barb Keeley, R.N., M.S.N., coordinator; 101 Health Center, 372-8760

## Philosophy

Human dignity, 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, as well as generating bodies of knowledge in the professional sphere. 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 the human condition. For these reasons, education is directed toward inspiring and developing problem-solving and creative capabilities in students. Additionally, preprofessional and professional education must be regarded as preparation for a lifetime of continued learning which enhances the process of self-actualization for the individual.

## Academic advising

Each student is assigned a faculty adviser within the selected program. In addition, career information and advising services are provided for students in the college office located in the Health Center Building. The responsibility for meeting graduation requirements lies with the student and not with the adviser, the program director or the dean. Reading and following the information in the Undergraduate Catalog and the College Academic Handbook are essential.

## Degrees offered

The degrees awarded by the College of Health and Human Services and its School of Nursing are:
Bachelor of science in applied microbiology
Bachelor of science in art therapy
Bachelor of science in communication disorders
Bachelor of science in criminal justice
Bachelor of science in dietetics
Bachelor of science in environmental health
Bachelor of science in gerontology
Bachelor of science in medical technology
Bachelor of science in nursing
Bachelor of science in physical therapy
Bachelor of science in social work

A candidate for any degree in the College of Health and Human Services or School of Nursing must complete the general requirements for graduation listed on page 9 . 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 masters' degrees in communications disorders and rehabilitation counseling as well as a Ph.D. degree in communications 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. The requirement includes a minimum of two courses in each of the functional understandings of natural sciences, social sciences, humanities and arts, one course in foreign language and multicultural studies, plus one additional course in any of the functional understandings.

## Functional Understandings

Natural Sciences: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 115, 116, 125, 126, 135, 136; GEOG 125 (weather and climate); GEOL $100,104,105,205$; PHYS 101, 201, 202, 211, 212.
Social Sciences: A\&S 200; CAO H101; ECON 100, 200, 202, 203, 323; ENVS 101 301; ETHN 101, 410; GEOG 121, 122,
$230,325,331,337,343,344,346,349$,
426, 452; GERO 405; HIST 151, 152, 180,
$205,206,310,311,319,370,382,411$,
429, 470; HOEC 107; LEGS 200; MUCH
125; POLS 201, 250, 271, 301, 372, 402;
PSYC 201; SOC 101, 202, 231, 316; TECH 302.
Humanities and Arts: AMST 200, 230,
300; ART 101, 102; ARTH 145, 146; A\&S
100, 200; CAO H101; ENG 150, 200, 261, 262, 264, 265, 266, 267, 269; ETHN 220; FREN 284; GERM 260; LAT 141, 142; MUCH 101, 125, 221, 431; PHIL 101, 102, 103, 204, 207, 211, 212, 230, 319*, 327*, 342*, 325; POPC 160, 165, 220; RTVF 261; RUSN 211, 213, 222; THEA 141, 202, 347, 348; WS 200.
Beginning and Intermediate French, German, Greek, Italian, Latin, Spanish, Russian, Japanese and Chinese: 101, 102, 201, 202.

## Foreign Language and Muiticultural

Studies: Foreign Languages (Chinese, French, German, Italian, Latin, Japanese, Pussian, Spanish) 101, 102, 201, 202; also: FREN 211, 212, 284; GERM 117, 131, 260; SPAN 211, 212; ETHN 101, 220, 410; GEOG 121, 122, 230, 325, 331, 337. $343,344,346,349,426,452$; GERO 405; HIST 151, 152, 180, 310, 319, 370, 382, 470; HOEC 107: MUCH 125, 431; POLS 271, 272, 372; SOC 231.

## Skill Areas

Communications: IPCO 102; THEA 141, 202.

Computation and Math: CS 100, 101; MATH $115,116,120,124,125,128,129$, $130,131,232,247$; STAT 200.
*Only the courses specified meet requirements; they need not be taken in the order listed. Approved for students in criminal justice, communication disorders, nursing and gerontology.

## Grading option

A student may request the S/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 S/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 with honors before electing the S/U option.

## DEGREE <br> PROGRAMS

In most cases, the sequence of courses listed below must be completed in order to meet the requirements for the major or for professional 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 Microbiology

102 Health Center, 372-7774
Microbiologists are employed by medical or clinical laboratories for detection and diagnosis of disease. Public health laboratories use microbiological procedures in testing water supplies for potability and in quantifying incidences of communicable diseases.
Microbiologists work as public health officials in consulting infected individuals to control the spread of diseases. They also work in the food, dairy or liquor industries to maintain product quality, and in pharmaceutical companies, which ferment microbes to produce antibiotics. Sanitation laboratories employ microbiologists for the safe treatment of sewage.

Additionally, the small size and simple organization of microorganisms makes them the most effective subjects for studying life at its most fundamental level. Research with microbes has made increasingly important contributions to the understanding of genetics and cancer. Genetic engineering, utilizing microorganisms, is developing into a major industry.

The course work required of students will allow them, after a year of employment, to take the qualifying examination of the National Registry of Microbiologists of the American Academy of Microbiology, or the microbiology subspecialization of the American Society of Clinical Pathology.
An individual with the bachelor of science in applied microbiology may pursue advanced degrees in medical schools or universities to specialize in medical microbiology, clinical microbiology, protozoology, virology, microbial genetics, microbial physiology, immunology, food science or other areas of microbiology. A few additional courses will satisfy the requirements for entrance into medical, dental or veterinary schools.

## Suggested program

First year
BIOL 205 (5)
MATH 130, 131, according to student's goals (5-10)
CHEM 125, 126 (10) or CHEM 135, 136 (10)
ENG 112 or equivalent (3-6)
PEG 100 (2)
Electives and general education requirements (2-6)
Second year
BIOL 313, 405 (8)
CHEM 201, 306 (7) or CHEM 341, 342 (10)
Electives and general education requirements (15-21)
Third year
BIOL 400, 426,439 ( $8-12$ )
CHEM 308, 309 (4) or CHEM 445, 446, 447 (7)
Program seminar (1-2)
BIOL electives and general education requirements (15-21)
(BIOL 443, 447, PHYS 201 if internship is planned)
Fourth year
BIOL 400, 401, 421, 443, 447, 470 (3-15)
PHYS; 201, 202 (10) or PHYS 211, 212 (10)
Program seminar (1-2)
General education requirements and electives (8-12)
(Optional Internship experience 3-10)

## Other programs

Microbiology is also offered by the Department of Biological Sciences as a specialization under the biology major for the College of Arts and Sciences.

## Art Therapy

114 Fine Arts, 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 including a studio concentration, art therapy methodology courses, supportive core requirements in the behavioral and social sciences and a cognate or subspecialization in any one of the following areas: psychology, special education, gerontology, criminal justice, social work or a dual degree in art education.

The interdisciplinary nature of this preprofessional program prepares graduates for entry-level positions in a variety of social service agencies. The program fulfills 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 advised to continue with their training 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 thems. art therapy specialization. It is quite cor , mon today to find art therapists working in special education programs, nursing homes, community mental health centers, psychiatric hosptials and other health care and social service agencies. Students graduating from this program are able to work for change within normalized and mental health settings in a way which is respectful of individual differences and cultural identities.
In order to continue in the program, all students must get the grade of " C " or higher in the ARTT 230 class. All art therapy majors are also 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 do so, they will be denied permission to do their practicums. All majors must also have an accumulative GPA of 2.5 before enrolling in ARTT 488. No class required in the major can be taken S/U (except ART 488). Transfer students must complete the appropriate prerequisites before enrolling in specific courses.

## Suggested program

First year
ENG 111 and/or 112 (3)/(6)
PEG 100 (2)
ART 102, 103, 112 (9)
PSYC 201 (4)
SOC 101 (3)
SOWK 220 (3)*
General education requirements (6)

Second year
TH 145 or 146 (3)
205, (3)
ARTT 230 (3)
ENG 207 (3)*
PSYC 303 or EDFI 490 or HOEC 321 (3)
PSYC 403 (3)*
PHIL 319 (3)
Required beginning level studio course (ART 261, 263, 371, 373) (3)
EDFI 302 (3)
General education requirement (3)
Third year
ARTT 330 (Fall) (3)
ARTT 331 (Spring) (3)
PSYC 405 (3)
2 required beginning level studio courses (ART
$261,263,371,373$ ) (6)
ARTE 382 or 343 (3)
Cognate (6)
ARTH 456 (3)
Studio concentration (3)
Fourth year
Cognate (remaining hours)
Studio concentration (remaining hours)
ARTT 488 (10)
General elective or ART elective
*Strongly recommended during this year

## Communication <br> Disorders

338 South Hall, 372-2515
The undergraduate major in communication disorders will prepare students in the basic speech and hearing sciences, theotical and practical aspects of therapy, well as affording the student the opportunity for a limited amount of observation, participation and direct clinical work under supervision. The student will also become familiar with other para-professionals' services and goals and the interrelationships of these with comrnunication disorders. Since this is a
preprofessional program, students who wish to receive the Certificate of Clinical Competence from the American Speech-Language-Hearing Association are
required to obtain a master's degree. The state of Ohio requires a master's degree for the licensing of a speech-language
pathologist or audiologist. This require-
ment also holds for school positions.

## Suggested program

First year
BIOL 101 or 104 (3-4)
ENG 112 or equivalent (3-6)
SOC 101 (3)
IPCO 102 (3)
PEG 100 (2)
PHYS 101 or 201 (3-5)
CDIS 223 and 224 (6)
Foreign language or multicultural studies (3)
Second year
CS or MATH (3-4)
PSYC 201, 311 or SOC 301 (6)
EDFI 302 (3)
ENG 380 (4)
SDIS 301, 311, 321 (10)
ird year
EDSE 431 (3)
CDIS 341, 351, 361, 401, and 411 (16)
PSYC 270 and 324 or SOC 369 (6)
Electives (7-10)

Fourth year
EDSE 451 (3)
PSYC 305, 309 and 405 (8)
CDIS 331, 421, 431 and 461 (11)
Electives
(A 2.5 accumulative grade point average in the program core requirements is required to be eligible for enrollment in CDIS 421 and 431, clinical practicum.)

## Other programs

A program in communication disorders is offered through the College of Education and Allied Professions.

## 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 course work 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 sys-tem-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. 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 a major piece of original 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 supervisory-level personnel.

Criminal justice students may begin their studies at any of several technical or community colleges with which Bowling Green has formal agreements. Cooperative programs have been developed with Owens Technical College, Lima Technical College, Toledo Community Technical College, Lorain County Community College and North Central Technical College. Completion of a two-year associate degree in law enforcement may allow the student to enter the baccalaureate program in criminal justice with junior standing. Students may also choose to complete the entire four-year degree program at Bowling Green

Students must complete, preferably during the senior 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 elective courses must be taken for a grade, except those courses graded only S/U.
University and general education group requirements
ENG 112 or equivalent
PEG 100 (2)
Natural Science (2 courses)
Humanities and Arts (2 courses)
Foreign Language and Multicultural Studies (1 course)
Social Sciences: POLS 201, PSYC 201, SOC 101.

## Core courses

CRJU 210, 220, 230 or 320,330 and 480
PHIL 327
POLS 221, 330, 347 and 417
POLS 419 or PHIL 318
PSYC 405 and 454
SOC 301 or PSYC 311
SOC 316, 341, 342, 441 and 442
One computer science course
One statistics course
Internship (480 agency hours for 12 credit hours, CRJU 491)
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 jus-

## tice core courses

## Suggested program

First year
CRJU 210
ENG 112 or equivalent
POLS 201
PEG 100
PSYC 201
SOC 101
Natural sciences
Foreign language and multicultural studies
Humanities and arts
Second year
CRJU 220 and 230
Computer science course
Statistics course
Completion of general education requirements

Third year
CRull 320
Core courses and core electives
Fourth year
CRJU 491 (Internship - 12)
CRJU 480
Completion of core courses and core electives

## Dietetics

206 Johnston Hall, 372-2026
This program leads to membership in the American Dietetic Association and registration certification. Requirements for registration are an internship or an approved preprofessional supervised practice, followed by the passing of a national examination, after completion of this course of study.
A declaration of intent to pursue the dietetics 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 Bacheior of Science in Dietetics degree.
This curriculum meets requirements with the general emphasis as outlined by the American Dietetic Association. Upon approval of one of the professional prac-
ticums, as described above, and the Registration Certificate (Registered Dietitian), a graduate can function in varied roles withinin the professional field of dietitics.

## Suggested program

## First year

BIOL 205 (5)
ENG 112 (3)
PEG. (2)
SOC 101 or Psyc 201 (3 or 4)
CHEM 125, 126 (10)
AHE 100, F\&N 210 (4)
MATH 124 (4)
Second year
ECON 200 (3)
EDFI 302 (3)
IPCO 102 (3)
SOC 231 (3)
F8N 212, 307 (6)
General education requirements
Third year
BIOL 332 (4)
CHEM 306, 308 (7)
MGMT 305, 361 (6)
F\&N 331, 432, AMID 303, F\&N 431, and HOEC 405 or HDFS 305 (15)
Fourth year
BIOL 313 (4)
ACCT 325 (3)
F\&N 433, 434, 435, 436, 438 (15)
MATH 115 or STAT 200 (3)
MIS 200 or CS 100, 101, or 130 (3)

## Other programs

A program in dietetics also is offered in the College of Education and Allied Professions through the Department of Applied Human Ecology.

## Environmental Health

102 Health Center, 372-7774
Environmental health graduates are specialists in improving and protecting the quality of our environment. They are prepared to evaluate potential threats to health, develop strategies to reduce these threats and implement programs to provide needed protection. They hold key positions ensuring safe and high quality air, water, food and consumer products. They apply governmental, industrial and professional standards to protect health and safety. Specific concerns include air, land and water pollution; occupational health and safety; food protection; health and safety in recreation areas; hazardous waste disposal; shelter and institutional environmental protection.
Graduates are eligible to become Registered Sanitarians (R.S.) by the state of Ohio upon completion of employment experience requirements. Places of employment are in industry, government, environmental engineering firms, consulting firms, testing laboratories, insurancerisk management agencies, health care facilities and educational institutions.
The curriculum emphasizes the biological, chemical and physical sciences with additional requirements in the social sciences, computer science and statistics. Students learn investigation, sampling and analysis of indoor and outdoor environments to ensure compliance with occupational, public health, safety and environmental laws. An internship in an environmental related agency is necessary. The internship is an opportunity for students to relate academic preparation to practical experience and application in the field.

## Suggested program

First year
ENG 112 (3)
MATH 124 (4)
CHEM 125 and 126 (10)
PSYC 270 or SOC 369 (4 or 3)
CS 100 or 101 (3)
PEG 100 (2)
General education requirements and
electives (6)
Second year
BIOL 204 and 205 or 104, 331, 332 ( 10 or 12) PHYS 201 (5)
POLS 331 or 336, or LEGS 431 (3)
ECON 200 (3)
CHEM 306 (4)
General education requirements and electives

## Third year

ENVH 302 (4)
ENVH 303 (4)
ENVH 304 (4)
ENVH 301 (3)
ENVH 306 (3)
General education requirements and electives
Fourth year
ENVH 405 (3)
ENVH 406 (3)
ENVH 491 internship (4)
Program option requirements (12)
General education requirements and electives

## Other programs

Environmental programs are also offerer by the College of Arts and Sciences anc. the College of Education and Allied Professions.

## 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 the aged, including social service agencies, senior centers, nutrition programs, nursing homes, recreation and counseling agencies and research organizations.

While providing a basic background in general studies, the gerontology program is flexible enough to permit students to design 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 social work, administration, exercise physiology, biology, art therapy, urban planning, health, speech communication, psychology, nutrition, recreation, food management and sociology. Other cognate areas may be designed by the student and the program director.

New majors are admitted to the gerontology program according to the following criteria:

1. have GERO 101 (Introduction to Ger. ontology) 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 30 credit hours.

Prior to admission, students will be classified as pre-gerontology majors in the College of Health and Human Services. 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 student completes a field placement in an agency or an institution serving the elderly.

## Suggested program

## First year

ENG 112 or equivalent ( $3-6$ )
GERO 101 (3)
SOWK 110 (3)
PSYC 201 (4)
PEG 100 (2)
BIOL 104 or 205 (4-5)
F\&N 207 (3)
Computer science (3)
Cognate requirements
General education requirements
Electives
Second year
BIOL 332 (4)
GEOG 326 (3)
PSYC 309 (3)
GERO 301 (3)
HDFS 429 (3) or SOC 404 (3)
IPCO 306 (3)

A 301 (2)
(3-4)
Cognate requirements
General education requirements
Electives
Third year
BIOL 310 (2)
GERO 405 (3)
PHIL 319 (3)
F\&N 436 (3)
Cognate requirements
Electives
Fourth year
GERO 410, 420 and 493 (5)
GERO 491 (10)
Cognate requirements
Electives
This program is subject to revision and may be modified to meet student needs.

## Long-Term Care Administration Option

A special option available to students majoring in gerontology is to elect a specially designed cognate, long-term care, which prepares the student to seek an Ohio Nursing Home Administrator's license. This cognate consists of twelve 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 pproved skilled-intermediate care facility der the supervision of a licensed nursg home administrator.
As a result of the need for close supervision of the student registered for this practicum experience, the placement must 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)
SOWK 110 (3)
PSYC 201 (4)
PEG 100 (2)
BIOL 104 (4)
SOC 101 (3)
F\&N 207 (3)
Computer science (3)
General education requirements
Electives
Second year
ACCT 221 and 222 (6)
BIOL 332 (3)
ECON 202 and 203 (6)
GEOG 326 (3)
PSYC 309 (3)
SOC 404 (3)
HDFS 429 (3)
IPCO 306 (3)
RED 260 (2)
RA 301 (2)
OL 310 (2
BA 325 (3)
FIN 300 (3)
LEGS 301 (3)
MGMT 305 or 360 (3)
PHIL 319 (3)

F\&N 436 (3)
Electives
Fourth year
FiN 425 (3)
GERO 410, 411, 420, 493 (8)
GERO 491 (10)
LEGS 425 (3)
MGMT 361 (3)
MGMT 463 (3)
Electives
Fifth year
GERO 491 (10)
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 Administration

101 Health Center, 372-8242
This program will not be available 198991.

## Medical Technology

504 Life Sciences Building, 372-8109
Certified medical technologists perform tests that aid in the detection, diagnosis and treatment 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, physician's offices, research centers, industrial and commercial settings.
Medical technologists also work in the areas of biotechnology, toxicology, and various specialities 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 degree and certificate of clinical training certificate 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 Council on Allied Health Education and Accreditation of the American Medical Association. 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, 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 The Toledo Hospital, St. Vincent Medical Center and St. Rita's Medical Center. The professional studies 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 based program that is affiliated with the University.

A grade point average of 2.5 or better must be maintained throughout the professional training program. During professional training no more than one lecture course in which a D or F has been earned may be repeated; 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 practi-
cum portion until all prerequisites have been completed with a grade of C or better.

## Three plus one (3+1) plan

First term ( 15 hours)
ENG 111 (3)
MATH 130 (3)
CS 100 (3)
CHEM 125 (5)
PEG 100 (1)
Second term (17 hours)
ENG 112 (3)
BIOL 205 (5)
CHEM 126 (5)
PEG 100 (1)
Social science elective (3)
Third term (15-16 hours)
CHEM 306 or 341 (4-5)
BIOL 332 (4)
MEDT 201 (1)
BIOL group elective (3)
Social science elective (3)
Fourth term (13-18 hours)
CHEM 308-309 or 342 (4-5)
BIOL 313 (4)
BIOL group electives (6-7)
Multicultural elective (3)
Fifth term (14-16 hours)
BIOL group electives (7-9)
Physical science/math elective (3-4)
Humanities elective (3)
Sixth term (14-16 hours)
Physical science/math electives ( $6-8$ )
BIOL group elective (4)
Humanities electives (6)

## Professional Training

Seventh term (16 hours)
MEDT 411, 412, 413, 414, 421, 422, 423, 451
Eighth term ( 15 hours)
MEDT 431, 432, 434, 435, 441, 442

Cinical practicum-as scheduled (19 hours)
MEDT $424,415,416,465,433,443,480$
Students may take CHEM 341-342 as
physical science/math electives if using
CHEM 306-308-309 as program require-
ments. Students who take CHEM 341-342 as program requirements may take CHEM 308-309 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.
PIOL group elective courses-4

## required

BIOL $310,331,350,405,407,411,419$, $426,433,435,438,439,443,447,449$, 526
ENG 388
Physical science/math elective
courses-2 required
CHEM 201, 308-309, 321, 341, 342, 352, 445
MATH 115, 131
PHYS 201, 202
ENG 388
CS $101,130,180$
Others by department approval

## Physical Therapy

2601 Dowling Hall, Medical College of Ohio, at Toledo, $381-3518$
(At the time this catalog went to print, major curriculum changes were being considered; please consult your adviser for up-to-date information)

The physical therapy education 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 provides values and attitudes that promote caring and concern for the individual and for society; concepts and principles derived from knowledge of the - natural sciences, the social sciences, and the humanities; and skills in the collection of information from and about patients, in the establishment of rapport with patients to facilitate both problem identification and therapy, in the application of the scientific method to the analysis, synthesis, and management of problems in the identification and critical appraisal of relevant literature and clinical evidence, and in the continuation of one's own professional development. The physical therapist is a highly skilled practitioner who is aware of the health problems of the disabled in all age groups and in a variety of environments.

Physical therapy provides a career 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 work in hospitals, public health agencies, health maintenance organizations, rehabilitation and extended care facilities, public schools, governmental agencies, and they may establish their own business as an independent practice.

During the freshman and sophomore years, students take a preprofessional program that permits them to fulfill all prerequisite courses 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 quarters include the basic sciences, physical therapy theory and procedures and applied clinical sciences. A six-month internship experience, which is required of all students, develops the ability to undertake responsibility for patient care while under supervision. More than 70 hospitals, local health agencies, rehabilitation centers and public schools are affiliated with the program as clinical educational facilities.
This program is accredited by the Commission on Accreditation in Physical Therapy Education. Graduates are eligible to take the state licensure examination in the state in which they wish to practice.

Fees for the baccalaureate physical therapy program are the same as for all other 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, travel to clinical educational facilities which 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 student.

## 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. if the candidate is a transfer student, submitted an application and all supporting academic credentials for admission to the University to the Office of Admissions by December 1 of the year preceding their anticipated acceptance to the professional program.
2. been admitted to the University of Toledo or Bowling Green State University.
3. filed the physical therapy professional curriculum application prior to the deadline date of January 15 of the year the student wishes to enroll in the professional curriculum to the Department of Physical Therapy, Medical College of Ohio.
4. obtained a minimum of 2.5 accumulative GPA. No S/U or PS (pass) or NC (no credit) options are permitted in required courses or prerequisites for required courses, except those graded only on that basis.
5. completed each of the following courses or their equivalent with a minimum grade of C :
Natural sciences
BIOL 205 and 331
CHEM 125 and 126
PHYS 201
Behavioral and social sciences
PSYC 201
SOC 101
6. completed all other general program requirements specified by Bowling Green State University.
7. provided documentation of experience in health care and/or community service(s).
8. completed a personal interview as stipulated by the admissions committee for the professional curriculum.
9. filed a certified letter of acceptance with the program director by April 30.

The availability of clinical facilities and faculty 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 professional physical therapy program.

## Selection

The responsibility for determining the admission of candidates is vested in the Committee on Admissions which is composed of the faculty of the physical therapy program 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, work experience, and personal characteristics important in working with people in the health care field.

## Suggested program

First year
ENG 112 or equivalent (3-6)
PEG 100 (2)
SOC 101 (3)*
MATH 130 (3)
IPCO 102 (3)
CHEM 125 and 126 ( 10 )*
PSYC 201 (4)*
MRA 101 (1)
General education requirements (3-6)
Second year
PHYS 201 (5)*
BIOL 205 and 331 (9)*

[^1]
## Social Work

413 South Hall, 372-2441
This program is designed to prepare students to be generalist practitioners at the beginning level of social work practice. Built upon a liberal arts foundation, the program provides students with knowledge and skills needed to assist people seen in social service programs.

Social workers work in a great variety of social service programs including hospitals, schools, courts, correctional institutions, programs for the aged, programs for the physically and mentally handicapped and mentally ill, child welfare programs and many others.
In these settings, social workers assume the roles of medical social worker, school social worker, probation and parole counselor, correctional social worker, geriatric social worker, child protective social worker, foster care or adoption social worker and public assistance social worker.
As a pre-major, students take introductory social work courses along with courses in a variety of other disciplines. A written application is required for major status. (See College of Health and Human Services Student Handbook for requirements.)
Most of the social work courses are taken in the junior and senior years.
This program emphasizes student participation in area social agencies through observation, volunteer work and supervised field instruction. Graduates of the program receive a Bachelor of Science in Social Work. The program is accredited by the Council on Social Work Education at the baccalaureate level.

## Suggested program

First year
SOWK 110 (3)
ENG 112 or equivalent (3-6)
BIOL 101 or 104 (3-4)
SOC 101 (3)
CS 100 (3)
PSYC 201 (4)
PEG 100 (2)
General education requirements (6)
Elective (3)
Second year
SOWK 220, 227 (6)
POLS 201 (3)
IPCO 306 (3)
ECON 200 (3)
PHIL 210 (3)
PHIL 103 (3)
General education requirements (6)
Elective (3)
Third year
SOWK 230, 320, 322 and 332 (12)
SOC 301, 369, 370 (9)
General education requirements (6)
Electives (6)
Fourth year
SOWK 325, 326, 321, 423, 430 (23)
PSYC 405 (3)
Electives (6)
This program is subject to revision and may be modified to meet student needs.

# School of Nursing 

Medical College of Ohio, 381-5800
101 Health Center, Bowling Green State University, 372-8760
Firelands College, 433-5560
The School of Nursing offers the student an opportunity to become actively involved in the health field 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 as an educated nurse. A graduate of the nursing program is capable of providing health services for individuals, families and communities, eligible to take the licensing examination to become a registered nurse and prepared 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 mandated for uniforms, professional liability insurance, specific health tests and lab fees. The classes in the nursing major are taught in Toledo at the Medical College of Ohio. Transportation to classes at the Medical College of Ohio in Toledo and to the clinical placements is the responsibility of the student.

The School of Nursing Offers two programs to obtain a Bachelor of Science in Nursing degree:

1. BSN for students entering the nursing profession.
2. RN/BSN for students that are A.D. or diploma registered nurses.

## BACHELOR OF SCIENCE IN NUPSING-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 transfer credits, in addition to the requirements listed on page 9.

A minor is not required for graduation.

## Admission requirements

Admission to the preprofessional nursing program is through the Office of Admissions of the University. Successful completion of the preprofessional 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 is competitive and based upon:

1. Completion of the following courses with a "C" or better:

ENG 112
MATH-demonstrated competency above 095 level

CHEM 115 and 116
BIOL 205
PSYC 201
2. minimum accumulative grade point average of 2.5 in the preprofessional program.
3. completion of 30 semester hours of credit. Admission applications are available from the nursing office in December of each year.

## University Requirements

These courses are offered at the BGSU main campus or at Firelands College, branch campus 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 page 11.

Each student must take two different PEG 100 courses.

## Functional Understandings Natural sciences

Each student is required to complete BIOL 205, CHEM 115, 116 and MATH as demonstrated by a competency examination score above MATH 095 level.

## Social sciences

Each student is required to complete PSYC 201 and SOC 101

## Arts and humanities

Each student is required to complete one course in literature (American, English or foreign), PHIL 102 or 342, and one other course in one or more of the following areas: art, literature, ethnic studies, foreign languages, music, philosophy, popular culture, theatre or women's studies. A list of courses approved for the humanities requirements is available from the School of Nursing office, 101 Health Center.

## Foreign languages and multicultural studies

Each student is required to complete one course from the approved list.

## Required supportive courses

Additional required credit hours exclusive of major include F\&N 207 or 307 , EDFI 490 or PSYC 240; two PEG 100 courses; PSYC 405; either PSYC 270, SOC 369 or MATH 115; and BIOL 331, 332, 314 and 315.

The major requires a minimum of 66 hours. These include 21 nursing courses and 6 human biological science courses. A minimum grade of $C$ is required in all nursing courses in the professional program. No required courses in the major may be taken $\mathrm{S} / \mathrm{U}$.

## Suggested program

First year (preprotessional program)
CHEM 115 and 116 (8)
MATH-demonstrated competency above 095 leve!
SOC 101 (3)
PEG 100 (2)
ENG 111 and 112 or equivalent (3-6)
BIOL 205 (5)
PSYC 201 (4)
NURS 100 (1)
Humanities elective (3)
Second year (professional program)
PHIL 342 or 102 ( 3 )
BIOL 331, 332, 314, and 315 (12)
EDFI 490 or PSYC 240 (3)
F\&N 207 or 307 (3)
Literature (3)
PSYC 270, SOC 369 or MATH 115 (3-4)
Foreign language and multicultural studies elective (3)
PSYC 405 (3)
Third year (upper division)
NURS $370,371,372,373 ; 380,381,382,383$
384; 390, 391, 392, 393, 394
Fourth year
NURS 471, 473, 474; 481, 484, 491, 492, 493, 494
Electives
The above is a suggested program that may be modified according to individual needs and capabilites. The School of Nursing recommends acadinic advisement as the student progresses.

## BACHELOR OF SCIENCE IN NURSING-RN/BSN Degree program for the registered nurse

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. This program is offered through the Bowling Green main campus and the Firelands campus.

## Admissions Requirements

Criteria for seeking admission to the major are:

1. minimum of 30 semester hours of college credit including prerequisite courses in chemistry and biology or equivalents with minimum GPA of 2.5 .
2. 50th percentile success on selected Nursing Examinations.
3. current license to practice in the e of Ohio.
completion of general college requirements.
4. professional liability/malpractice insurance.
5. graduation from an NLN accredited school

The NLN examinations earn the diploma graduate 30 semester hours of nursing credit and determine placement for both diploma and associate degree graduates into the RN sequence (upperdivision nursing). The diploma RN is also granted 12 semester hours of technical credit.

Application to the major takes place in January preceding the fall semester in which the student plans to enter the major.

A lab fee will be assessed for all technology courses.

A minimum of 123 hours are 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 Bowling Green State University.

## 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 comed the course. A penalty is imposed if G 112 is not completed within the first 60 hours. See page 11.

Each student must take two different PEG 100 courses.

RN students must take or transfer in equivalents to the following courses:

## Functional Understandings Natural Sciences

CHEM 115 (4)
BIOL 205 (5)
Math as demonstrated by a competency examination score above 095 level.

## Social Science

Each student is required to complete PSYC 201 and SOC 101.

## Arts and humanities

Each student is required to complete one course in literature (American, English or foreign), PHIL 102 or 342, and one other course in one or more of the following areas: art, literature, ethnic studies, music, philosophy, popular culture, theatre or women's studies. A list of courses approved for the humanities requirements is available from the School of Nursing office, 101 Health Center, or the Firelands College Nursing Office.

## Foreign languages and multicultural studies

Each student is required to complete one course from the approved list.

## Required Supportive Courses

Additional required credit hours exclusive of major include EDFI 490 or PSYC 240; either PSYC 270, SOC 369 or MATH 115; PSYC 405 or any other upper division PSYC course, BIOL 433.
There are 27 hours in the nursing major. Typically, students take the 27 hours part-time spread out over two years. An acceleration plan is possible; however, prior approval must be obtained from the associate dean for the RN program.


# College of Musical Arts 

Robert W. Thayer, Ph.D., dean, 1031
Moore Musical Arts Center, 372-2181
Richard Kennell, M.M., 'assistant dean, 1031 Moore Musical Arts Center, 372-2181
Department of Music Composition/ History, Kenley P. Inglefield, chair, 1031
Moore Musical Arts Center, 372-2181
Department of Music Education, P Thomas Tallarico, chair, 1031 Moore Musical Arts Center, 372-2181
Department of Performance Studies, Richard Cioffari, chair, 1031 Moore Musical Arts Center, 372-2181

## Objectives

The primary objectives of the College of Musical Arts are to educate talented musicians for professional careers in yhing, performance, composition and ical scholarship; and to serve the University community by contributing to the general education program. The college also strives through its division of public mission to enhance the cultural climate of the entire campus and community and to serve as a cultural resource for 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 courses in art music, jazz, world music, music 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 -usic.

## Entrance Examinations

Students wishing to major or minor in music are required to audition in their principal performance medium and to take a diagnostic examination in general musicianship including music reading, elementary music theory and aural skills. 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 satisfactrory completion of these auditions and examinations. 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.

## Music Performance Ensembles

Membership in music ensembles is open to all students in the University who qualif'y on the basis of auditions. These ensembles include the A Cappella Choir, Men's Chorus, Women's Chorus and Collegiate Chorale; Concert, University, Marching, and Symphonic Bands; Philharmonia Orchestra; and a variety of small vocal and instrumental ensembles, including 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:

Music composition (MUCH)
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, string or woodwind emphasis
Instrumental option-keyboard emphasis
Music history and literature (MUCH)
Jazz studies
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. To ensure not only technical skills but a broad understanding of the social and cultural environment in which the art of music is practiced, breadth as well as depth are stressed in the curricular programs for each of these majors. See the sections immediately following as well as the course descriptions for specific details of each of these majors.

## Bachelor of Arts

The Bachelor of Arts degree with both majors and minors in music is also available (see College of Arts and Sciences). Bachelor of Arts degree candidates who wish to pursue a major or minor in music should contact the assistant dean of the College of Musical Arts.

## Bachelor of Science in Education

A minor in music is available to students majoring in education (see College of Education and Allied Professions). The following options are offered:
Secondary instrumental music (meets high school certification requirements)

Secondary vocal music (meets high school certification requirements)

All prospective music minors must complete the music entrance examination including an audition in the major performance medium.

## Approval for Continuation as a Music Major or Minor

The progress of each music major or minor toward a degree is reviewed each semester by the faculty of the appropriate department(s). Only students whose musical and academic performance is salisfactory are permitted to continue in the program.

## BACHELOR OF MUSIC DEGREE

## General Requirements for the Degree

A candidate for a degree in the College of Musical Arts must fulfill the general University requirements for the baccalaureate degree (see Academic Policies) and meet the requirements for the degree listed in the following pages. To further assist students in academic program planning, curricular check sheets are available from each department.

## Academic Advising

A departmental adviser is available to assist students with career advisement, curricular planning, course selection and determining progress toward meeting graduation requirements. Ultimate responsibility for knowing and meeting requirements rests with the student, who thus needs to be thoroughly familiar with the Undergradute Catalog and with appropriate curricular checksheets. Students adrnitted to the College of Musical Arts as a music major or minor are encouraged to meet with the chair of the appropriate department 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 major within music.

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.

## Double Miajor

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 musical 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 attendance, 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 Minor

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 performance. Students interested in the jazz minor should consult their department chair and the coordinator of jazz studies for assistance in planning for the additional required course work.

## 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 or Jazz Ensemble (4)
MUSP Applied instruction (8)

Applied credits earned in any music major program count toward this requirement.

## Recording Technology Minor

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.

## Recording Technology minor program (28)

Required courses
PHYS 350 - Musical Acoustics (3)
MUCH 424 - Electronic Music I (3)
MUCH 425 - Electronic Music II (3)
MUCH 436 - Recording Techniques (2)
MUCH 437 - Advanced Recording
Techniques (2)
MUCH 470 - Computer Music̣ (3)
Elective courses; at least 12 hours selected from the following:
TECH 121 - Industrial Mathematics (3)*
ET 240 - Electricity (4) - Prereq:
TECH 121
ET 241 - Electronics (4) - Prereq:
ET 240
CONS 235-Intro to Construction (3) Prereq: High School Math
CS 100 - Computer Basics (3) -
Prereq: MATH 095 or equivalent
BA 102 - Introduction to Business (3)
ECON 200 - Introduction to Economics (3)
MGMT 305 - Principles of Organization \& Management (3)
MKTG 300 - Principles of Marketing Management (3) - see course description' for prerequisites
ACCT 325 - Accounting Concepts for Non-Business Students (3)
*Open only to freshmen and sophomores

## S/U Grading

No required music courses may be taken for S/U grades. General education and professional requirements outside of music, however, may be taken for S/U credit. Elective hours within and outside of music may also be taken on an $S / U$ 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 participate in ensembles in other media: See depart- Amon mental guidelines for individual require ments and limitations.

## Aural Skills

rder to acquire those hearing and tsinging 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). Since these courses are competency based, students are encouraged to progress faster than the "normal" rate of one level per semester. See Music Com-position-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).

## DEGREE PROGRAMS

## 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 st demonstrate their understanding facility in the jazz idiom as well. This 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. Please refer to the specific performance requirements for the jazz studies major below. All music majors are expected to participate in ensembles throughout their undergracluate program at Bowling Green State University. Performance opportunities in the Jazz Lab Bands and Combos are not lim. ited to jazz studies or other music majors.

## Keyboard Proficiency Requirement

Functional keyboard proficiency tests I and II are required. See Music Education: Functional Keyboard Requirements below 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 126-128 total credits distributed as follows:

1. 30-32 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 performance studies courses and keyboard proficiency;
5. 6 credits in music electives;
6. 3 credits in ENG 112;
7. 2 credit hours in PEG 100.

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 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 junior year.

## Physical Education

See Academic Policies, General Requirements for the Baccalaureate Degree.

## General Education

Requirements

## I. Humanities and Arts

English Literature Elective-3 hours Additional elective from the approved list-3 hours

## II. Natural Sciences

Two courses from the approved list-6 hours.

## III. Social Sciences

Two courses from the approved list-6 hours.

## IV. Foreign Languages and <br> Multicultural Studies

At least two courses from the approved list-6-8 hours.

## Additional requirements outside music

ENG 112-3 hours
ETHN 120 Introduction to Black Stud-ies**-3 hours
POPC 280 Introduction to Popular
Music-3 hours
**May be approved spring 1989 for fulfillment of one Group IV requirement in general education.

## 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 ensem-
bles 12 hours; major instrument/voice 16 hours; MUSP 3052 hours; MUSP 495 recital 2 hours. Total: 36 hours.

## Piano

MUED 150, 151 (may be waived by profi-
ciency 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 ( 34 hours)
MUCH 131, 141, 142, 236 and 237 (13)
PEG 100 (2)
Applied music (4)
Ensembles (4)
MUED 150 and 151 (2)
ENG 112 (3)
Social 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 (33 hours)
MUCH 213, 232, 311 and 312 (11)
MUSP 305 (2)
Applied music (4)
Ensembles (4)
Music electives (3)
Natural sciences general education requirements (6)
Humanities and arts general education elective (3)
Fourth year ( $28-30$ hours)
MUCH 411, 436 and 438 (6)
MUSP 495 Recital (2)
Applied music (4)
Ensembles (4)
Music electives (3)
English literature general education elective (3)
Multicultural studies general education electives (6-8)

The above is a sample program which may be modified with the approval of the coordinator of jazz studies and individual department chairs according to the student's individual needs and capabilities.

## Wusic Composition

(courses coded MUCH)
1031 Moore Musical Arts Center, 372-2181

## Admittance as a Composition Major

Music students who have developed a strong interest in music composition and have demonstrated a strong aptitude in this area 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 and must be approved by the faculty of the department.

## Collegium Musicum

The department maintains a Collegium Musicurn 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 and Balinese Gamelan 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.

## Reyboard Proficiency <br> Requirement

Functional keyboard proficiency tests and II are required. See Music Education: Functional Keyboard Requirements below and pertinent course descriptions.

## 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 or arrangement.

## Completlon 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 316 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 316.

## DEGREE REQUIREMENTS

The Bachelor of Music degree in music composition requires $133-138$ total credits distributed as follows:

1. 40-44 credits in general education;
2. 50-51 credits in basic musicianship, including performance;
3.38 credit hours in advanced courses in music theory, literature and composition;
3. 3 credits in ENG 112;
4. 2 credit hours in PEG 100.

For specific information, consult the
Chair of the Department of Music Composition/History.

## 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 Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year.

## Physical Education

See Academic Policies, General Requirements for the Baccalaureate Degree.

## General Education <br> Requirements

## I. Humanities and Arts

Students must complete one course in fine arts or philosophy and one course in English literature. Total: 6 hours.

## II. Natural Sciences

Students must complete at least two courses. Total: 6 hours.

## III. Social Sciences

Students must complete at least two courses. Total: 6 hours.

## IV. Foreign Languages and Multicultural Studies

Students must complete at least eight hours of one language; either French or German is recommended. If proficiency equivalent to 101-102 in either language can be established with the appropriate language departments, courses beyond this level may be taken. One or two semesters in computer science courses may be substituted for one semester of a foreign language beyond the first year of earned credits. Total: 16 hours.
In addition, each student must select a sufficient number of courses from any of the above areas, in consultation with the chair, to meet the total general education requirements of $40-44$ hours.

## Music Requirements

All composition majors are required to complete the following music courses. Minimum total: 88 hours.

## Music core

MUCH 131, 132, 231, 232; either 236 or 237, and one the following: 233,234 or 235.

Aural skills 141, 142, 241, 242, and H341. 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

MUED 150, 151, 250, 251 (may be waived by proficiency exam). Keyboard proficiency tests I and II are required. Total: 5 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, 316 (12 hours), 320 or $325,403,404,410$ ( 4 hours), 424 and 425. Total: 34 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 ( 33 hours)
MUCH 131, 141, 142, 233 or 234 or 235, and 236 (12)
PEG 100 (2)
Applied music (2)
Arts and humanities general education requirements (6)
MUCH 116 (4)
Ensembles (2)
MUED 150 and 151 (2)
ENG 112 (3)
Second year ( 34 hours)
MUCH 132, 231, 232, 241 and 242 (13)
Applied music (2)
Foreign language (8)
Ensembles (2)
MUED 250 and 251 (3)
Electives in and out of music (6)
Third year (35 hours)
MUCH H341 (2)
MUCH 308 and 309 (4)
MUCH 315 and 320 (4)
MUCH 410 (4)
MUCH 316 (6)
Ensembles (2)
Music literature electives (4)
Mathematics and natural sciences general education requirements (6)
Music performance electives (3)
Fourth year ( 35 hours)
MUCH 316 (6)
MUCH 424 and 425 (6)
MUSP 305 and 306 (4)
MUCH 403 and 404 (4)
Foreign language ( 8 )
Social sciences general education requirements (6)
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 <br> urses coded MUED)

Moore Musical Arts Center, 372-2181
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: a choral, an instrumental, a classroom music and a choral/musical theater option. 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 se who are interested in teaching elentary and junior high 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 student must take approximately 34 hours of required course work 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. 42 hours of credit in general studies
2. 9 hours of credit in professional education;
3. 58 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;
5. $2-3$ hours of credit in physical education (PEG).
[^2]Approval of an option is initially determined on the basis of the student's academic standing and performance achievement.

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 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 junior year.

## Physical Education Requirement

See Academic Policies: General Requirements for the Baccalaureate Degree.

## General Education Requirements

To ensure a general education background in addition to the teaching major, a student is required to complete 42 hours of credit from the four areas of knowledge indicated below.

## I: Humanities and arts

Students are required to complete one course in ENG literature ( 3 hours) from the approved general education list. In addition, a minimum of 3 hours of credit must be completed from the approved humanities and arts general education list. Courses in music may not be used. Minimum Total: 6 hours. Exceptions to this requirement are discussed below.

Requirements for the classroom music option
Students pursuing the classroom music option are required to take 9 hours in related art disciplines. These include: English literature ( 3 hours) from the approved general education list, ART 101 ( 3 hours) and a choice of one of the following: ART 145, 146 or THEA 347 (3 hours). Courses in music may not be used. Minimum total: 9 hours.
Requirements for the choral/musical theater option
Students pursuing the choral/musical theater option must complete the following courses in theater and related field: THEA 202, 241, 341 and 352 (12) and THEA 243 or 343 or 349 (3). Students are also required to take one course in ENG literature (3) from the approved general education list. 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. Minimum total: 18 hours

## II: Natural sciences

Students must complete at least 3 hours of credit in course work selected from the approved natural science general education list. (MATH 241 and 242 are applicable only for the elementary education major.) Minimum total: 3 hours.

## III: Social and behavioral sciences

Each student must complete PSYC 201 and at least 3 hours of credit from the approved social and behavioral sciences general education list. Minimum total: 7 hours.

## IV: Foreign languages and multicultural studies

Students are required to complete (MUCH 233, 234 or 235 and EDFI 408. Minimum total: 5 hours.

## Communication

Students must complete ENG 112 (C or better) and IPCO 102 (C or better). A student is considered to have demonstrated acceptable performance in English skills if a grade of C or better is received in ENG 112. A student who receives a D in ENG 112 must repeat the course until a grade of $C$ is earned. A penalty is imposed if ENG 112 is not passed before the junior year. See Writing Proficiency Requirement. Minimum total: $\overline{6}$ hours.

## Computation and Mathematics

Students are required to complete one course (3 hours) from the approved computation and mathematics general education list. Minimum total: 3 hours.

## Total group requirements

1. Instrumental and choral options-

Group I, II, III, IV, Communication, and computation and mathematics. Total 30 hours

Classroom option-Group I, II, III, IV. Communication, and computation and mathematics. Total 33 hours.
Choral/musical theater option-Group I, II, III, IV, Communication, and computation and mathematics. Total 42 hours.
2. Elective hours are distributed as follows:
Instrumental and Choral options-12 hours, a minimum of five of which must be exclusive of required music courses.
Classroom option- 9 hours, a minimum of two of which must be exclusive of required music courses.
Choral/musical theater option-0 hours.
These hours may be elected from one or more of the five general studies categories or from any of the following disciplines: JOUR, MKT, MGMT, BUSE, international business, LEGS, FIN, INS, LEM, HOEC, POPC, technology; health, physical education and recreation; music, and education. Required courses in the music education option may not be used. Students required to take MUCH 110, however, may apply these hours to the elective category.
3. Students in all options except cho$\mathrm{ral} / \mathrm{musical}$ theater are required to take a minimum of 2 hours of PEG courses. Students in the choral/musical theater option select 3 hours of dance courses.

## Professional Education <br> 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 EDF: 302 is PSYC 201). EDF 408 appears as a requirement in group IV, above.

## Music Core Requirements

All music education majors are required to complete the following core courses. Minimum total: 58 hours.

## Music history, theory and aural skills

Music modules MUCH 131, 132, 231, 232 and 236. (Either MUCH 233, 234 or 235 required under the Group IV category.) in addition, either 315,320 or 325 taken according to specific option. Aural skills IIV (MUCH 141, 142, 241 and 242). Minimum total: 25 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. Total: 3 hours.

## 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 (58 hours) each major in music education must complete the requirements of one of the following options:

## Choral option (keyboard emphasis)

MUED 340, MUED 341, 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 minimum: 21 hours.

## Choral option (vocal emphasis)

MUED 340, MUED 341, MUED 359, MUSP 310; 3 hours of instrument classes (see additional requirements-instrument classes), one hour of studio piano, 3-5 hours of class piano and functional proficiencies I, II and III. Total: 19-21 hours.

## Classroom option (keyboard emphasis)

MUED 340, MUED 341, 451, 3 hours of instrument classes, 3 hours of class or studio voice, 2 hours of class piano, functional proficiencies I and II, and MUSP 264. Total: 20 hours.

## Classroom option (vocal emphasis)

MUED 340, MUED 341, 451, 3 hours of instrument classes, 1 hour of studio piano, 3-5 hours of class piano and functional proficiencies I, II and III. Total: 18-20 hours.

## Instrumental option (keyboard emphasis)

MUED 340, MUED 341, 7 hours of instrument classes, 1 hour of class or studio voice, 2 hours of class piano, functional proficiencies I, and II, and MUSP 264. Total: 20 hours.

## Instrumental option (instrument

 emphasis in woodwind, brass, string or percussion)MUED 340, MUED 341, 7 hours of instrument classes, 1 hour of class voice, 3-5 hours of class piano and functional proficiencies I, II and III. Total: 20-22 hours. Choral-musical theater option (vocal emphasis)
MUED 340, 341, 359, MUSP 310, 3 hours of instrument classes, 1 hour of studio piano, 3-5 hours of class piano, and functional proficiencies I, II and III. Total: 19-21 hours.

## Choral-musical theater option (keyboard emphasis)

MUED 340, 341, 359, MUSP 310; 3 hours of 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.

Performance requirements-musical theater option
Students must participate in one Univer. sity 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 a field component (MUED 341). Specific option areas will be offered only during certain semesters. Students should consult the department for detaiis.

## 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 ail music education majors. It 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 simpiy by taking piano for a specified number of credit hours. The following skills are required for each proficiency examination:

Proficiency l: (freshman level) scales, basic chord progressions, chording melodies, and sight reading

Proficiency II: (sophomore level) harm. nization, score reading, and transposition

Proficiency III: (sophomore level) accompanying
roficiency / is a freshman-level requireit; proficiencies II and III are sophomore requirements.

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 150151 and take MUSP 264 in lieu of proficiency III.
All freshmen are expected to pass functional proficiency 1 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. 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
signments, there must be at least one
semester between the time the firial voficiency is passed and the semester of student teaching. Summer session is considered equivalent to one semester. Proficiency examinations are scheduled on an arranged basis for students not enrolled in class piano.
All piano classes must be passed with a grade of $C$ or better. This is indicated in the course descriptions. Additional information on all 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
ve). On the basis of this examination, lents may be required to enroll in
lvíCH 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 certification standards, 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 available 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, 340) 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 Allied Professions, 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 Allied Professions and those prerequisites established by the Department of Music Education. An overall GPA of 2.5 is required.

## Departmental 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 Allied Professions; and (b) with the coordinator of student teaching in the College of Musical Arts.
Speech and hearing test
Prospective teachers must also take speech and hearing tests so that they may avail themselves of appropriate corrective services if necessary. These tests are administered through MUED 240.
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.

## Preteaching interview

Any school system has the right to interview a prospective student teacher. If the student is not accepted, the coordinator reserves the right to designate a reassignment. If necessary, the coordinator may request that the student seek an interview with school authorities.

## Radius

The radius for student teacher placement is not more than 75 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, he or she 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 fullsemester 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 commiment 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 student teaching requirements.

## Summer student teaching

Student teaching during summer session terms 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 I
MUCH 141 (2)
MUCH 236 (offered fall only) or non-Western (Gp. V) MUCH 233/4/5 (2)*
Electives out of music (3)
ENG 112 or IPCO 102 (3)*
Applied Study (10 sem. hrs. required) (2)
Large Ensemble (A Cappella or Collegiate Cho-
rale) ( 5 sem . hrs. required) (1-2)
MUED 154 (1)
Woodwind or Brass or Guitar Class (1)
PEG 100 (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied Study (2)
Large Ensemble (1-2)
Group I requirement (3)
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) or Mus Theory (MUCH 110) may need
to attend summer term in order to complete all
course work in four years.
Second year (36-37 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 (offered fall only) or non-Western
(Gp. IV) MUCH 233/4/5 (2)
MUED 251 (offered fall only) (1)
MUED 240 ( 3 )
Small emsemble (1)
Applied study (2)
MUED 359 (fall only) (2)
MUSP 310 (fall only) (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
Elective (in music) MUSP 264 (1)
Group II requirement (3)
Large ensemble (1-2)
Voice class or studio voice (1)
Applied study (2)
PSYC 201 (4)
Woodwind or brass or guitar class (1)
MUS 099 (0)
Third year ( $33-38$ hours)
Semester $V$
Junior Methods Project in Music (fall only for choral option) (Prerequisite: MUED 240)
MUED 340 (7)
MUED 341 (2)
MUSP 305 (2)
Large Ensemble (1-2)
Applied study (2)
EDFI 302 (3) evening section
MUS 099 ( 0 )
NO OTHER COURSES MAY BE TAKEN DURING THE PROJECT
Semester VI
MUCH 232 (2)
MUCH 325 (spring only) (2)
Electives in music (2)
EDAS 409 (3)
Voice class or studio voice (1)
MUSP 306 (2)
Large ensemble (1-2)
Computation/Mathematics (3)
MUS 099 (0)

Fourth year (29 hours)
Semester VIII
Student teaching (first 10 weeks) (10)
EDFI 402 (last $5-6$ weeks only) (3)
Group IV requirement: EDFI 408 (last 5-6 weeks only) (3)
Semester VIII
Group I requirement (3)
Group ill requirement (3)
Electives in music (4)
Electives out music (2)
PEG 100 (1)

## Choral Option-Vocal Emphasis

First year (33-35 hours)

## Semester I

MUCH 236 (offered fall only) or non-Western (Gp. IV) MUCH 233/4/5 (2)*
MUCH 141 (2)
ENG 112 or IPCO 102 (3)*
Applied study ( 10 sem. hrs. required) (2)
Large ensemble (A Cappella or Collegiate Chorale) ( 5 sem. hrs. required) ( $1-2$ )
MUED 150 (or 154) (1)
Electives out of muslc (3)
Woodwind or brass or guitar class ( ${ }^{(1)}$
PEG 100 (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Large ensemble ( $1-2$ )
Group I requirement (3)
Woodwind or brass or guitar class (1)
MUED 151 (or 154) (1)
MUS 099 (0)
*Students requiring remedial or review work in English
(ENG 110/11) or Music Theory (MUCH 110) may need
to attend summer term in order to complete all
course work in four years.
Second year (35-36 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 (offered fall only) or non-Western (GP. IV) MUCH 233/4/5 (2)
MUED 251 or 252 (1-2)
MUED 240 (3)
Small ensemble (1)
Applied study (2)
MUED 359 (fall only) (2)
MUSP 310 (fall only) (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUED 256 or 257 (1)
Group II requirement (3)
Large ensemble (1)
Applied study (2)
PSYC 201 (4)
Woodwind or brass or guitar class (1)
MUS 099 (0)

Third year (33-35 hours)
nester V
nior Methods Project in Music (fall only for choral option)
MUED 340 (7)
MUED 341 (2)
MUSP 305 (2)
Large ensemble (1-2)
Applied study (2)
EDFI 302 (3) evening section
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DURING THE PROJECT
Semester VI
MUCH 232 (2)
Studio Piano (1)
MUCH 325 (offered spring only) (2)
Electives in music (2)
EDAS 409 (3)
MUSP 306 (2)
Large ensemble (1-2)
Computation/Mathematics (3)
MUS 099 (0)
Fourth year (30 hours)
Semester VII
Student teaching (first 10 weeks) (10)
EDFI 402 (last 5-6 weeks only) (3)
Group IV requirement: EDFI 408
(last 5 -6 weeks only) (3)

## Semester VIII

Group I requirement (3)
Group III requirement (3)
Electives out of music (2)
Electives in music (5)
PEG 100 (1)

## assroom Option-Keyboard nphasis

First year ( $33-35$ hours)
Semester 1
MUCH 236 (offered fall only) or non-Western (GP. IV) MUCH 233/4/5 (2)*
MUCH 141 (2)
ENG 112 or IPCO 102 (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 (1)
Voice class/studio voice (1)
Electives in music (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Large ensemble (1-2)
Group I: ART 101 (3)
Woodwind or brass or guitar class (1)
Class voice or studio voice (1)
MUS 099 (0)
*Students requiring remedial or review work in English (ENG 110/111) or Music Theory (MUCH 110) may need to attend summer term in order to complete all course work in four years.
Second year (35-36 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
LED 251 (offered fall only) (1)
ED 240 (3)
riall ensemble (1)
Voice class or studio voice (1)
Elective in music (1)
MUS 099 ( 0 )

Semester V
MUCH 231 (3)
MUCH 241 (2)
MUSP 264 (1)
Group II requirement (3)
MUCH 325 (offered spring only) (2)
Large ensemble (1-2)
Applied study (2)
PSYC 201 (4)
MUS 099 (0)
Third year (32-34 hours)
Semester V
MUCH 232 (2)
EDFI 302 (3)
MUSP 305 (2)
Applied study (2)
Large ensemble (1-2)
Computation/Mathematics (3)
PEG 100 (1)
Woodwind/brass or guitar class (1)
MUS 099 (0)
Semester VI
Junior Methods Project in Music (spring only for classroom option)
MUED 340 (7)
MUED 341 (2)
MUSP 306 (2)
Large ensemble (1-2)
Electives in music (2)
EDAS 409 (3) evening section only
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DURING THE PROJECT.

## Fourth year ( 30 hours)

Semester VII
MUCH 236 (offered fall only) or non-Western (Gp. IV) MUCH 233/4/5 (2)
MUED 451 (offered fall only) (2)
Group I: ART 145 or 146 or THEA 347 (3)
Group I: Lit. requirement (3)
Group III requirement (3)
PEG 100 (1)
Semester VIII
Student teaching (last 10 weeks) (10)
EDFI 402 (first $5-6$ weeks only) (3)
Group II: EDFI 408 (first 5 -6 weeks only) (3)

## Classroom Option-Vocal <br> Emphasis

First year ( $33-35$ hours)
Semester I
MUCH 236 (offered fall only) or non-Western (Gp. IV) MUCH 233/4/5 (2)*
MUCH 141 (2)
ENG 112 or IPCO 102 (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 (or 154) (1)
PEG 100 (1)
Electives in music (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Large ensemble (1-2)
Group I: ART 101 (3)
Woodwind or brass or guitar class (1)
MUED 151 (or 154) (1)
MUS 099 (0)
*Students requiring remedial or review work in English (ENG 110/111) or Music Theory (MUCH 110) may need to attend summer term to complete all course work in four years.

Second year (35-36 hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUED 251 or 252 ( 1 or 2)
MUED 240 (3)
Small ensemble (1)
Applied study (2)
Woodwind or brass or guitar class (1)
Electives out of music (2)
Electives in music (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUED 256 or 257 (1)
Group II requirement (3)
MUCH 325 (offered spring only) (2)
Large ensemble (1-2)
Applied study (2)
PSYC 201 (4)
MUS 099 (0)
Third year ( $33-35$ hours)

## Semester V

MUCH 236 (offered fall only) or non-Western
(Gp. IV) MUCH 233/4/5 (2)
Studio piano (1)
EDFI 302 (3)
MUCH 232 (2)
MUSP 305 (2)
Applied study (2)
Large ensemble (1-2)
Computation/Mathematics (3)
MUS 099 (0)
Semester VI
Junior Methods Project in Music (spring only for classroom option)
MUED 340 (7)
MUED 341 (2)
MUSP 306 (2)
Large ensemble (1-2)
Electives in music (2)
EDAS 409 (3)
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DURING THE PROJECT
Fourth year (29 hours)
Semester VII
MUED 451 (offered fall only) (2)
Group I: ART 145 or 146 or THEA 347 (3)
Group I: literature requirement (3)
Group III requirement (3)
Elective in music (1)
PEG 100 (1)
Semester VIII
Student teaching (last 10 weeks) (10)
EDFI 402 (first 5-6 weeks only) (3)
Group IV: EDFI 408 (first 5 - 6 weeks only) (3)

## Instrumental-Keyboard

## Emphasis

First year (33-35 hours)
Semester I
MUCH 236 (offered fall only) or non-Western
(Gp. IV) MUCH 233/4/5 (2)*
MUCH 141 (2)
ENG 112 or IPCO 102 (3)*
Applied study ( 10 sem. hrs. required) (2)
Large ensemble ( 5 sem . hrs. required) (1-2)
MUED 154 (1)
Wind/Percussion class (1)
PEG 100 (1)
Electives out of music (3)
MUS 099 (0)

Semester Il
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Lerge ensemble (1-2)
Wind/Percussion class (1)
Group I requirement (3)
Class voice (1)
MUS 099 (0)
*Students requiring remedial or review work in English (ENG 110/111) or Music Theory (MUCH 110) may
need to attend summer term to complete all course
work in four years.
Second year ( $34-35$ hours)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 (offered fall only) or non-Western
(Gp. IV) MUCH 233/4/5 (2)
Group II requirement (3)
MUED 251 (offered fall only) (1)
Small ensemble (1)
Applied study (2)
Wind/Percussion class (1)
PEG 100 (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUSP 264 (1)
MUED 240 (3)
Large ensemble (1-2)
Applied study (2)
PSYC 201 (4)
Wind/Peroussion class (1)
MUS 099 (0)
Third year (35-37 hours)
Semester $V$
MUCH 232 (2)
MUCH 320 (band arranging) or MUCH 315 (orchestration) (2)
Electives out of music (2)
Applied Study (2)
Wind/Percussion class (1)
EDFI 302 (3)
Large ensemble (1-2)
Computation/Mathematics (3)
MUSP 305 (2)
MUS 099 (0)
Semester VI
Junior Methods Project in Music
MUED 340 (7)
MUED 341 (2)
MUSP 306 (2)
EDAS 409 (3)
Large ensemble (1)
Elective in music (2)
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DURing THE PROJECT

## Fourth year ( 28 hours)

## Semester VII

Student teaching (first 10 weeks) (10)
EDF 402 (last 5-6 weeks only) (3)
Group IV: EDFI 408 (last $5-6$ weeks only) (3)
Semester VIII
String class (2)
Group I requirements (3)
Group ill requirement (3)
Electives in music as required (4)

## Instrumental-Wind/String/Guitar <br> Percussion Emphasis <br> First year (32-34 hours)

## Semester 1

MUCH 236 (offered fall only) or non-Western (GP. IV) MUCH 233/4/5 (2)*
MUCH 141 (2)
ENG 112 or IPCO 102 (3)*
Applied study ( 10 sem. hrs. required) (2)
Large ensemble ( 5 sem . hrs. required) (1-2)
MUED 150 (or 154) (1)
Wind/Percussion class** (1)
Class voice (1)
Electives out of music (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Large ensemble (1-2)
Wind/Percussion class (1)
MUED 151 (or 154) (1)
Group I requirement (3)
MUS 099 (0)
*Students requiring remedial or review work in English
(ENG 110/111) or Music Theory (MUCH 110) may
need to attend summer term to complete all course work in four years.
**initially, students should attempt to register for those instrument classes which are within the family of their major instrument.

## Second year ( $36-37$ hours)

Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 (offered fall only) or non-Western
(Gp. IV) MUCH 233/4/5 (2)
Group II requirement (MUED 240 for string majors) (3)
MUED 250 (or 251) (1-2)
Small ensemble (1)
Applied study (2)
Wind/Percussion class (1)
PEG 100 (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUCH 320 (MUED 180 for string majors) (2)
MUED 256 (or 257) (1)
MUED 240 (Group II requirement for string majors) (3)
Large ensemble (1-2)
Applied study (2)
PSYC 201 (4)
Wind/percussion class (1)
MUS 099 (0)
Third year ( $32-34$ hours)
Instrumental majors will be placed in the junior methods project in music (340) as follows:

1) String emphasis-fall only
2) Wind/percussion/guitar emphasis-

University lab schools-fall only
3) Wind/percussion/guitar-all othersspring only

String Emphasis and Wind/percussion/
guitar Emphasis (Univ. lab schools only)
Semester V
MUED 340 (7)
MUED 341 (2)
MUSP 305 (2)
EDFI 302 (3)
Large ensemble (1-2)
Applied study (2)
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DURING THE PROJECT
Semester VI
MUCH 232 (2)
PEG 100 (1)
Electives in music (2)
Wind/percussion class (1)
EDAS 409 (3)
MUSP 306 (2)
Large ensemble (1-2)
Computation/Mathematics (3)
MUS 099 (0)
Wind/percussion/guitar emphasis (all other school assignments)

## Semester V

Applied study (2)
Wind/percussion class (1)
MUCH 232 (2)
PEG 100 (1)
EDFI 302 (3)
MUSP 305 (2)
Large ensemble (1-2)
Group II requirement (3)
MUS 099 (0)
Semester VI
MUED 340 (7)
MUED 341 (2)
MUSP 306 (2)
EDAS 409 (3)
Large ensemble (1)
Electives in music (2)
MUS 099 (0)
NO OTHER COURSES MAY BE TAKEN DUR-
ING THE PROJECT
Fourth year ( 31 hours)
All Wind/percussion/guitar emphasis
Semester VII
Student teaching (last 10 weeks) (10)
EDFI 402 (first $5-6$ weeks) (3)
Group IV: EDFI 408 (first $5-6$ weeks) (3)
Semester VIII
String class (2)
Group I requirements (3)
Group III requirements (3)
Electives out of music (2)
Electives in music (5)

## String Majors

Semester VII
MUCH 315 (offered fall only) (2)
Group : requirements (3)
Group III requirements (3)
Electives out of music (2)
Electives in music (5)
Semester VIII
Student teaching (last 10 weeks) (10)
EDFI 402 (first $5-6$ weeks only) (3)
Group IV: EDFI 408 (first $5-6$ weeks only) (3)

## isic. History and erature

(courses coded MUCH)
1031 Moore Musical Arts Center, 372-2181.

## Admittance as a History and Literature Major

Music students who have developed a strong-interest in music history and literature 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 and literature: It is also possible to add music history and literature to an existing major for a double major. Application for admission to the music history and literature program is made prior to the end of the sophomore year, and must be approved by the faculty of the department.

A student wishing to apply for a major in music history and literature should submit sample papers to the departmental chair. 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; NonWestern Music and MUCH 236; MUCH 141, 142 and 241. Students with an average of 2.5 to 2.9 may be accepted as ors on probationary status. Students epted on this status must achieve a o. average in major area courses within one year.

## Collegium Musicum

The department maintains a Collegium Musicum as a training ground for performance practice and showcase for music not usually performed by other ensembles. Ensemble c̀redit is available in: Early Music Ensemble, New Music Ensemble and Balinese Gamelan 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, below; and 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 jesues and basic research techniques. is accomplished through MUCH 406, blems in Music History.

## DEGREE REQUIREMENTS

The Bachelor of Music degree in music history and literature requires 132-137 total credits, distributed as follows:

1. 49-53 credits in general education
2. 48-49 credits in basic musicianship, including performance;
3. 30 credits in advanced courses in music theory, history and literature;
4. 3 credits in ENG 112;
5. 2 credits in PEG 100.

For specific information consult the chair of the Department of Music Composition/History.

## 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 junior year.

## Physical Education

See Academic Policies: General Requirements for the Baccalaureate Degree.

## General Education Core Requirements

## l. Humanities and arts

Students must complete one course in
PHIL; one course in fine arts and two courses in English literature (or one course in English literature and one course in English composition). Total: 12 hours.

## II: Natural science

Students must complete at least two courses from the approved list. Total: 6 hours.

## III: Social sciences

Students must complete at least two courses from the approved list. Total: 6 hours.

## IV: Foreign language and multicụltural studies

Students must complete at least. 8 hours in each of two foreign languages; French and German are recommended. If proficiency beyond 101-102 in either language can be established with the appropriate language department, courses beyond this level may be taken. Total: 16 hours.

In addition, students must select a sufficient number of courses from any of the above areas, in consultation with the chair, to meet the minimum total general education requirements of $49-53$ hours

## Music Requirements

All history majors are required to complete the following music courses. Minimum total: 78 hours.

## Music Core

MUCH 131, 132, 231, 232, 236 or 237 , and 233, 234 or 235 . Aural skills 141, 142, 241, 242 and H341. Minimum total: 27-28 hours.

## Music Performance

Large ensembles 4 hours; small ensembles (Collegium Musicum) 4 hours; major instrument/voice 4 hours; MUSP 305 and 3064 hours. Total: 16 hours.

## Piano

MUED 150, 151, 250, 251 (may be waived by exam). Keyboard proficiency exams I and II required. Total: 5 hours.

## Music Theory

MUCH 308, 309 and 315,320 or 325. Total: 6 hours.
Music History and Literature Courses MUCH 318, 406 (6 hours), 407; 408, 412, electives. 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 (33 hours)
MUCH 131, 141, 142, 233 or 234 or 235, .
236 (12)
MUED 150, $151^{\prime}$ (2)
Applied music (2)
Large ensembles (2)
Humanities and arts general education require-
ments (9)
ENG 112 (3)
PEG 100 (2)
Early Music Ensemble (1)
Second year ( 35 hours)
MUCH 132, 231, 232, 241, 242 (13)
Applied music (2)
MUED 250 and 251 (3)
Large ensembles. (2)
Foreign language (8)
Humanities and arts general education requirements (3)
Electives in/out of music (3)
Early Music Ensemble (1)
Third year (34 hours)
MUCH H341 (2)
MUCH 315, 320 or 325 (2)
MUCH 308 and 309 (4)
MUCH 318, 407 and 408 (6)
Music literature electives (4)
Mathematics and natural science general education requirements (6)
Electives in/out of music (9)
Early Music Ensemble (1)
Fourth year ( 34 hours)
MUĊH 412 (2)
MUCH 406 (6)
MUSP 305 and 306 (4)
Music literature electives (6)
Foreign language (8)
Social science general education
requirements (6)
Early Music Ensemble (2)
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 Performance <br> (courses coded MUSP)

1031 Moore Musical Arts Center, 372-2181
The Department of Performance Studies provides applied instruction and course work 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 follows:

Church music (organ or voice emphasis)
Guitar (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 woodwind 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. Successful 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 performance majors. A prerequisite to individual applied instruction is class piano, MUED 151, or equivalent. In addition, majors in brass, guitar, harp, percussion, 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 Performance Major

A student is accepted for the Bachelor of Music degree program in 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

A full recital is required of all performance majors. This is usually 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 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 workshop; piano: accompanying and/or small ensembles). In cases subject to question, students should consult the department chair.

## DEGREE REQUIREMENTS

## General Requirements

All 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.

## Physical Education

See Academic Policies.

## General Education Core

 RequirementsStudents must complete a total of at least eight courses from the four areas listed below, all of which must be chosen from the current list of approved General Education courses (see Academic Policies). Each area must be represented by at least one course.

## I : Arts and humanities

Students must complete one course in ENG literature (ENG course 150 or above) AND at least one other course in this area, excluding music. Voice/musical theater students have special requirements in this area; see Specific Requirements for Performance Program Options.

## II: Natural science

Students must complete at least one course.

## III: Social science

As:
Students must complete at least one course. Vocal pedagogy students have special requirements in this area; see Specific Requirements for Performance Program Options.

## IV: Foreign language and multicultural

 studiesStudents must complete at least one course. Students in church music and all voice options have special requirements in this area; see Specific Requirements for Performance Program Options.

## 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

More than the 122 -hour University minimum total is required for certain performance degree program options. Specific course requirements not listed above for the various options follow, along with a suggested order of courses over a fouryear period.

## Specific Requirements for Performance Program Options <br> 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)
Each student in the church music option is. expected to participate in the music progra of a church of his or her choice. itar Option (127 hours) 2 Emphasis
CH 211 Jazz Improvisation and Repertoire I (2)
MUCH 212 Jazz Improvisation and Repertoire II (2)
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)
MUSP 458 String (guitar) Pedagogy (2)
MUSP 100/300 Smali 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! (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, 438-439, 477479, 488-489 Large Ensembies (4)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 367 Piano Pedagogy 1 (3)
MUSP 410 Harpsichord Repertoire I (3)
MUSP 411 Harpsichord Repertoire 11 (3)
MUSP 262/462 Applied Harpsichord (30)
MUSP 495 Senior Recital (2)
Instrumental Option (124-125 hours)
CH 320 Band Scoring or 315
Jrchestration (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 il (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

(128-129 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 Sightreading I (1)
MUSP 210 Piano Repertoire I (3)
MUSP 211 Piano Repertoire $1 \mid$ (3)
MUSP 264 Accompanying Techniques 1 (1)
MUSP 265 Piano Four-Hand Class (1)
MUSP 100/300R Accompanying Practicum (2)
MUSP 100/300S Mixed Chamber Ensemble (2)
MUSP $100 / 300$ R or $100 / 300$ S Accompanying
Practicum or Mixed Chamber Ensemble (1)
MUSP 305 Conducting 1 (2)
MUSP 360 Sightreading II (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 467 Piano Technology (1)
MUSP 261/461 Applied Piano (32)
MUSP 495 Senior Recital (2)
Piano Literature Option (126-127 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 Sightreading I (1)
MUSP 210 Piano Repertoire I (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 467 Piano Technology (1)
MUSP 495 Senior Recital (2)
MUSP 261/461 Applied Piano (32)
Piano Pedagogy Option (131-132 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 Sightreading I (1)
MUSP 210 Piano Repertoire I (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 (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 467 Piano Technology ( 1 )
MUSP 261/461 Applied Piano (32)
MUSP 495 Senior Recital (2)

Voice Option (127-128 hours)
MUCH 412 Opera Literature (2)
MUSP 214 Singers' Diction (2)
MUSP 261/461 Applied Piano (4)
MUSP 272/472 Applied Voice (30)
MUSP 275 Introduction to Opera Workshop (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 Workshop (4)
MUSP 100/300, 277-79/477-79 Ensembles (6)
MUSP 495 Senior Recital (2)
FREN 101, 102 (8)
GERM 101, 102 (8)

## 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 Singers' Diction (2)
MUSP 272-472 Applied Voice (22)
MUSP 261/461 Applied Piano (4)
MUSP 370 Vocal Pedagogy ( 3 )
MUSP 378 Opera Workshop (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 117 Dance: Jazz (1)
PEG 119 Dance: Modern (1)
PEG 122 Dance: Tap (1)
RED 120 Classical Ballet I (2)
RED 220 Classical Ballet II (2)
FREN 101 (4)
GERM 101 (4)
Vocal Pedagogy Option (125-126 hours)
MUCH 412 Opera Literature (2)
MUSP 214 Singer's Diction (2)
MUSP 264 Accompanying Techniques I (1)
MUSP 261/461 Applied Piano (4)
MUSP 272/472 Applied Voice (16)
MUSP 275 Introduction to Opera Theater (2)
MUSP 305 Conducting I (2)
MUSP 378 Opera Theater (4)
MUSP 311 Vocal Repertoire ! (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 101, 102 (8)
GERM 101, 102 (8)

## 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 1
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
First 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 1

Arts and humanities (3)
MUCH 141 (2)
MUSP 100, 277-79 (1)
MUSP 263 or 272 (2)
ENG 112 (3)
FREN 101 (4)
PEG 100 (1)
INUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 100, 277-79 (1)
MUSP 263 or 272 (2)
English literature (3)
FREN 102 (A)
PEG 100 (1)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 100, 277-79 (1)
MUSP 263 and 272 (3)
GERM 101 (4)
MUSP 261 (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 242 (2)
MUSP 100, 277-79 (1)
MUSP 263 and 272 (3)
GERM 102 (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)
Electives (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)
Electives (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)
Electives (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 I
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (2)
MUSP 286 (4)
PEG 100 (1)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 100 (2)
MUSP 286 (4)
PEG 100 (1)
ENG literature (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)

Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 262 (4)
MUSP 238-39, 277-79, 288-89 (1)
Foreign language/multicultural studies (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)
Electives (4)
MUS 099 (0)

Foreign language/multicultural studies (3)
(3)


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#### Abstract




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MUCH 312 (3)
Electives (3)
MUS 099 (0)
Semester VII
MUSP 300 (2)
MUSP 486 (4)
MUCH 411 (2)
MUSP 458 (2)
Electives (6)
Semester VIII
MUSP 300 (2)
MUSP 486 (4)
MUCH 436 (2)
MUSP 495 (2)
Electives (5)

## Harpsichord 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)
PEG 100 (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUCH 100 (Early Music Ensemble) (1)
MUSP 262 (4)
English literature (3)
MUSP 238-39, 277-79, 288-89 (1)
PEG 100 (1)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUSP 262 (4)
MUSP 238-39, 277-79, 288-89 (1)
Natural science (3)
Social science (3)
MUS 099 (0)

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79, 288-89 (1)

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ester V!
CH 300 (Early Music Ensemble) (1)
CH 309"(2)
        glish literature (3)
USP 238-39, 288-89 (2)
    MUS O99 (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 N
    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.O99 (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) , ,
    Electives: (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),
        reign language/multicultural studies (3)
        ctives (3)
        S.099 (0)
    MUSP 306 (2)
    MUSP 462 (4)
    Electives. (6)
    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)
    PEG 100 (1)
    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)
    *SP 221,23
        G 100 (1)
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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)
Electives (6)
Semester VIII , ,
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUCH $408^{\circ}$ (2)
MUSP 495 (2)
Electives (3)
Organ Option
Semester !
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (1)
MUSP 263 (4)
MUSP 238-39, 27.7-79, 288-89.(1)
ENG 112 (3)
PEG 100 (1)
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)
Eriglish literature (3)
PEG 100 (1)
MUS 099 (0)
Semester III
MUCH 132 (4)
MUCH. 241 (2)
MUSP 100 (1)
MUSPP 263 (4)
MUSP 238-39, 277-79, 288-89 (1)
Social science (3)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)

## Piano Accompanying Option

Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 160 (1)
MUSP 261 (4)
MUSP 100R (1).
PEG 100 (1)
ENG 112 (3)
MUS 099 (0)
Semester II *
MUCH 131 (4)
MUCH 142 (2)
MUSP 261 (4)
PEG 100 (1)
English literature (3)
Social science (3)
MUS 099 (0)
Semester 11
MUCH 132 (4)
MUCH 241 (2
MUCH 236 or 237 (2-3)
MUSP 261 (4)
MUSP 210:(3)
MUSP $264^{\text {(1) }} 1$
MUS 099 (0)
Semester $\dot{N}$
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 211 (3)
MUSP 265 (1)
MUSP 261 (4
MUSP 360 (1)
MUS 099 (0)
Semester V
MUCH 31'5:(2)
MUSP 300R (1)
MUSP 300 S (1)
MUSP.305 (2)
MUSP 461 (4)
Natural science (3)
MUCH-300/400 literature (2)
Foreign language/multicultural studies (3) .
MUS 099 (0)
Semester VI
MUSP 300R (1)
MUSP 300 S (1)
MUSP 361 (1)
MUSP 364.(1)
MUSP 461 (4)
Electives (8)
MUS 099 (0)
Semester VII
MUCH 404 (2)
MUCH 407 (2)
MUSP 367 (3)
MUSP 461 (4)
MUSP 466 (1)
MUSP 467 (1)
Electives (3)
Semester VIII
MUSP 461 (4)
MUCH 408 (2
MUCH $410^{\circ}$ (2)
MUSP 495 (2)
Electives.(4)
Piano Literature Option
Semester I
Arts and humanities (3)
MUCH 141 (2)
MUSP 261 (4),
ENG 112 (3)
MUSP 160 (1)
MUSP 100R (1)
PEG 100 (1)
MUS 099 (0) .

Semester 11
MUCH 131 (4)
MUCH 142 (2)
MUSP 261 (4)
MUSP or MUCH ensemble (1)
English literature ( 3 )
PEG 100 (1)
Mus 099 (0)
Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 or 237 (2-3)
MUSP 261 (4)
MUSP 210 (3)
MUSP 264 (1)
MUSP or MUCH ensemble (1)
MUS 099 (0)
Semester IV
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 211 (3)
MUSP 261 (4)
MUSP or MUCH ensemble (1)
Natural science (3)
MUS 099 (0)
Semester V
MUCH 315 (2)
MUCH $300 / 400$ literature (2)
MUSP 361 (1)
MUSP 3005 (1)
MUSP 305 (2)
MUSP 461 (4)
Electives (3)
Foreign language/multicultural studies (3)
Mus 099 (0)
Semester VI
MUSP 300 S (1)
MUSP 461 (4)
Social science (3)
Electives (6)
MUS 099 (0)
Semester VII
MUCH 404 (2)
MUCH 407 (2)
MUSP 367 (3)
MUSP 461 (4)
MUSP 467 (1)
Electives (3)
Semester VIII
MUCH 408 (2)
MUCH 410 (2)
MUSP 461 (4)
MUSP 466 (1)
MUSP 495 (2)
Electives (3)

## Piano Pedagogy Option

Semester 1
Arts and humanities (3)
MUCH 141 (2)
MUSP 261 (4)
MUSP 160 (1)
MUSP or MUCH ensemble (1)
PEG 100 (1)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 261 (4)
PEG 100 (1)
English literature (3)
Social science (3)
MUS 099 (0)

Semester III
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 or 237 (2-3)
MUSP 261 (4)
MUSP 210 (3)
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)
Electives (3)
MUS 099 (0)
Semester $V$
MUCH 315 (2)
Natural science (3)
MUSP 361 (1)
MUSP 305 (2)
MUSP 461 (4)
MUSP 367 (3)
Foreign language/multicultural studies (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)
Electives (6)
MUS 099 (0)
Semester VII
MUCH 404 (2)
MUCH 407 (2)
MUSP 461 (4)
MUSP 466 (1)
MUSP 467 (1)
MUSP or MUCH ensemble (1)
Electives (4)
Semester VIII
MUCH 408 (2)
MUCH 410 (2)
MUSP 300 (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 (4)
PEG 100 (1)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 100 (1)
MUSP 272 (4)
English literature (3)
PEG 100 (1)
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 $N$
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)
GERM 102 (4)
Natural science (3)
MUS 099 (0)
Semester VII
MUSP 370 (3)
MUSP 472 (4)
MUSP 477 (1)
MUCH 412 (2)
MUSP 378 (2)
Arts and humanities (3)
Electives (3)
Semester VIII
MUSP 472 (4)
MUSP 495 (2)
MUSP 477 (1)
Electives (7)

## Voice/Musical Theater Option

## Semester I

Social science (3)
MUCH 141 (2)
MUSP 272 (4)
MUSP 261 (1)
MUSP 277 (1)
MUSP 214 (2)
ENG 112 (3)
MUS 099 (0)
Semester II
MUCH 131 (4)
MUCH 142 (2)
PEG 117 (1)
English literature (3)
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 119 (1)
THEA 241 (3)
MUS 099 (0)

| amester $V$ | Semester V |
| :---: | :---: |
| SP 472 (2) | MUSP 472 (2) |
| - $\quad$ UCH 232 (2) | MUSP 477 (1) |
| MUSP 305 (2) | MUSP 275 (2) |
| MUSP 311 (2) | MUSP 305 (2) |
| GERM 101 (4) | MUSP 311 (2) |
| THEA 344 (3) | MUSP 461 (1) |
| RED 120 (2) | MUSP 264 (1) |
| MUS 099 (0) | MUSP 370 (3) |
| Semester VI | MUCH 232 (2) |
| MUSP 472 (2) | MUS 099 (0) |
| MUSP 300 (1) | Semester VI |
| MUSP 312 (2) | MUSP 472 (2) |
| MUSP 378 (2) | MUSP 477 (1) |
| MUSP 477 (1) | MUSP 461 and proficiency (1) |
| THEA 345 (3) | MUSP 312 (2) |
| RED 220 (2) | MUSP 378 (2) |
| THEA 352 (3) | PSYC 201 (4) |
| MUS 099 (0) | MUSP 473 (1) |
| Semester VII | MUS 099 (0) |
| MUSP 370 (3) | Electives (3) |
| MUSP 472 (2) | Semester VII |
| MUSP 378 (2) | MUSP 472 (2) |
| MUCH 412 (2) | MUSP 473 (1) |
| Natural science (3) | MUSP 378 (2) |
| PEG 122 (1) | Arts and humanities (3) |
| Electives (4) | MUSP 300 (1) |
| Semester VIII | MUCH 412 (2) |
| MUSP 477 (1) | EDFI 302 (3) |
| MUSP 472 (4) | Electives (2) |
| MUSP 495 (2) | Semester VIII |
| Electives (8) | MUSP 472 (2) |
| Vocal Pedagogy Option | MUSP 473 (1) |
| Semester 1 | MUSP 300 (1) |
| MUCH 141 (2) | MUSP 495 (2) |
|  | Electives (8) |
| G 112 (3) | Woodwind Specialist Option |
| -EG 100 (1) | Semester I |
| MUSP 214 (2) | Arts and humanities (3) |
| FREN 101 (4) | MUCH 141 (2) |
| MUS 099 (0) | MUSP 241-45 (major) (2) |
| Semester II | MUSP 238-39, 288-89 (2) |
| MUCH 142 (2) | MUED 140 (1) |
| MUCH 131 (4) | MUSP 100 (1) |
| English Literature (3) | ENG 112 (3) |
| MUSP 272 (2) | PEG 100 (1) |
| PEG 100 (1) | MUS 099 (0) |
| FREN 102 (4) | Semester II |
| MUS 099 (0) | MUCH 131 (4) |
| Semester III | MUCH 142 (2) |
| MUCH 132 (4) | MUSP $241-45$ (major) (2) |
| MUCH 241 (2) | MUSP $241-45$ (first minor) (2) |
| MUCH 236 or 237 (2-3) | MUSP 238-39, 288-89 (2) |
| MUSP 272 (2) | MUED 145 (1) |
| MUSP 261 (1) | English literature (3) |
| GERM 101 (4) | PEG 100 (1) |
| MUSP 277 (1) | MUS 099 (0) |
| MUS 099 (0) |  |
| Semester N |  |
| $\text { MUCH } 231 \text { (3) }$ |  |
| MUCH 242 (2) |  |
| MUSP 272 (2) |  |
| MUSP 277 (1) |  |
| MUSP 261 (1) |  |
| GERM 102 (4) |  |
| MUS 099 (0) |  |
| Math/Natural science (3) |  |
| Elective (1) |  |

Semester V
MUP 472 (2)
MUSP 477 (1
MUSP 275 (2)
MUSP 305 (2
MUSP 311 (2)
MUSP 461 (1)
MUSP 264 (1)
MUSP 370 (3)
MUS 099 (0)
Semester VI
MUSP 472 (2

MUSP 461 and proficiency (1)
MUSP 312 (2)
MUSP 378 (2)
PSYC 201 (4)
MUSP 473 (1)
UUS 099 (0)
Semester VII
Susp 472
MUSP 473 (1)

MUSP 378
Arts and humanities (3)
MUCH 412 (2)
MUCH 412 (2)
Electives (2)
Semester VIII
MUSP 472 (2)
MUSP 473 (1)
SP 300 (1)
Electives (8)

Semester I
Arts and humanities (3)
UCH 141 (2)
MUSP 241-45 (major) (2)
$288-89$
140
MUSP 100 (1)
ENG 100 (1)
EG 100 (1)

Semester II
MUCH 131 (4)
MUCH 142 (2)
MUSP 241-45 (major) (2)
MUSP 238-39, 288-89 (2)
MUED 145 (1)
解
PEG 100 (1)
MUS 099 (0)

Semester III
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 N
MUCH 231 (3
MUCH 232 (2)
MUCH 242 (2)
MUSP 241-45 (major) (2)
MUSP 241-45 (first minor) (2)
MUSP 241-45 (second minor) (2)
MUSP 238-39, 288-89 (2)
MUSP 100 (1)
MUSP 261 and proficiency (1)
MUS 099 (0)
Semester V
MUCH 236 or 237 (2-3)
MUCH 318 (2
MUSP 441-45 (major) (2)
MUSP $441-45$ (first minor and half recital) (2)
MUSP $441-45$ (second minor) (2)
MUSP 454 (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)
Foreign language/multicultural studies (3)
Social science (3)
Electives (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 (second minor) (1)
MUSP 438-39, 488-89 (2)
MUSP 300 (1)
Electives (6)
Semester VIII
MUSP 441-45 (major) (2)
MUSP 454 (major) (2)
MUSP 495 (2)
MUSP 438-39, 488-89 (2)
Electives (6)


# College of Technology 

## Office of the Dean

Jerry Streichler, Dean, 204 Technology Building, 372-2438
John W. Sinn, Associate Dean, 202 Technology Building, 372-7570
Office of Cooperative Education
Barry D. Piersol, Director of Cooperative Education, Assistant to the Dean, 102 Technology Building, 372-7580
Program Services Office
Mary Helen Ritts, Director,
101 Technology Building, 372-7581
Office of Graduate Studies
Long Chain Chen, Interim Director, 207 Technology Building, 372-7613 fice of Interdisciplinary Studies,
201 Technology Building, 372-7570

## Office of Research and External

 Services201 Technology Building, 372-7570

## Departments

Technology Systems,
John H. Erion Jr., P.E., Interim Chair, 264 Technology Building, 372-2439
Visual Communication and Technology Education, Ernest B. Ezell Jr., Chair, 260 Technology Building, 372-2437

## Goals

The foremost consideration in the College of Technology is to provide students with a quality profesśional 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 iversity.

The college and departmental goals and objectives 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 practical and theoretical 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 of the social, natural and behavioral sciences. The mission of the College of Technology is carried out by students and faculty in:

1. 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.
2. Research and development in technical processes and materials to benefit the private sector, government and education.
3. Undergraduate, graduate and continuing education programs which prepare, update and upgrade personnel for technical management positions in the private sector and government.
4. Undergraduate, graduate and continuing education programs which prepare, update and upgrade personnel who serve at all levels in industrial and technology education and industrial training.
5. 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.
6. 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 of their counterpart national or international organizations are operated by students who major in the college: Instrument Society of America, Society of Manufacturing Engineers, Student Construction Management Association, Alpha Eta Rho Honorary
Aerotechnology Student Organization.
The college is also the international headquarters for Epsilon Pi Tau, the International Honorary Professional Fraternity for Education 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 (industrial) education programs are accredited by the National Council for the Accreditation of Teacher Education.

## College Matriculation

Students admitted to Bowling Green State University may register in the College of Technology 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.

## Program Matriculation

Full 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 , and a 2.5 within technology, for all courses taken prior to matriculation.
2. completed cooperative education experience (TECH 289) for all programs except technology education.
3. completed technology core courses (TECH 101 and TECH 102).
4. completed with a C grade or better, English 112, computer science, mathematics, and science requirements as specified on program checksheets.
5. completed any additional specific requirements and application procedures that have been established by the programs in which the student wishes to matriculate. Information on specific program matriculation requirements is available in the College's Program Services Office.
The matriculation steps listed above must be completed before students will be permitted 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, except for coop and 490, all courses offered in the College of Technology must be taken for letter grades by majors in the College of Technology.

## Due Process 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 associate dean of the college through the Program Services Office.
Academic appeals may be initiated in the Program Services Office. A rationale for the appeal is required and documentation or other evidence may 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 dropped 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 $\mathrm{S} / \mathrm{U}$ 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 Code.

## 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.
Toward this end, a staff including a program counselor is located in the Program Services Office in the Technology Building. This 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.

## Intercoliege Curricula and Dual Degrees

A candidate for a degree from the College of Technology who desires a second degree from a different school or college, or a second degree within the College of Technology, may take work after graduation to complete second degree requirements or qualify for the dual degree program prior to graduation. Students who desire a dual degree/major must:

1. secure permission of the Dean of the College of Technology before they complete their junior year. For intercollege degrees, permission of both deans is required.
2. complete the requirements for both majors for the degrees sought.
3. complete at least 36 hours minimum of credit beyond the hours required for a single degree major (including 12 hours of co-op);
4. dual majors in technology completexs. 4 cooperative education experiences amounting to a minimum of 16 credit. hours, with 8 hours applicable to each major.

## General Education 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.

## Bachelor of Science Degrees

The College of Technology offers the bachelor of science in technology and the bachelor of science in education. The programs leading to the bachelor of science in technology are designed for those students planning to seek a position in business or industry. Those programs leading to the bachelor of science in education are appropriate for students interested in teaching at junior or senior high schools or at technical colleges.

## Curriculum for $2+2$ Transfer Students in Technology Programs

101 Technology Building, 372-7581
For students who have earned an associate degree in an engineering or related technology from a regionally or Ohio Board of Regents accredited post-secondary institution, the upper-division program (junior and senior years) is designed by the student and an adviser in one of the technology programs offered. At least 65 hours must be earned at Bowling
Green. After analysis of the student's credentials, appropriate courses are selected by the student and major adviser to best fulfill the degree requirements and meet career objectives.

## CHELOR OF SCIENCE 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 classifications as: construction supervision, production management, technical sales, product design, quality control, technical service trairing, graphic coordinator, customer service technician, cost and systems analysis. These classifications are used in all segments of our enterprise system including the automotive, construction, pollution control, communications, glass and plastics industries. The University's geographic location is such that excellent cooperation exists 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
iences, communications and the hu-
hities. Industrial experience is gained Inrough the college-sponsored cooperative education program which is required of all technology majors.
The Cooperative Education Program of the College of Technology at Bowling Green State University 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 semesterlong 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 Bowling Green State Univeristy'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.
A candidate for the degree of bachelor of science in technology must meet re-
quirements for graduation as listed else-
ere in this catalog (General
equirements for Baccalaureate Degrees).

1. Complete 40 or more semester hours of credit in courses numbered 300 or above.
2. Complete all requirements for a major including prerequisites, laboratory experiences and other requirements.

## Aerotechnology

264 Technology Building, 372-2439
The aerotechnology concentration is designed to prepare students for responsible positions in aviation. The program is organized around the three sequences of airport operations, aircraft maintenance and flight technology and is conducted in accordance with the appropriate Federal Aviation Regulations. The student should choose two of these sequences for a program.
Also, the program requires course work in areas of science and mathematics, general education and business. Supervised cooperative education experiences with or related to the sequences selected are required.

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 following this section.
First year (31 hours)
ENG 112 (3)
PEG (2 activities) (2)
SOC 101 (3)
IPCO 208, 306 or 307 (3)
MATH Requirements (5)
TECH 101 (3)
TECH 102 (3)
AERT 240 (3)
GEOG 121 or 122 (3)
ETHN 101 or 220 (3)
Second year ( 34 hours)
ENG 200 or A\&S 200 (3)
MIS 200 or CS 130 (3)
PSYC 201 (4)
TECH 289 (4)
AERT 342 (3)
TECH 302 (3)
AERT Sequence (6)
PHYS 201 (5)
Natural science elective (3)
Third year ( 31 hours)
AERT Sequences (12)
MGMT 305 or 360 (3)
LEGS 301 (3)
TECH 389 (4)
Business elective ( 3 )
HED 313 (3)
Elective
Fourth year ( 29 hours)
AERT Sequences (16)
TECH 489 (4)
Business elective (3)
Elective (3)
AERT 349 (3)

## Construction Management and Technology

## 264 Technology Building, 372-2439

This curriculum is designed to prepare personnel for technical positions on the construction site and in the office. The three options offered recognize the special requirements of residential, general (including commercial, industrial and civil) and mechanical/electrical construction and are recognized by the Associated General Contractors and the National As. sociation of Home Builders, among others. Each option requires course work in the areas of science and mathematics, general education, business, industrial technology, construction job control, design, and methods and materials. Supervised, cooperative education experiences with a construction-related employer are required.
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. Refer to $2+2$ transfer statement following this section.

## General construction option

First year (34 hours)
ENG 112 (3)
GEOL 104 (4)
MIS 200 OR CS 130 (3)
PEG (2 activities) (2)
MATH Requirement (10)
TECH 101 (3)
TECH 102 (3)
DESN 104 (3)
CONS 235 (3)
Second year ( 34 hours)
ENG 200 or A\&S 200 (3)
PSYC 201 (4)
PHYS 201 (5)
STAT 200 (3)
TECH 302 (3)
CONS 320 (3)
DESN 243 (3)
TECH 289 (4)
CONS 318 (3)
General Education Core Elective (3)
Third year (31 hours)
TECH 389 (4)
LEGS 301 (3)
CONS 335 (3)
Construction option (6)
Multicultural elective (3)
ACCT 325 (3)
BA 203 or ENG 388 (3)
CONS 336 (3)
ECON 200 or 202 (3)
Fourth year ( 28 hours)
MGMT 305 (3)
CONS 439 (3)
CONS 440 (3)
TECH 489 (4)
Construction option (6)
CONS 435 (3)
CONS 437 (3)
CONS 442 (3)

## Mechanical/electrical option

First year ( 34 hours)
ENG 112 (3)

GEOL 104 (4)
MIS 200 or CS 130 (3)
PEG (2 activities) (2)
MATH Fequirement (10)
TECH 101 (3)
TECH 102 (3)
DESN 104 (3)
CONS 235 (3)
Second year ( 34 hours)
ENG 200 or A 2 S 200 (3)
PSYC 201 (4)
PHYS 201 (5)
STAT 200 (3)
TECH 302 (3)
Construction option (3)
OESN 243 (3)
CONS 318 (3)
TECH 289 (4)
EA 203 (3)
Third year (34 hours)
TECH 389 (4)
ECON 200 or 202 (3)
LEGS 301 (3)
CONS 335 (3)
ET 357 (3)
CONS 337 (3)
Multicultural elective (3)
Construction option (3)
ACCT 325 (3)
CONS 320 (3)
General Education Core Elective (3)
Fourth year ( 25 hours)
MGMT 305 (3)
CONS 439 (3)
CONS 440 (3)
TECH 489 (4)
Construction option (6)
CONS 406 (3)
CONS 435 (3)
CONS 336 (3)

## Residential option

First year ( 34 hours)
ENG 112 (3)
GEOL 104 (4)
MIS 200 or CS 130 (3)
PEG (2 activities) (2)
MATH Requirements (10)
TECH 101 (3)
TECH 102 (3)
DESN 104 (3)
CONS 235 (3)
Second year ( 34 hours)
ENG 200 or A\&S 200 (3)
PSYC 201 (4)
PHYS 201 (5)
STAT 200 (3)
TECH 302 (3)
DESN 301 (3)
DESN 243 (3)
DESN 307 (3)
TECH 289 (4)
CONS 318 (3)
Third year ( 34 hours)
TECH 389 (4)
General Education Core Elective (3)
LEGS 301 (3)
CONS 335 (3)
Construction option (6)
CONS 306 (3)
Multicultural elective (3)
ACCT 325 (3)
BA 203 (3)
ECON 200 or 202 (3)
Fourth year (25 hours)
MGMT 305 (3)
CONS 439 (3)
CONS 440 (3)

TECH 489 (4)
Construction option (6)
CONS 435 (3)
CONS 336 (3)

## Design Technology

260 Technology Building, 372-2437
These programs involve the efficient application of arts, sciences, technology and business to the process of design in industry. The arts involve the development of communicative working drawings, renderings and models. The scientific knowledge required includes a basic understanding of mathematics, physics and computer science. Computer-aided design principles and applications is an integral part of the program. The technology of manufacturing and construction and selected courses in business complement and complete the design program. An important component of these design technology programs is a cooperative education experience in a design or de-sign-related position in industry which is supervised by College of Technology faculty.
Students who have obtained an associate degree in an area of design technology 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 following this section.

## Architectural/environmental design

This technology prepares students to deal with the architectural designs associated with the exterior and interior environment.
First year (32 hours)
ENG 112 (3)
PEG 100 (2)
SOC 101 (2)
IPCO 102 (3)
ART 102 (3)
ART 103 (3)
CS 101 (3)
TECH 101 (3)
DESN 104 (3)
TECH 102 (3)
CONS 235 (3)
Second year ( 36 hours)
ENG 200 (3)
PSYC 201 (4)
MATH 128 (5)
Arch./Env. Concentration (9)
Multicultural elective (3)
TECH 302 (3)
PHYS 302 (3)
TECH 289 (4)
Third year (28 hours)
TECH 389 (4)
ENG 388 (3)
Business electives (6)
Arch./Env. Concentration (9)
Technology electives (6)
Fourth year (28 hours)
TECH 489 (4)
Technology electives (6)
Arch./Env. Concentration (9)
Business electives (6)
Elective (3)

Arch./Env. concentration courses are listed below:
DESN 104, 243, 301, 307, 404 and 450
ART 213 and 313
ARTH 440
CONS 439 and 235
Technical electives are derived from the following list:
ART 112
DESN 305, 436
CONS 306, 335, 440
GEOG 321 (3)
AMID 319 (3)
VCT 203 (3)
Other technical courses by advisement

## Mechanical design

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
First year (32-33 hours)
ENG 112 (3)
PEG 100 (2)
MATH requirement (4-5)
PCO 102 (3)
General education elective (3)
CS 101 (3)
MFG 112 (3)
DESN 104 (3)
TECH 101 (3)
TECH 102 (3)
MATH 129 (2)
Second year (33-34 hours)
ENG 200 (3)
DESN 204 (3)
MATH requirement (4-5)
TECH 289 (4)
TECH elective (3)
DESN 243 (3)
TECH 302 (3)
PHYS 201 and 202 (10)
Third year ( 32 hours)
TECH 389 (4)
Business elective (3)
ECON 202 (3)
Mech. Desn. Concentration (9)
PSYC 201 (4)
STAT 211 (3)
General education elective (3)
Multicultural elective (3)
Fourth year (28 hours)
TECH 489 (4)
Technology electives (6)
Mech. Design Concentration (9)
LEGS 301 (3)
MGMT 305 (3)
ENG 388 (3)

## Courses for the mechanical design

 concentration are listed below:DESN 104, 204, 243, 304, 404 and 455
MFG 112 and 223
TECH 223 and 323
Technical electives are derived from the following list:
DESN 305, 490
ET 191, 240, 441
MFG 229, 323, 329, 426, 428 and 438 aras.
TECH 391 Other technical courses by a. visement

## roduct design specialization

program involves the design of products with the aid of technology and art. The program prepares the student to develop creative solutions to three dimensional problems involving aesthetic, materials, manufacturing processes and human factors.
First year (31 hours)
ENG 112 (3)
PEG 100 (2)
ART 102 and 103 (6)
MATH 128 (5)
IPCO 102 (3)
CS 101 (3)
TECH 101 and 102 (6)
DESN 104 (3)
Second year (31 hours)
ENG 200 (3)
PSYC 201 (4)
STAT 200 (3)
TECH 289 (4)
Multicultural elective (3)
Prod. Design Concentration (6)
TECH 302 (3)
PHYS 201 (5)
Third year (31 hours)
TECH 389 (4)
ENG 388 (3)
ECON 202 (3)
ACCT 221 (3)
Prod. Design Concentration (9)
Technology electives (6)
General education elective (3)
purth year ( 31 hours)
CH 489 (4)
lechnology electives (6)
Prod. design Concentration (12)
MKT 300 (3)
MKT-410 (3)
Electives (3)

## Product design concentration courses

ART 112
ARTD 313, 319, 416 and 418
DESN 104, 204, 243, 304 and 404

## Technical electives are derived from the following list:

VCT 203
MFG 112, 323 and 329
DESN 305 and 490
ARTD 211, 311 and 411
Other technical courses by advisement

## 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 Applied Human Ecology.

## Electronic Technology <br> 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, 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, construction, 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 in industry which is supervised by University faculty.
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 following this section.
First year ( 33 hours)
ENG 112 (3)
Multicultural elective (3)
TECH 101 (3)
TECH 102 (3)
ET 191 (3)
DESN 104 (3)
Math requirement (10)
Humanities and arts elective (3)
PEG (2 activities) (2)
Second year (34 hours)
ENG 200 or A\&S 200 (3)
CS 101 (3)
IPCO requirement (3)
MFG 112 (3)
ET 240 (4)
ET 241 (4)
PHYS 201 and 202 (10)
TECH 289 (4)
Third year ( 32 hours)
Business electives (6)
ET 344 (3)
TECH 302 (3)
TECH 389 (4)
ET 300 (3)
ET 358 (4)
ET 442 (3)
STAT 200 (3)
TECH 302 (3)
Fourth year ( 32 hours)
Business electives (6)
Technology electives (6)
PSYC 201 (4)
ECON 200 or 202 (3)
TECH 489 (4)
ET 441 (3)
ET 443 (3)
ET 453 (3)

## Industrial Training Technology

260 Technology Building, 372-2437
Industrial trainer preparation is an interdis ciplinary program consisting of course work in industrial technology, 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 technology by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement following this section.
First year (30-31 hours)
ENG 112 (3)
PEG 100 (2)
ENG 200 (3)
IPCO 102 (3)
DESN 104 (3)
MFG 112 (3)
TECH 101 (3)
MATH requirement (4)
VCT 203 (3)
CONS 235 (3)
Second year ( $33-34$ hours)
PSYC 201 (4)
PHYS 201 or CHEM 115 (4-5)
CS 100, 101 or MIS 200 (3)
ECON 200 or 202 (3)
ET 191 (3)
TECH 102 (3)
TE 252 (3)
Concentration (6)
TECH 289 (4)
Third year (33 hours)
EDFI 302 (3)
MGMT 305 (3)
TE 352 (3)
TECH 302 (3)
Social science elective (3)
TECH 389 (4)
Concentration (6)
SOC 101 (3)
Humanities and arts elective (3)
Fourth year ( 31 hours)
Business electives (6)
ENG 388 (3)
TE 428 (3)
LEM 455 (3)
EDFI 402 (3)
TECH 489 (4)
Concentration (6)
Multicultural elective (3)

## Manutacturing <br> Technology

264 Technology Building, 372-2439
This field of study draws upon the principles of mathematics and the physical sciences and applies them to industrial problems related to manufacturing systems. An understanding of the computer and its use in designing, monitoring and controlling manufacturing processes, which includes robots and automated work cells, is an important part of this program. In addition to these technical studies, the program offers excellent opportunities for studies in management and industrial psychology. Three options are offered under this specialization: manufacturing, industrial environment technology, and physical plant and energy utilization technology. An important component of this technology program and its options is the required cooperative eduction experiences in industry which is University supervised.

Students who have obtained an associate degree in this 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 following this section.

## Manufacturing option

First year ( 31 hours)
CS 101 or MIS 200 (3)
DESN 104 (3)
ET 191 (3)
ENG 112 (3)
MFG 112 (3)
MATH 128 (5)
PSYC 201 (4)
TECH 101 (3)
TECH 102 (3)
PEG 100 (1)
Second year (32 hours)
DESN 204 (3)
MFG 223 (3)
MFG 229 (3)
MATH 131 (5)
Multicuitural elective (3)
Foreign language elective (3)
PHYS 201 (5)
STAT 200 (3)
TECH 289 (4)
Third year (32 hours)
IPCO 208, 306 or 308 (3)
ECON 200 (3)
A\&S 200 (3)
MGMT 300 (prereq STAT 200) (3)
Natural science elective (3)
MFG 323 (3)
MFG 326 (3)
MFG 329 (3)
DESN 243 (3)
PEG 100 (1)
TECH 389 (4)
Fourth year (31 hours)
Business elective (3)
DESN 404 (3)
ENG 338 (3)
MFG 327 (3)
MFG 424 (3)
MFG 428 (3)
MGMT 305 (3)

TECH 302 (3)
TECH 489 (4)
MFG 438 (3)

## Industrial environment technology option

This program consists of studies in industrial technology, business and the sciences. Technical problem solving in manufacturing, instrumentation, and process control gives students an appreciation of industrial production practices, while studies in business emphasize consideration of the organizational, legal and financial principles involved. The sciences, primarily chemistry and biology, offer students the opportunity to develop an understanding of the chemical nature of pollutants and their effect on the ecological system.
First year ( 32 hours)
CS 101 or MIS 200 (3)
PEG (2 activities) (2)
CHEM 125 (5)
ENG 112 (3)
MFG 112 (3)
MATH 128 (5)
CHEM 126 (5)
TECH 101 (3)
TECH 102 (3)
Second year ( 35 hours)
Technology elective (3)
ECON 200 (3)
MATS \& PROC CHOICE (3)
MATS \& PROC CHOICE (3)
MATH 131 (5)
Multicultural elective (3)
BIOL 204 (5)
STAT 200 (3)
TECH 289 (4)
Technology elective (3)
Third year ( 30 hours)
Technology elective (3)
ENG 200 or A\&S 200 (3)
MGMT 300 (prereq. STAT 200) (3)
Technology elective (3)
MATS \& PROC CHOLCE (3)
BIOL 205 (5)
MFG 338 (3)
TECH 389 (4)
IPCO 208, 306 or 308 (3)
Fourth year (31 hours)
LEGS 301 (3)
Technology electives (3)
ENG 338 (3)
MFG 327 (3)
MFG 424 (3)
MFG 428 (3)
Technology Elective (3)
TECH 302 (3)
TECH 489 (4)
MGMT 305 (3)

## Physical plant and energy utilization option

The energy utilization technologist may be employed in commercial or industrial areas and be responsible for efficient, proper and economical use of mechani-
cal, electrical, thermal, nuclear, chemical and radiant sources of energy. These are applied to the production, processing and transportation of goods and materials; and the heating, cooling and ventilating of physical plants.

First year (31 hours)
ENG 112 (3)
PEG (2 activities) (2)
MATH requirement (5)
TECH 101 (3)
IPCO requirement (3)
ET 191 (3)
DESN 104 (3)
TECH 102 (3)
ENG 200 or A\&S 200 (3)
BIOL 101 (3)
Second year ( 33 hours)
ECON 200 or 202 (3)
MIS 200 (3)
PHYS 201 (5)
CONS 235 (3)
CHEM 125 or 135 (5)
MATH requirement (5)
TECH 289 (4)
STAT 200 (3)
ENVS 101 (2)
Third year (31 hours)
MGMT 300 (3)
DESN 301 (3)
CONS 337 (3)
TECH 302 (3)
PP or EU option (12)
TECH 389 (4)
Foreign Language/Multicultural elective (3)
Fourth year (31 hours)
Business electives (6)
ENG 388 (3)
DESN 436 (3)
MGMT 305 (3)
ET 357 (3)
PP and EU Option (9)
TECH 489 (4)

## Technical Education

260 Technology Building, 372-2437
This major prepares students for teaching positions at post-secondary technical institutions. These positions require a blend of technical proficiency and an ability and desire to work with adult learners. This major combines teaching methods courses with a technical concentration.

Students who have obtained an associate degree in this or a closely related field may pursue a bachelor's degree in this major by enrolling in the curriculum for $2+2$ transfer students. Refer to $2+2$ statement following this section.
First year ( 33 hours)
ENG 112 (3)
PEG (2 activities) (2)
PHYS 201 or CHEM 125 (5)
IPCO 102 (3)
PHYS 202 or CHEM 126 (5)
Tech Concentration (9)
TECH 101 and 102 (6)
Second year ( $33-34$ hours)
ENG 200 (3)
PSYC 201 (4)
CS 101 (3)
Tech Concentration (9)
TE 252 (3)
TECH 289 (4)
MATH (4-5)
TECH 302 (3)
Third year ( 31 hours)
ECON 200 or 202 (3)
EDFI 302 (3)
TE 352 (3)
Tech Concentration (12)
TECH 389 (4)
\& Arts Elective (3) 388 (3)
rourth year (29-31 hours)
EDFI 408 (2)
Multicultural elective (3):
Math requirement (3-5)
TECH 489 (4)
TE 449 (3)
TE"428 (3)
Tech Concentration (11)

## Visual Cómmunication Technology

260-Technology Building; 372-2437
The visual communication technology program prepares students for media pro dưction, training, sales and technical management positions with the communication industry These careers require technical competencies in design, printing, television, film display and photography With help from an adviser, each student selects an occupational option for specialization from nümerous career options. The program proceeds through a framework of analyzing and applying the many methods of creating; reproducing and distributing visual commúnication materials: Students ultimately combine concepts, theories and principles with critical and creative technical problem solving abilities to generate solutions for sual communication problems. y developing the ability to solve communication problems, students will be prepared for such technological production and management positions as adver tising prodúction, graphic design, commercial and industrial photograply, motion pocture and" tèlevision graphics, multimedia production, printing and publishing plant control, and similar occupations.

The occupational options are chosen in dividually by each student with the assistance of an adviser. The occupational options are display production display marketing/sales, display management, photographic production, photographic marketing/sales photographic management, print production print marketing/ sales, print management, television production, television marketing/sales, television management, industrial media specialist, visual communications generalist.
Students who have obtained an associate degree in an allied area may pursue-a bachelor's degree in technology by enroll: ing in the curriculum for $2+2$ transfer students. Refer to $2+2$ transfer statement following this section
$\therefore$ First year ( $34: 36$ hours)
TECH 101 (3)
VCT 203 (3)
112 (3)
anities and art elective, (3)
AATD 211 (3)
MATH réquirement (4:5)
PHYS 201 or CHEM 1-15 (4-5),
PEG (2 activities) (2)

ART 102 (3)
DESN:104"(3)
TECH 102 (3)
Second year (32-34 hours)
PSYC 201 (4)
MIS 200 or CS 101 or 130 (3)
ECON 200 or higher (3)
IPCO 102 (3)
VCT 208 (3)
VCT 282 (3)
Social science elective (3)
TECH 289 (4)
STAT 200
Science elective (3-5)
Third year (34 hours)
MKT 300 (3)
VCT cluster (15)
TECH 389 (4)
TECH 302 (3)
ENG 388 (3)
ACCT. 221 (3)
Multicultural or foreign language elective (3)
Fourth year ( 25 hours)
VCT cluster (12)
VCT 467 (3)
MGMT 305 (3)
TECH 489 (4)
VCT 468 (3)

## BACHELOR OF SCIENCE IN EDUCATION

The College of Technology offers several programs in technology education which lead to the bachelor of science in education. These programs include several options and minors.

Professional education and general ed ucation requirements are specified elsewhere in this catalog. For admittance to the Bachelor of Science in Education pro gram the student must meet all program matriculation requirements as indicated elsewhere.

## Technology Education

260 Technology Building, 372-2437
Major-Industrial Technology Education
(meets special certification, kindergartentwelfth grade)
First year (31 hours)
ENG. 112 (3)
PEG 100 (2)
IPCO 102 (3)
MATH 128 (5)
CS 100 or CS 101 or MIS $200^{\circ}$ (3)
TECH 101 (3)
TECH 102 (3)
DESN 104 or DESN 204 (3)
MFG 112 (3)
ET $191^{1}(3)$
Second year (32-33 hours)
PSYC 201 (4)
CHEM 115 or PHYS 201 (4:5)
MFG 223 or MFG 229 (3)
TECH 2XX (3)
VCT. 203 (3)
CONS 235 (3)
EDF'//EDCI 202 (3)
ENG 200 (3)
TE 252 (3)
Humanities'and 'arts elective (3)

Third year (33 hours)
'TECH 302 (3)
TE 352 (3)
TE 462 (3)
EDFI 302 (3)
MFG 323 (3)
MFG 329 (3)
DESN 301 or DESN 404 (3)
CONS 306 (3)
EDFI 402 (3)
TECH elective (3)
Multicultural elective (3)
Fouth year (31- hours)
TE 497 (10)
EDFI 408 (3)
EDAS 409 (3)
TE 447 (3)
TE 449 (3)
TECH' elective (3)
Social science elective (3)
Elective (3)
Minor-Industrial Technology Education
(meets high school certification)
( $36-38$ hours) ${ }^{* *}$
One methods course by advisement (3-5)
DESN 104 and 204 (6)
MFG 1.12, 223; 323 and 423 (12)
ET 191 (3)
VCT. 203 (3)
CONS $235^{\prime}$ and 306 (6).
-TECH 302 (3)
Major-Vocational-Industrial: Education
First year (35 hours)
ENG 1.12 (3)
IPCO 102 (3)
DESN 104 (3)
MFG 112 (3)
TECH 302 (3)
EDCI 202 or EDFI. 202" (3)
PEG 100 (2)
TECH concentration (6)
CONS 235 (3)
ENG 200 or A\&S 200 (3)
ET 191 (3)
Second year (32-34 hours)
PHYS 201 or CHEM 115 (4-5) by advisement
VCT 203 (3)
TECH concentration (3)
TE 252 (3)
TECH 289 (4)
TECH 128 (5)
PSYC 201 (4)
CS 101 (3)
Social science elective (3)
Third year (34, hours)
ECON 200 or 202 (3)
EDFI 302 (3)
TE 352 (3)
TE 470 (3)
TE 447 (3)
Technology concentration by advisement (9)
TECH 389 (4)
Humanities and arts elective (3)
Multicultural elective (3)
Fourth year (35 hours)
EDFI 402 and 408 (6)
TE 497 - Student teaching (10)
TECH 489 (4).
TE 449 : (3)
EDAS 409 (3)
Elective (3)
TECH' concentration (6)
*Upperdivision students may arrange a minor pro gram with 300 - and 400 -level cou'ses.


Telephone: (419) 433-5560
Robert DeBard, dean, 122 East Building
Georgeanna Belfiore, director of student services, 139 North Building
John P. Hartung, director of admissions and registration, 114 East Building
Dennis S. Horan, instructional media coordinator, instructional media center, 324328 West Building
Joseph J. Nayduciak, director of personal and professional development, 101 East Building
Holly R. Hilborn, director of college relations, 110 East Building
Charles C. Stocker, director of budget operations, 106 East Building
Penny Nemitz, director of academic services, 136 North Building
H . Kreig Elicker, assistant director of admissions, 114 East Building oseph J. O'Loughlin III, director of computer services, 233 North Building argie A . Brodrick, director of learning achievement center, 230 North Building

## The College

Firelands College is a regional branch campus and college of Bowling Green State University.

Located in Huron, Ohio, 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 the college and BGSU is a close one and the courses and programs offered at Firelands 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.

It offers five associate (two-year) degrees 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 rses, workshops and seminars. embers of the faculty, more than 60 percent of whom hold the highest degrees in their fields, include two Fulbright Scholars, authors and nationally known researchers.

The small size of the campus and its classes (usually $20-25$ 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 is an accredited member of the North Central Association of Colleges and Secondary Schools.

## Firelands Library

Firelands College Library functions as an integral part of the educational process. The collection of more than 28,000 volumes, 227 current periodical and newspaper titles and a wide variety of audio-visual materials enhances the instructional program and provides additional resources for use by members of the community. The collections of the University Libraries in Bowling Green are also made available to Firelands College students through a regular shuttle service.

The library handbook, revised annually, 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.

## Instructional Media

Center
The Firelands College Instructional Media Center provides faculty and students with state-of-the-art audio-visual and telecommunications support. Services are available during regular class hours throughout the academic year.

Services provided include provision of equipment and software necessary for inclass presentations of films, slide shows, video tapes and a variety of other audiovisual materials.

The Instructional Media Center staff assists students and faculty in the production of simple audio-visual materials and maintains a comprehensive index to suppliers of prepared software. The staff is available to help in the location of appropriate programming

In addition to traditional audio-visual support, the Instructional Media Center operates a sophisticated internal television network. The seven channels of the network may be viewed on receivers in each of the college's classrooms and laboratories and in study carrels in the Firelands Library. Programming from a wide array of sources can be transmitted on the system at anytime during regular class hours. Students and faculty can request this programming by contacting the Instructional Media Center secretary.

Special arrangements may be made to utilize these services during other hours.

## Admissions

The procedures for admission to Bowling Green State University are described on page 29 of this catalog. Students seeking admission to Firelands 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.

## Housing

A wide variety of reasonably priced housing options 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 at 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 Registration 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, 114 East Building.

## Computer 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. Via a remote job entry facility and interactive terminals, Firelands has access to software on the IBM 4381 and the VAX 8500 on the main campus. Locally, various microcomputers, - located in the computer science and word processing laboratories, are available for instructional use and/or program preparation.

## Suctent/Academic <br> Sarvices

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, which is located in Room 129. West Building, maintains day and evening hours to accommodate all students.

Career Development and Counseling Services provides educational, career . and personal counseling services to students. Information on academic majors, career options and other colleges is available on the COIN Computer and a variety of printed materials can be found in the Student Services Office Career Library. The Strong Campbell Interest Inventory assists students in making career decisions. It is computer-administered and offers immediate feedback.

A course entitled Career Planning and Decision Making, CAO 131, is 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) and the Career Planning Profile (CPP) are administered monthly by the office.

The National League of Nursing Examination (NLN) is also administered each semester.

The Placement Service, located in the West Building in room 129, is responsible for providing employment counseling, assistance in resume writing and information on interviewing procedures to all graduates 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 establishing a placement file and planning the job search.

Handicapped services are provided to enable disabled persons to attend classes and to participate in a broad range of activities. The Student Services Office acts as a liaison between rehabilitation agencies and the college. All handicapped students should be in close contact with the Student Services Office.

Program advisement at Firelands College provides the opportunity to gather information about various fields of study available through Bowling Green State University. Upon admission all students are assigned a faculty 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.

Students who are undecided as to their career goals and those returning to school after a lengthy absence, have the opportunity to discuss their interests and objectives with a career counselor in the Program Advisement 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, either in business, government, industry or the nonprofit sector.

Every effort is made to place students in assignments compatible with their academic programs and career goals. 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. Interested students should contact the Student Services Office in the West Building.

## Student Life and Activities

Firelands College offers students cocurricular opportunities for personal growth and development. Social, cultural and athletic programs are sponsored by the Student Activities Office, various student. organizations and academic departments of the College. An opportunity for selfgovernment is afforded students through elected representatives or by election to office. Many academic departments and student groups provide additional oppertunities 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:
Campus Fellowship
Firelands College Theater
Firelands Writing Center
International Club
Intramurais
More Mature Element
Ski Club
Social Science Club
Society of Manufacturing Engineers
Speech Activities Organization
Student Advisory Committee
UCAM-United Campuses to Prevent Nuclear War
Weight Club

## Learning Achievement Center

The Learning Achievement Center is located on the second floor in room 230 North, Students who want to improve their learning skilis 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 is widely used.
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

The Financial Aid Office, 114 East Building, coordinates ail Pell Grants, Ohio Instructional Grants (OIG), Perkins Loa: and the campus-based scholarship programs.

## holarships

merous annual scholarships are administered by Firelands College. Applications for these scholarships are available from the Admissions Office and must be filed by April 1 to be considered for the next academic year. Special need analysis forms are not required for scholarships administered directly by Firelands Col-
lege, which include:
BGSU Alumni Association
James E. Cole Memorial
Alta M. Croll Memorial
Sally DeForest
Elyria Savings and Trust National Bank:
Firelands Office
Erie County Board of Realtors
Erie County Student
John F. and Doris H. Ernsthausen
Memorial
Firelands Challenge Tournament
Firelands Faculty and Staff
Clarissa A. Givens Memorial
Thomas J. Hanlon Memorial
Harlequins Founders'
William Randolph Hearst
Holiday Challenge Tournament
Huron Junior Women's League
Huron Rotary Club
Kiwanis Club of Sandusky Bay
Milan Chamber of Commerce
Milan Mothers Club
ven G. Mruk Memorial
dander Scholarships
William J. Parker Family
William J. Parker Memorial
Mary A. Printy Memorial
Sandusky Exchange Club
Third and Fourth Degrees of Sandusky
Knights of Columbus, Firelands Shrine
Club and Singara Grotto
Sandusky Register
Social Science Club
Society National Bank
Lyle L. Speer Memorial
Student Advisory Board
Dr. Carl R. Swanbeck Memorial
David H. Thakar 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 mined by the person administering oan fund. All loans of $\$ 250$ or more 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. Transient 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 from the business office.

## Finance Charge

The finance charge for all loans is at the annual rate of 10.75 percent.

## 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 cancelled 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 needs and is interest free. However, it is suggested that the student make a gift to the loan fund after repayment of the loan.

## Kiwanis Club of Sandusky Loan Program

The Kiwanis Club of Sandusky has a loan program available to any student in the Firelands College area. A student may negotiate a loan up to $\$ 250$ per year which is interest-free while the student is in school. An interest rate of six percent per annum is charged once the student is no longer enrolled at the University. Early repayment of the loan is encouraged after the student's graduation or termination of enrollment in order to allow financial assistance to other students.

## V.F.W. Post No. 2743 Loan Fund

The Norwalk Post No. 2743 of the Veterans of Foreign Wars has established a loan fund for Firelands College students. Loans are individually negotiated and no interest is charged when terms of the loan are met. The loan is administered by an agent of the veteran's organization; however, information is available at the Firelands College Financial Aid Office.
Third and Fourth Degrees of Sandusky Knights of Columbus, Firelands Shrine Club, and Singara Grotto Loan Fund Loan 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.

## Academic Objectives and Organizations

Firelands is organized as a college of Bowling Green State University. The college has three academic departments: applied sciences, humanities, and natural and social sciences. The departments are structured by academic discipline as follows:

## 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 Health Technology
Finance
Health Information Technology
Legal Studies
Management
Management Information Systems
Manufacturing Technology
Marketing
Respiratory Care Technology

## Humanities

Art
Art History
English
French
Health Education
Interpersonal and Public Communications
Journalism
Music Education
Philosophy
Physical Education
Popular Culture
Spanish
Theatre

## Natural and Social Sciences

Biology
Chemistry
Criminal Justice
Geography

Geology
Gerontology
History
Mathematics
Physics
Political Science
Psychology
Sociology
Social Science
Social Work

## Prebaccalaureate 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 group requirements for the degree sought.

## Ceneral Education <br> Trecquirements

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: language, humanities, social science and mathematics-physical sciences.

A wide variety of general education courses is available at Firelands. These courses can be used to meet the appropriate group requirements in baccalaureate and associate degree programs.

## Upperdivision Courses

Firelands College primarily offers the freshman and sophomore-level courses required for most four-year programs at BGSU as well as other colleges and universities.

The college also provides opportunities for some study at the junior, senior and graduate levels.

## Lifelong Learning (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 aiso offered in many topical areas, such as management, education, computers, industrial education and technology and environmental quality control.

## Lake Erie Regional Studies Program at Firelands College

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.

Lifelong learning courses, workshops, seminars and in-service training programs may be organized 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.

## 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 studies; 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 four-year degree. The associate of applied business, associate of applied science and associate of technical study degrees are primarily intended to prepare students for employment upon graduation. Although termed career education, they are articulated with similarly oriented four-year programs, 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 satisfy the general requirements listed on page 12 of this catalog.

No more than six credit hours of basic writing from ENG 110, 111 and 112 may be applied toward graduation.

## 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 the half-way point in the progression toward a baccalaureate degree.

The associate of arts degree program is designed to provide pre-baccalaureat 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 twoyear program. General education programs have been developed in the following areas:
Elementary education
Humanities
Human services
Liberal studies
Pre-business administration
Secondary education
Social science

## Associate of Arts Requirementis

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. Students must take CS 180 along with ENG 110, 111 or 112 or demonstrate proficiency in a word processing program. ENG 112 and IPCO 102 are required.

## Mathematics and science

Each student must complete a minimum of nine credit hours in mathematics and science.

## Social sciences

Each student must complete a minimum of 10 credit hours in courses designated social science.

## Fine and applied 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.

## Physical education

Two academic semesters of physical education (PEG 100) are required, for a minimum of two credits. This requirement may be waived if a student has attained the age of 25 at the time of initial registration, has a written statement from a personal physician or is a veteran of the military service. Exemption from physical education does not excuse a student from meeting the 62 semester hours required for graduation.

## 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 sci- mos. ences is encouraged to take a foreign language.

## riminal Justice

associate degree in criminal justice is designed to be a halfway point toward 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 Academic Services Office will provide placement information before your first semester. No more than six hours of basic writing can be applied toward graduation. IPCO 102 is required.

## Mathematics and sciences

Each student must complete three courses, including one in math and one in the natural sciences. MATH 115 is

requiuired. Students without a passing e on Math Placement Test B will take H 095 or 098 before MATH 115. Computer Science 100 is required. The student must select one science course 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, PSYC 405 and SOC 101.

## Multicultural Studies

Each student must choose one course from the following: SOC 231, GEOG 230 or SPAN 101.

## Humanities

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 18 hours. The required courses are CRJU 210, CRJU 220, POLS 221, POLS 347. POLS 417 and SOC 441.

## Core electives


student must complete two courses the following: IPCO 306, POLS 201, 301, SOC 316, SOC 341 and SOC

## Other requirements

Firelands' students less than 25 years of age must complete two hours in PEG 100. All Bowling Green students are required to complete the physical education requirement unless án appeal is approved for health reasons or a waiver is made for veterans.

## Electives

Each student must select a sufficient number of electives to earn a minimum of 62 hours.

## Elementary Education

This curriculum 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 addition. to the associate of arts general requirements, students must complete the following: (Requirements for this degree are currently being revised. Please check with the director of academic services for updated requirements.)

## Communication

See general education requirements for associate of arts programs. Six hours minimum.

## Mathematics and science

MATH 241 and 242 and BIOL 101; CHEM 104 or 100, GEOL 101, PHYS 104 or 100. Total requirement of 17 hours.

## Social and behavioral sciences

All courses listed below plus one additional social science course, except from geography or history. Twenty hours minimum.
GEOG 121 and 122 (4)
HIST 205 and 206 (6)
HIST 151 or 152 (3)
PSYC 201 (4)

## Fine and applied arts

ART 101, MUED 239 and an ENG literature course (ENG 342 recommended).
Two additional courses must be selected from art, business education, English, French, home economics, technical courses, philosophy, Spanish and speech. Nine hours minimum. THEA 202 and PHIL 103 are recommended.
Other requirements
PEG 100 (2)

## Humanities

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: (Requirements for this degree are currently being revised. Please check with the director of academic services for updated requirements.)

## Communication

See general education requirements for associate of arts programs. Six hours minimum.

## Mathematics and science

Each student must complete both (A) and (B) below. Nine hours minimum.
A. 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 121, and one of the following: PHIL 103, or CS 100 or 101.
3. Three years of high school mathematics and CS 100 or 101.
4. MATH 115,124 or 130.
B. At least two courses elected from biological sciences, chemistry, geology, physical geography (GEOG 125, 126, 127, 213). At least one course must be for laboratory credit.

Students who plan to pursue bachelor of fine arts or bachelor or arts in communication degree programs at Bowling Green State University may elect to follow the Group III mathematics and science requirements for those degrees.

## 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.

## Fine and applied arts

Each student must complete HUM 101 and a minimum of 16 hours from at least three of the following disciplines: art, 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

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 two-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 regular human services program frains 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, sfudents must complete the following: (Requirements for this degree are currently being revised. Please check with the director of academic services for updated requirements.)

## Communication

See general education requirements for associate of arts programs. Nine credit hours minimum.

## 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 sciences
A minimum of 22 credit hours in social and behavioral sciences. Required courses are: PSYC 201; 240 or 303; SOC 101; 202 or 316; and 361; SOWK 110 and 220; SOSC 289. Gerontology emphasis requires 25 credits, including PSYC 240 and GERO 101.

## Fine and applied arts

Ten credit hours minimum, PHIL 102, PHLL 103 or 319 ; and ENG literature are required. PHIL 319 is recommended for gerontology emphasis.

## Multicultural studies

Three credits among those which are acceptable to the College of Health and Human Services are required.

## Oher requirements

PEG 100 (2)
Core electives
Six credit hours from the following (PSYC 405 is recommended): BUSE 335; CAO 121; 1 PCO 203, 306; PHLL 319; POLS 201 or 332, POLS 221; PSYC 311, 405; SOC 301, 316, 361, 441. Three credit hours required for gerontology emphasis, with BlOL 220 as an option.

## Fisld experience

Thirty hours as a volunteer in a supervised field experience is one of the requirements for SOWK 220 . During the second academic year, a 120 -hour supervised field experience at a collegeapproved agency is required as a part of SOSC 289. SOSC 289 also includes a weekly seminar.

## Liberal Studies

This curriculum allows the undecided student to sample a variety of disciplines while ensuring a well-rounded background. In addition to the associate of arts general requirements, students must complete the following: (Requirements for this degree are currently being revised. Please check with the director of academic services for updated

## requirements.)

## Communication

See general education requirements for associate of arts programs. Six hours minimum:

## Miathematics and science

A minimum of 10 hours in at least two sciences or a science and a mathematics combination.

## Social and behavioral sciences

A minimum of 10 hours chosen from: economics, geography, history, political science, psychology and sociology.

## Fine and applied arts

Each student must complete both (A) and (B).
A. Fine Arts and Humanities: HUM 101 and a minimum of 7 hours from at least two of the following: art, film, humanities, English, music, philosophy (except PHIL 103 when used to apply to math and science requirements), popular culture, theatre and American studies. One course in ENG literature must be included.
B. Applied Arts: a minimum of two hours from business education, environmental health, health education, home economics, technical education or journalism.

## Other requirements

In addition, each student must complete 16 hours at the 200 level.

## Pre-business

Donald Wilch, program adviser 305 West Building
This program of study includes the general education requirements and offers business foundations in mathematics, accounting, economics and statistics. In addition to the associate of arts general requirements, students must complete the following:

## Communication

See general education requirements for associate of arts programs. BA 203 is required. Nine hours minimum.

## Mathematics and science

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
A minimum of 10 hours including PSYC 201 or SOC 101, and ECON 202 and 203. The remainder may be chosen from geog. raphy, history, political science, psychology and sociology.
Fine and applied arts
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

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: (Requirements for this degree are currently being revised. Please check with the director of academic services for updated

## requirements.)

## Communication

See general education requirements fc $*$ associate of arts programs. Six hours minimum.

## Mathematics and science

A minimum of nine hours in at least two sciences or a science and a mathematics combination.

## Social and behavioral sciences

A minimum of 13 hours, including PSYC 201, chosen from the following disci: plines: economics, geography, history, political science, psychology and sociology.

## Fine and applied arts

A minimum of 10 hours from at least two of the following disciplines: art, business education, English, French, home eco-; nomics, technology courses, philosophy, Spanish and speech. One course in English literature must be included.

## Other requirements

Each student should consult an adviser for information concerning courses required in various secondary teaching fields.

## Social Science

This curriculum offers the foundation of a bachelor of arts degree program in geography, history, political science, psychology, sociology or liberal studies. In adse tion to the associate of arts general requirements, students must complete the following:

## mmunication

general education requirements for associate of arts program. Six hours minimum.

## 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 mathematics or equivalent proficiency as demonstrated on a placement test.
2. MATH 115, 124 or 130.
3. MATH 121, 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: anthropology, economics, history, social geography, psychology and sociology. Students should also have an area of concentration from one of these disciplines.

## Fine and applied arts

.inimum of 10 hours from at least two e following: art, film, literature, music, sophy (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 Business

Two-year, career-oriented curricula are available 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 mathematics and science, physical science) and in specific major areas (such as business management, secretarial technologies).

Applied business programs offered at Firelands include:
ess management technology puter programming technology Secretarial administrative sciences

## Associate of Applied Business Requirements

This degree is awarded to a student who successfully completes the career-oriented programs listed below and the general associate degree requirements listed on page 12.

## Business Management Technology

'Majors within this program are accounting and business management.

## Accounting

## Planned program

This program prepares students for paraprofessional positions in industrial, public or governmental 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 two-year accounting program are applicable to the four-year baccalaureate degree in business.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic courses
MIS 200 (3)
MATH 126 (5)
Core courses
ACCT 221 and 222 (6)
ACT 231* (3)
BAT 102 (3)

## Second year

General education
SOC 101 or PSYC 201 (3-4)
ECON 202 and 203 (6)
BA 203 (3)
Basic courses
STAT 211 (3)

## Core courses

ACT $241^{*}$ and 251* (6)
BAT 201 and 291, MKT 300 and FIN 300 (12)
*Designed only for the associate degree in accounting.

## Bookkeeping Option

This two-year program is designed for the part-time evening student. The program will prepare students for clerical positions in industrial, governmental or public accounting. Many 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 (3)

## Second year

General education
BA 203 (3)
Basic courses
MIS 200 (3)

## Core courses

ACCT 231*, 241* and 251* (9)
*Designed only for the bookkeeping certificate and associate degree in accounting.

## General Business Management

 Planned programBusiness Management Technology (BMT) at Firelands College is a challenging twoyear 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 successfully manage a small business. Management theory, learning how to moti vate employees, keeping accurate financial records, hiring employees and promoting your business are just a few of the major topics emphasized in the program. In addition, students will 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 students to complete the program during the day or evening. Full-time students can complete the program in two years; however, it will take more than two years for the parttime student.

Graduates of the BMT program will have the skills and knowledge to manage and operate their own business. For those students not interested in business ownership they may be employed in midmanagement positions as supervisors, managers or department managers in businesses such as department stores, restaurants, grocery stores, banks and factories.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic courses
MATH 126 (5)
MIS 200 (3)
Core courses
BAT 102, 201, 205 (9)

## Technical elective (3-4)

## Second year

General education
ECON 202 (3)
Elective (3-4)
Social/behavioral science (3)
Basic courses
STAT 211 (3)
BA 203 (3)
CS/CST elective (1-3)
Core courses
ACCT 221 and 222 (6)
MKT 300 and FIN 300 (6)
Technical elective (3-4)

## Retail Management Specialization <br> Parned 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 services appropriate to the needs of the ultimate consumer.
A sequence of courses in human relations and resources management, business economics, word processing of business communications, accounting spreadsheet utilization, marketing and retail management, psychology and professional selling, together with a field experience, provide students with a comprehensive background in the area of retail management.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic courses
BUSE 101 (3)
MATH 120 or 126 (5)
PSYC 201 (4)
Core courses
BAT 102, 201 and 205 (9)

## Second year

General education
ECON 200 or 202 (3)
Elective (3)
Social/behavioral science (3)
Basio courses
STAT 200 or 211 (3)
BA 203 (3)
CS/CST elective (2-4)
Core courses
ACCT 221 and 222 (6)
BAT 280 and 291 (6)
MKT 300 and 400 (6)

## Industrial Management Specialization

## Planned Program

The industrial management specialization, under 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 human relations 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 special ized knowledge and practical skills in industrial management.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic courses
MATH 126 (5)
Science elective (3)
Core courses
BAT 102, 201, 205 (9)
ENVT 270 (3)

## Second year

General education
ECON 202 (3)
Elective (3-4)
Social/behavioral science (3)
Basic courses
STAT 200 (3)
BA 203 (3)
CS/CST elective (2-4)
Core courses
ACCT 221 and 222 (6)
BAT 203 or MGMT 300 (3)
FIN 300 (3)
MFG 143 (3)

## Computer Programming Technology

Teresa Bettcher, program director 235 North Building

## Planned program

Computer science technicians are twoyear college graduates with an associate of applied business degree. This program will prepare students to seek 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 (BASIC, Pascal, Dbase III,
COBOL, RPG II, Assembler), selection and implementation of microcomputer hardware and software, use of popular microcomputer software packages (Lotus 1-2-3, Wordstar) and advanced programming skills such as structured design, system implementation, basic system architecture and techniques of systems analysis. Students will also receive mainframe exposure through access to the computers at main campus. 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 on foreign language and multicultural studies elective ( $3-5$ )
Basic courses
MIS 200 (3)
MATH 126 or 128 or 131 (5)
MATH 115 or STAT 200 or STAT 211 (3)

## Computer core

3 CS 180's, CST 260, CS 260 (10)

## Second year

General education
IPCO 102 (3)
Social sciences or humanities and art or foreign language and multicultural studies elective (3-5)
Basic courses
Natural science elective (3-5)
Computer core
CST 232, 251, 261, 275 (13)
CS 360 or CST 231 (3)
Business
ACCT 221 (3)
BAT 102 or 205 (3)

## ecretarial <br> Administrative <br> Sciences

Teresa A. Marano, program director 311-B 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 word processing skills 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 rnay be applied toward a four-year baccalaureate degree in a related field.

In addition to the two-year program, one-year certificate programs are offered in medical transcriber, word processor and administrative support secretary.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
P102 (3)
BAT 102 (3)
BUSE 101 (3)

## Core courses

BUSE 111, 210, 213 and 215 (12)

## Second year

General education
Humanities elective (3-4)
ECON 200/202 (3)
Basic courses
ACCT 220/221 (3)
BA 203 (3)
LEGS 301 (3)
Core courses
BUSE 202, 217, 302, 321, 335 and 401 (18)
BUSE 314 (2)

## Word Processor Option

The one-year word processer option prepares students for entry-level word processor positions. 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 word processer certificate, the student must have at least a 2.0 grade point average for all work attempted.

## One-year certificate

ral education
110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic course
BUSE 101 (3)

Core courses
BUSE 111, 202, 210, 217, 302, 321 and 335 (21)

## Administrative Support Secretary Option

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 four-year 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.

## One-Year certificate

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic courses
BUSE 101 (3)
BA 203 (3)
Core courses
BUSE 111, 202, 210, 213, 215, 302 and 335 (21)

## Medical Transcriber Option

The medical transcriptionist is responsible for transcribing medical information and reports from dictating 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.

## One-year certificate

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)
Basic course
BUSE 101 (3)
Core courses
BUSE 111, 202, 210, 302 and 335 (15) 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.

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 mathematics and science, physical science) and in specific major areas.

Applied science programs offered at Firelands include:
Computer-assisted manufacturing technology
Electrica//electronics engineering technology
Health information technology
Respiratory care technology

## Associate of Applied Science 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 on page 12 of this catalog.

## Electrical/Electronics Engineering Technology

Dr. Jan Adams, program director 152 North Building

## Planned program

Academic preparation for this program emphasizes digital electronics and microcomputer electronics with robotics applications. Also covered are communication systems and circuits, instrumentation and measurements, power and energy, materials processing and com-puter-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. Also, students who complete the associate degree have reached the halfway point in progress toward a baccalaureate degree.

## First year

ENG 110, 111 and/or 112 (3-8)
Basic courses
MATH 126, 128 or 131 (5)
DESN 104 (3)
CS 101 (3)
Core courses
ET 191, 240 and 249 (11)
DESN 131 (2)
MFG 112 and 223 (6)

## Second year

General education
IPCO 102 (3)
ECON 200 (3)
PSYC 201 (4)
Basic courses
ENVT 270 or STAT 200 (3)
PHYS 201 and 202 (10)
Core courses
ET 241, 250, 290, 442 (12)

## Computer-Assisted Mhantacturing Technology

Richard K. Kepple, program director 150 North Building

## Pignned program

Industrial manufacturing technicians are employed in business and in industry. The program is planned to fit the needs of students whose work necessitates a part-time schedule. It is designed to provide the graduate with theoretical and practical skills for assignments in planning, organizing and controlling the manufacturing operation, including the operation of computer controlled systems. Skills in robotics, programmable controllers, computer-assisted drafting (CAD)
and computer-assisted manufacturing (CAM) are developed.

## First year

General education
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)

## Basic courses

MATH 128 or MATH 120 and
MATH 129 (5-7)
CS 101 or MIS 200 (3)
Core courses
MFG 112 and 223 (6)
DESN 104 and 131 (5)
ENVT 270 (3)
Second year
General education
Electives (6)
Basic courses
STAT 200 (3)
PHYS 201 (5)
Core courses
BAT 203 or MGMT 300 (3)
MFG 143 and 245 (6)
DESN 132 and 133 (4)
ET 191 (3)
BAT 205 (3)

## Health Information Technology

Mona M. Jackson, MRA, program director, 151 North Building

## Planned program

Health information is found in many places in a variety of formats. As a health information practitioner, an Accredited Record Technicain (ART) specializes in evaluating, controlling and maintaining the information contained in all types of health records. Career opportunities include positions in group practices, longterm care facilities, hospital medical record 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, compiling statistics, answering subpoenas, utilization review, quality assurance, 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 medical record 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 noncompulsory, paid and subject to employee regulations. The program has been granted accreditation status through CAHEA, AMA in collaboration with COE, AMRA. This accreditation allows graduates to sit for a national examination sponsored by the American Medical Record Association. Upon successful completion of the accreditation examination, the student receives Accredited Record Technician (ART) credentials.

The health information technology cur riculum is based on written goals and standards, consistent with and responsive to the demonstrated needs and expectation of the health care community served by the Firelands community. 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 EntryLevel Competencies for Medical Record Technicians, identified by the profession as currently encompassing the following nine areas:

1. Management - The functions related to planning, organizing, controlling and evaluating health information services.
2. Legal Aspects - The application of legal principles, policies, regulations and standards for the control and use of health information.
3. Personnel Administration - The leadership, direction and documentation necessary for supervision of personne!.
4. Health Information Systems - The definition and application of techniques used in the development and implementation of health information systems.
5. Health Records - The definition and application of techniques necessary to assure adequate documentation of healtb care.
6. Information Retention and Retrieva, The definition and application of techniques for the filing, maintenance and acquisition of primary and secondary health information.
7. Health Statistics - The acts of collecting, computing, analyzing, interpreting and presenting numerical data related to health care services.
8. Quality Assurance Systems - An organization of activities which provides the process for reviewing and evaluating health care services.
9. Classification and Indexing Systems - Activities in which medical record professionals code, classify and index diagnoses and procedures for purposes of standardization, retrieval and statistical analysis.

To be admitted to the professional program in health information technology (i.e., Directed Practice), the student must meet the following matriculation standards of eligibility:

1. Successful completion of MRT 100, MRT 101, BUSE 111 (if required) and BIOL 104.
2. Current enrollment in MRT 112, MRT 102 and BIOL 331 or BIOL 332.
3. GPA of at least 2.5 or better in all MRT and BIOL courses attempted with an overall GPA of 2.0 or better.
4. Enrollment in MRT 290 (mandato. for all grades lower than a C in BIOL 331 and BIOL 332.
5. Repetition of any MRT course or of OL 331 or BIOL 332 for students receiving a grade of $D$ or $F$ in those courses. 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 thorugh 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
BUSE 111 (3)
BIOL 104, 331 and 332 (12)
Core courses
MRT 100, 101, 102 and 112 (12)
MRT 290* and 291* (1-4)

## Second year

General education
IPCO 102 (3)
SOC 101 (3)
PSYC 201 (4)
Basic courses
MIS 200 (3)
MATH 115 or STAT 200 (3)
Core courses
MRT 201, 202, 204, 211 and 212 (14)
*Optional electiv/e

## pspiratory Care chnology

Robert K. Greenham, RRT, CPFT, program director 153 North Building

## Planned program

Respiratory care is an allied health specialty concerned with the treatment, management, control, diagnostic evaluation and care of patients of all ages with deficiencies and abnormalities associated with the cardiopulmonary system. Most respiratory care practitioners work in hospitals, although employment opportunities are expanding in areas such as home care, skilled nursing facilities and medical clinics.
The respiratory therapist delivers medical gases, maintains environmental control systems and provides many therapeutic modalities to improve ventilation and promote bronchial hygiene, such as humidity, aerosols, breathing exercises, postural drainage, chest percussion and IPPB

The respiratory therapist also has primary responsibility for management of artificial airways and sophisticated life support systems, and is an integral part of the resuscitation team. Respiratory therapists also perform various tests to evaluate cardiorespiratory function, such terial blood gases and ventilatory les, pressures and flows.

Program graduates are eligible to sit for the credentialing examination for certification through the National Board for Respiratory Care (NBRC) to become a Certified Respiratory Therapy Technician (CRTT). Upon successful completion of this examination, the Firelands graduate/ CRTT would be eligible to take the registry examinations to earn the Registered Respiratory Therapist (RRT) credential. Program graduates would also be eligible to take the examination for the Certified Pulmonary Function Technologist (CPFT) credential.
Classroom instruction and laboratory practice is integrated with clinical experience provided at area hospitals affiliated with the program. Clinical courses are conducted three days per week during the last three semesters. Dates, times and rotations may vary.
The following information may be of importance to prospective students:

## Prerequisite courses

Prospective students who are inadequately prepared in mathematics, based upon placement test results, will be required to remedy this deficiency prior to enrolling in CHEM 115 during the first semester. In addition, those without high school chemistry or equivalent are strongly advised to complete an introductory chemistry course or equivalent prior to enrolling in CHEM 115. Because of this remedial course work, the length of time required to complete the program may be extended.

## Program Entrance Requirements

Students wishing to pursue the program must meet the following minimum requirements prior to enrolling in any RT courses:

1. Be a graduate of an accredited senior high school and have attained an overall GPA or 2.0 or a C average in high school, OR,
2. Be a graduate of an accredited senior high school OR have earned high school equivalency through the GED test ing program, AND have completed at least 12 semester hours (or 18 quarter hours) of college work with an overall GPA of 2.0 or a C average.

## Matriculation standards

The student must meet certain matriculation standards for initial entrance into the clincial phase of the program and must continue to meet these standards throughout the program:

1. achieve and maintain an overall GPA of 2.0 for all college work attempted.
2. achieve and maintain an average GPA of 2.25 for all CHEM, MRT, ENVT and RT courses attempted.
3. the student must repeat any RT course in which a grade of $D, F$ or WF is received.

## Hospital visit/tour

It is required that the prospective student visit/tour the respiratory care department of a local hospital (not necessary for those with experience in the field of respiratory care).

## Meeting with Faculty

It is required that the prospective student meet with the program faculty to discuss his/her professional goals as they relate to the respiratory care field and the program.

## Professional Liability Insurance

The student is required to carry professional liability insurance, which may be obtained through the University for a nominal fee ( $\$ 15$ for $\$ 1,000,000$ / $\$ 3,000,000$ coverage) prior to entering into clinical training. This insurance may have to be renewed, but not more than once.

## Automobile Liability Insurance

The student is required to provide evidence of current automobile liability insurance coverage before he/she is permitted to drive a personal vehicle to a clinical training site or to a class field trip.

## Expenses

The student is responsible for expenses incurred for transportation to and from clinical training sites, for meals while at clinical sites (students receive any employee cafeteria discounts, if applicable), for lab coats and/or uniforms, for stethoscopes and other supplies, for required NBRC Self-Assessment Examinations and for membership fees to the national professional organization (American Association for Respiratory Care), which is optional. Student nametags, health screening, parking at clinical sites, and locker facilities and some supplies are provided at no charge to the student.

## Advanced Standing

Experienced respiratory care practitioners, with or without formal training in a traditional or non-traditional respiratory care educational program, may be eligible to be granted some form of advanced standing in the program. This may serve to shorten the program of study or otherwise facilitate the pursuit of the degree and registry eligibility.

## First year

General education
ENG 110 or 111 (3-5)
PHIL 342 or PSYC 201 (3-4)
Basic courses
MATH 120 (5)
MRT 101 (3)
RT 101 (5)
CHEM 115 (4)
ENVT 110 (3)
Core courses
RT 102 (3), 120 and 200 (9)

## Summer session

Core courses
RT 150 and $151^{\prime}(6)$

## Second year

General education
ENG 112 (3)
PHIL 342 OR PSYC 201 (3-4)
IPCO 102 (3)
Elective (3)
Basic courses
RT 204 (4)
Core courses
RT 152, 250 and 251 (12)

## Associate of

 ScienceFirelands College offers two years of general education courses leading to the associate of science degree. Students who complete the associate of science degree have reached the halfway point in the progression toward a B.S. degree.

The associate of science degree program 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:
Pre-professional
medicine
optometry
veterinary medicine
dentistry
hygienists
pharmacy
occupational therapy
Microbiologist
Agriculturist
Wildlife management
Applied mathematician
Chemist
inorganic-organic
physical-nuclear
structural-polymer
Computer scientist
Secondary school teacher
Pre-engineering
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. Students must take CS 180 along with ENG 110, 111 or 112 or demonstrate proficiency in a word processing program. ENG 112 and IPCO 102 are required.
Minth/science ( 20 hrs . minimum)
To include a concentration of two courses in a major field and two courses in a cognate field, Eligible disciplines include: biology, chemistry, computer science, geology, physical geography, physics and mathematics. MATH 130 or 131 required.

## Social and behavioral sciences (14 hrs

 minimum)To include courses from at least two of the following disciplines: economics, geography, history, political science and sociology. PSYC 201 is required.
Fine and applied arts (10 hrs. minimum)
To include courses from at least two of the following: art, film, literature, music, popular culture, philosophy, speech and theatre. One course in literature must be included.

## Physical education

Two academic semesters of physical education (PEG 100) are required, for a minimum of two credits. This requirement may be waived if a student has attained the age of 25 at the time of initial registration, has a written statement from a personal physician or is a veteran of the military service. Exemption from physical education does not excuse a student from meeting the 62 semester hours required for graduation.

## 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 Studies

The associate of technical studies 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 maximum 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 studies 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 academi services at Firelands College as well as to a faculty member within the primary area of interest. The fur ther development of the educational plan will be done jointly by the student, director of academic services and 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 30 semester hours of credit in the college. It is explicitly understood that all of the OBOR standards for approval of the associate of technical studies Degree will be adhered to. This will include the fact that following approval of the applica. tion, 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 dents transierring from other institutic will be required to complete a minimum of 33 semester hours at Firelands College.

$3 t$ year<br>heral education<br>IPCO 102 (3)<br>Basic courses<br>Computation/math elective (3-5)<br>Computer literacy elective (3)<br>Science/math/computer science elective (3-5)<br>Core courses<br>Technical electives (16)<br>\section*{Second year}<br>General education<br>Social/behavioral science elective (3)<br>Humanities/fine arts elective (3)<br>Basic courses<br>Computation/math elective or Science/ math/Computer science elective (6)<br>Core courses<br>Technical electives (16)

## NURSING

Judith K. Lamp, RN, MS Coordinator, Nursing Programs 331 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 sing

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.

Admission to the preprofessional nursing program at Firelands is through the nursing office at Firelands. Successful completion of the preprofessional requirements is a prerequisite for admission to the professional nursing program which is limited by the availability of clinical facilities and faculty. Admission to the professional program is competitive and based upon:

1. Completion of:

ENG 112
MATH-demonstrated competency above 095 level
CHEM 115 and 116
BIOL 205
PSYC 201
2. A minimum accumulative grade point average of 2.5 in the preprofessional program.

3 . Completion of 30 semester hours of credit.
Admission applications are available from the nursing office in December of each year.

## Suggested preprofessional program

## First year

CHEM 115 and 116 (8)
MATH-demonstrated competency above 095 level
SOC 101 (3)
PEG 100 (2)
ENG 111 and ENG 112 (3-6)
BIOL 205 (5)
PSYC 201 (4)
NURS 100 (1)
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)
Foreign language and multicultural studies elective (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.

## Bachelor of Science in Nursing for the registered nurse

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 30 semester hours of college credit including prerequisite courses in chemistry and biology or equivalents with minimum GPA of 2.5
2. 50 th percentile success on selected National League for Nursing Examinations
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 27 hours in the nursing major. Typically students take the 27 hours part-time spread out over two years. An accelerated plan is possible; however, prior approval must be obtained from the associate dean for the RN program.
The nursing courses are offered at Firelands College.

# Course Descriptions 

A $\downarrow$ 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 I preceding a course number indicates that the course may be used to fulfill a general education requirement.
The Arabic number in parentheses immediately following the title of the course indicates the number of hours of credit.
The Roman numerals indicate the term the course is usually offered on the main campus with I indicating fall semester; II, spring semester; and III, summer term.

Courses numbered from 100 to 199 are ordinarily for freshmen or sophomores.

Courses numbered from 200 to 299 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 circumstances may be taken by a
dent upon the recommendation of his or her ber and with the written approval of the rrstluctor of the course or the chair of the department concerned.
Courses which may be taken for graduate credit are listed following the undergraduate courses in this handbook.

## Accounting (ACCT)

- ACCT 220. Administrative Accounting (3) II. Practice and procedures of accounting for office personnel. No credit allowed toward BSBA degree.
- ACCT 221. Introduction to Accounting I (3)

I, II, III. Financial accounting concepts and methodology for accumulating data on the results of economics activities of a business concern and reporting such results to various user groups. Underlying theory of the reporting model as it relates to user decisions about the business. Prerequisite: sophomore standing or consent of department.

- ACCT 222. Introduction to Accounting II (3) I, II, III. ACCT 221 continued with emphasis on usage of accounting information in the managerial process. Problems of cost determination, cost flows, cost behavior, budgeting, standard costing, relevant costing, and captial expenditure evaluation are introduced. Prerequisite: ACCT 221.
ACCT 321. Intermediate Financial Accounting I (3) I, II, III. 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 the specialization in accounting or consent of department.
ACCT 322. Intermediate Financial Accounting II (3) I, II, III. ACCT 321 continued with emphasis on long-term 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.

ACCT 325. Accounting Concepts for Nonbusiness Students (3) I, II, III. 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 327. Financial Accounting for Nonmajors (3) I. Structure and theory of financial accounting. Evaluation of existing conventions and procedures pertaining to external reporting. No credit towards accounting concentration. Prerequisite: ACCT 222.

ACCT 331. Cost Accounting (3) I, II, III. Cost determination and cost accounting systems. Cost analysis using regression methods. Job order, process, standards and variable cost systems. Accounting for spoilage, service department and joint products. Prerequisite: admission to the specialization in accounting and STAT 212, or consent of department.
ACCT 332. Intermediate Managerial ACcounting (3) I, II, III. 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 transfer pricing. Prerequisite: grade of C or better in ACCT 331.
ACCT 337. Management Accounting for Non-majors (3) II. Accounting concepts as tools for administrative evaluation and control of business operations. Nature, usage and reliability of accounting data in the decision making process. Cost analysis and profit planning. No credit toward accounting concentration. Prerequisite: ACCT 222.
ACCT 360. Accounting Information Systems (3) I, II, III. 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 the specialization in accounting or consent of department.
ACCT 421. Advanced Financial Accounting (3) I. Theory and practice for business combinations and consolidations, partnerships, branch and home office accounting, financial reporting for multinationals including foreign currency translation. Prerequisite: grade of C or better in ACCT 322.
ACCT 422. Contemporary Financial Accounting Topics (3) II, alternate years. Theory and implications for accounting practice of selected contemporary financial accounting topics. Topics vary with governmental and professional bodies' pronouncements impacting on financial accounting. Prerequisite: grade of C or better in ACCT 322.
ACCT 423. Accounting for Non-profits (3) II, alternate years. Methods and problems of controlling and reporting on resources (funds) segregated for conducting specific activities of non-profit-seeking entities; budgetary control. Prerequisite: grade of C or better in ACCT 322 or consent of department.

Acet 42A. Financial Reporting for Multinationals (3) II, alternate years. Case study of worldwide accounting control and reporting problems, impact of cultural and legal constraints, and objective appraisal of various accounting principles and pronouncements. Prerequisite: grade of C or better in ACCT 322 or consent of the department.
ACCT 425. Problems in Accounting Practite (3) II. Comprehensive review and integration of accounting theory and practice using problem method. Prerequisite: 15 hours of accounting and grade of C or better in ACCT 322.
ACCT 439. Role of the Financial Executive (3) II. Capstone case study of accountant's role in management planning and control; profit centers, discretionary costs, budgeting, strategy and evaluation of enterprise performance. Prerequisite: grade of C or better in ACCT 332 or in ACCT 337, or consent of instructor.
ACCT 441. Introduction to Federal Taxation (3) 1,11 , III. 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: grade of C or better in ACCT 322, or grade of $C$ or better in ACCT 321 if concurrently registered for ACCT 322.
ACCT 442. Advanced Federal Taxation (3) 11. Determination of taxable income and reporting requirements unique to corporatlons, 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 441.
ACCT 451. Auditing I (3) !, II, Ili. Auditing procedures and practices of independent verification of financial records and reviews of operations as used 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 322 or grade of $C$ or better in ACCT 321 if concurrently enrolled in ACCT 322.
ACCT 452. Auditing II (3) II. Auditor's role in society; auditing standards, professional ethics, accountants' legal liability, the auditor's report. Case studies in applied auditing. Review for professional examinations in auditing. Prerequisite: grade of C or better in ACCT 451, or consent of instructor.

- ACCT 489. internship Seminar (1-3) I. 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) On demand. 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)

$\dagger$ ACT 231. Financial Accounting (3) I or II. Theory and application of generally accepted accounting principles as pronounced by the Financial Accounting Standards Board (FASB) and the Securities Exchange Commission (SEC). Designed for the associate of applied business accounting program at Firelands. Prequisite: ACCT 221.
$\dagger$ ACT 241. Cost Accounting (3) I or II. Theory and application of job-order-cost systems, process cost systems and standard cost systems. Designed for the associate of applied business accounting program at Firelands. Prerequisite: ACCT 222.
$\dagger$ ACT 251. Federal Income Tax (3) I or II. Theory and application of federal income taxes as applied to the individual, sole proprietorship, partnership and corporation. Designed for the associate of applied business accounting 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.
AERO 111. Air Force Organization (1) I. U.S. general purpose force capabilities, mission, resources, operation of tactical air forces defensive forces, airlift forces, structure and function of logistics support weapons systems development. Leadership laboratory activities.
AERO 112. Air Force Organization (1) II. Organization of the United States Air Force, mission function and employment of strategic forces, capabilities of Army in limited war and counterinsurgency, Naval forces structure and employment, enemy threat assessment. Leadership laboratory activities.
AERO 211. Air Force History (1) I. Development of air power from the first lighter-thanair 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 iaboratory activities.

AERO 212. Air Force History (1) II. 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) I. Air. Force leadership, planning, organizing, $c o$ ordinating, 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 312. Air Force Management (3) II. 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, mliitary writing, and briefing formats. Leadership laboratory activities. Prerequisite: departmental approval.
AERO 411. American Notional Security (3) I. The Air Force officer as part of national security forces in contemporary American society, armed forces as integral element of society, American civil military relations and environmental context in which defense policy is formulated. Formulation and implementation of U.S. defense policy; framework of defense policy including domestic and international system; military law. Leadership laboratory activities. Prerequisite: departmental approval.
AERO 412. American National Security (3) II. The Air Force officer and his part in the evolution of defense strategy since World War II. Strategy and management of con- $\Rightarrow$ flict, arms interaction and control, limitec war, insurgency, counter-insurgency, inte: $;$, tional terrorism, international and regional security issues. Initial Active Duty Orientation. Leadership laboratory activities. Prerequisite: departmental approval.

## Aerotechnology (AERT)

AERT 240. Air Transportation (3) I, II, III. History, regulation and administration of air transportation system. Emphasis on air carrier, air taxi, corporate and general aviation.
AERT 342. Flight instruction I \& II (3) I, II, III. Aerodynamics, aircraft systems, charts, airports, communication procedures, meteorology, regulations, aviation publication, flight computer, medical facts, radio navigation and cross country flight planning. Upon completion of course, students qualified to take FAA Private Pilot-Airplane written exam.
AERT 343. Flight instruction III (1) ! 11 , III. Includes 15 hours of solo and 20 hours of dual instruction specified as a minimum for FAR Part 141 private pilot training. License must be obtained to receive credit for course. Additional fees arranged with chief flight instructor. Prerequisite: AERT 342 or permission.
AERT 344. Commercial Ground School (3) I, II, on demand. Advanced aerodynamics and aircraft systems, commercial pilot operations, weight and balance, complex operation. Upon completion of course, studentmest qualified to take FAA Commercial Pilot-A plane written exam. Prerequisite: AERT 342.

4345. Commercial Flight Instruction I II, III. Advanced flight maneuvers, night instruction, cross country flight training. First of two flight sequences leading to the Commercial Pilot-Airplane rating. Flight fees arranged with chief flight instructor. Prerequisite: AERT 343.
AERT 346. Commercial Flight Instruction II (2) I, II, III. AERT 345 continued to include commercial pilot flight maneuvers and complex aircraft flight training. Commercial Pi-lot-Airplane license must be obtained to receive credit for course. Prerequisite: AERT 345. Additional fees arranged with chief flight instructor.
AERT 348. Airport Operation (3) II. General aviation airport operations planning including airport environment, airport security, legal aspects, deregulation, airport finance and airport master plans. Junior status.
AERT 349. Aviation Law (3) I, II. A survey of significant aviation legal cases. Includes airport and passenger liability, tariffs, Workmen's Compensation, manufacturers and repairers liability, and national/international aviation legislation and regulation. Prerequisite: LEGS 301.
AERT 401. Aviation Instructor Ground School (2) II, on demand. Learning theory in an aviation setting, instructor responsibility, lesson planning, and advance aviation problems. Upon completion student is quilified for FAA written exam Fundamentals of Instructing and either Basic Ground Instructor. or Flight Instructor-Airplane. Prerequi-

AERT 344.
fit 402. Instrument Ground School (3) I, on demand. Instrument flight planning, meterology, approach procedures, approach chart interpretations and instrument flight communication. Upon completion students are qualified for the Instrument-Airplane written exam. Prerequisite: AERT 342.
AERT 403. Instrument Flight Instruction (1) I, II, III. Dual flight instruction required for the FAR Part 141 Instrument rating. Flight fees arranged with chief flight instructor. Prerequisite: AERT 345 or permission.
AERT 490. Problems in Aerotechnology (13) On demand. For advanced students wanting to conduct intensive study of selected problems in aerotechnology. Prerequisite: consent of college.

## American Studies (AMST)

- IAMST 200. Introduction to American

Studies (3) I. 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 studies majors.

- 1 AMST 230. Issues in American Civilization (3) I, II. Characteristically American themes, issues or problems reflecting relationships among ideas, values, traditions, events and personalities. Subject matter designated in time schedule; may be re-

> ted once if topics differ.
st 240. Historical Perspectives on Àmerican Culture (3) I, II. 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.

AMST 300. Interpretations of American Culture (3) I, II. 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.
AMST 400. The Literature of American Studies (3) II. Interdisciplinary approach to study of American culture. Required of American 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.
AMST 490. Tutorial in American Studies (13) I, II. 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 studies prior to semester in which tutorial begins.

## Apparel, Merchandising and Interior Design (AMID)

AMID 101. Clothing Design and Construction (3) I, II. 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) I, II. Fiber, yarn and fabric structures; finishes; color and design. Selection and care of fabrics for personal and household uses. Lab fee.
AMID 119. Interior Design I (3) I, II. Basic technical aspects of interior design with emphasis on drawing types, lettering,
orthograhic projection, one- or two-point perspective and working drawings of case pieces.
AMID 202. Intermediate Clothing and Basic Flat Pattern (3) I, II. Clothing construction techniques and couture methods as applied to commercial designer patterns. Basic flat pattern knowledge and skills resulting in design and execution of an original muslin garment. Prerequisites: AMID 101 and AMID 103. Lab fee.
AMID 204. Introduction to the Fashion Industry (3) I, II. Fashion design and terminology; organization of fashion industry and career opportunities in fashion. Prerequisites: AMID 101 and AMID 103 or consent of instructor.
AMID 219. Fabric Use In Interior Design (3) I. Fundamental workroom techniques used in construction of textile products for residential and commerical interiors. Lab fee.
AMID 303. Home Furnishing (3) I, II. Today's interiors from standpoint of use, economy, beauty and individuality. Recognition and evaluation of space needs, window, wall and floor treatments as well as furnishing and accessories.
AMID 313. Textile Analysis (3) I, II. 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.

AMID 319. Residential Interiors (3) I, II. Application of design principles in residential interiors. Problem formulating and problemsolving in restoring and renovating residential interiors. Professional organization of design portfolio for residential employment. Prerequisites: CONS 235, DESN 301 and AMID 303.
AMID 401. History of Costume (3) I. Development of western costume from Egyptian times to present; emphasis on relation OF modern costume to earlier forms of dress.
AMID 402. Fashion Merchandising (3) I, II. 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.
AMID 403. Sociological and Psychological Aspects of Clothing (3) II. Cultural, sociological and psychological factors influencing clothing habits of individuals and groups are related to their environments. Prerequisites: SOC 202 and PSYC 201 and junior standing.
AMID 404. Tailoring (3) I, II. 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) II. Selecting, financing and adapting housing for families with varying lifestyles and needs. Energy efficiency, government role in housing, renting and owning options, and psychological needs emphasized.
AMID 412. Advanced Apparel Design (3) II. 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) I. Experimental approach to factors influencing construction of apparel. Prerequisite: AMID 202 or consent of instructor. Lab fee.
AMID 417. Home Furnishing Laboratory (3) II. Renovation and construction of various furnishings including refinishing, upholstering, slip covering and drapery making for home and professional purposes. Prerequisites: AMID 101 or AMID 219 and AMID 303 or consent of instructor. Lab fee.
AMID 418. History of Interiors (3) I. European and American furniture from 14th through 20th centuries with corresponding interiors; wall, window and floor treatments and decorative arts. Prerequisite: AMID 303 or consent of instructor.
AMID 419. Contract Interiors (3) I, II. Application of design principles in contract and commercial interiors. Space and facilities planning. Identification of interior equipment to facilitate a particular function. Professional organization of design portfolio for contract employment. Prerequisite: CONS 235, DESN 301 and AMID 303.

## Applied Human Ecology (AHE)

AHE 100. Professional Perspectives (1) I, II. Integrative focus to discipline of home economics. Contemporary issues, pertinent resources, career options, professional leaders, organizations. Recommended for all majors. First eight weeks of semester (I, II). Graded S/U.

AHE 195. Telecourse on Current Topics in Home Economics (1-3) On demand. Selected introductory topics; departmentally supervised presentations via television complemented by seminars or other stu-dent-teacher interaction in groups or individually.
AHE 295. Telecourse on Current Topics in Home Economics (1-3) On demand. Selected advanced topics; departmentally supervised presentations via television complemented by seminars or other stu-dent-teacher interaction in groups or individually.
AHE 389. Supervised Field Experience (15) I. II, III. Supervised work experience of diversified nature in approved field site. Contact hours and specific requirements obtainable from authorized home economics faculty members in the specialized areas. May be repeated. Prerequisite: consent of department. Graded S/U.
AHE 395. Workshop on Current Topics (1-3) 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. May be repeated on approval of adviser. Some workshops require transportation.
AHE 470. Independent Study (1-3) I, II, HI. For advanced students who want to conduct intensive study of selected problems in home economics. For undergraduate credit only. Prerequisite: consent of department chair.

AHE 480. Seminar in Home Economics (13) On demand. In-depth examination of topics in home economics not covered by existing course work. Repeatabie once. Undergraduate credit only. Some seminars require transportation and/or lab fee.
AHE 489. Internship (5-12) I, II, III. Internship in a protessional environment. Work settings are approved on an individual basis. May be repeated. Graded S/U.

## Applied Mathematics and Statistics (AMS)

+ANis 100. Developmental Mathematics (3) I, II, III. Review of basic mathematics such as equations, inequalities, exponents and radicals, logarithms, polynomial functions, graphs and applications. Graded S/U.

## Applied Statistics (STAT)**

*STAT 200. Using Statistics (3) I, II. 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 B.S B.A.
*STAT 211. Elementary Statistical Methods I (3) I, II, III. Elementary probability, random variables, probability distributions, sampling, descriptive statistics, sampling distributions, estimation. Prerequisite: MATH 126 or MATH 131.
*STAT 212. Elementary Statistica! Methods II (3) I, II, III. Estimation, hypothesis testing, regression, correlation, anaysis of variance and contingency tables. Prerequisite: STAT 211.
*STAT 311. Introduction to Regression and Design (3) I, II. 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, nonparametrics or factor analysis. Prerequisite: STAT 212.
STAT 315. Introduction to Statistical Inference (3) I. Univariate and N-dimensional random variables and distributions; methods of estimation. Prerequisites: STAT 212 and MATH 232. No credit for students with MATH 441.
STAT 402. Regression Analysis (3) I. Linear, nonlinear and multiple regression and correlation analysis. Prerequisite: STAT 315 or MATH 441 or consent of instructor.
STAT 404. Time Series Analysis (3) Stochastic stationary and nonstationary models; use in forecasting seasonal and nonseasonal discrete time series; fitting models to time series data. Prerequisite: STAT 315 or MATH 441 or consent of instructor.
STAT 406. Sample Design (3) II. 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: STAT 315 or MATH 441 or consent of instructor.
STAT 410. Experimental Design (3) II. Constructing statistical designs and analyzing resulting data; basic experimental design and analysis of variance. Prerequisite: STAT 315 or 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. Prerequisites: STAT 315 or 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 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.
*Cannot be counted toward specialization in STAT.
**See also mathematics and statistics (MATH)

## Arabic (ARAB)

The following courses employ the self-instructional approach, utilizing tapes, text, native tutor and outside examiner.
ARAB 101. Beginning Arabic I (4) I. Introduction to modern standard Arabic. Four class periods and practice with tapes each week.
ARAB 102. Beginning Arabic II (4) II. ARAB 101 continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 101 or equivalent.
ARAB 201. Intermediate Arabic I (4) I. ARAB 101-102 continued. Conversation, writing, reading, grammar. Four class periods and practice with tapes each week. Prerequisite: ARAB 102 or equivalent.
ARAB 202. Intermediate Arabic II (4) II. AR$A B 201$ continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 201 or equivalent.

## Art (ART)

\#\$ART 101. Introduction to Art (3) I, II, III. Historical and aesthetic components of art with laboratory experiences with basic elements of creative expression. Non-majors only. Two hours studio, two hours lecture.
$7 \rightarrow$ ART 102. Two-Dimensional Foundations
(3) I, II, III. 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.

- ART 103. Drawing Foundations (3) I, II. Development of drawing skills through observation of natural objects to aid expressive draftsmanship and pictorial accuracy. Required of art majors and minors. Can be taken with ART 102 or ART 112.
-ART 112. Three-Dimensional Foundations (3) I, II, III. 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.
-ART 205. Figure Drawing (3) |, II. 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.

ART 206. Figure Drawing II (3) I, II. Further work on visual comprehension in figure drawing to improve perceptual judgment; move to a more personal and selective level of stylistic interpretation. Six studio hours. Prerequisite: ART 205. Lab fee.
ART 261. Sculpture I (3) I, II. Creative concepts, arrangements and techniques of three-dimensional sculptural forms. Six studio contact hours. Prerequisites: ART 101 or ART 102. Lab fee.
ART 263. Ceramics I (3) ! II. Clay as crez tive medium for functional forms. Handbuilding and wheel techniques; simpi sculpture; glazing and firing; survey of clays, pottery types, kilns, pyrometry. Six studio hours. Prerequisite: ART 102, ART 112. Lab fee.

On ARRT 267. Stained Glass Compositions (3) I. chniques involved with creative two-and ree-dimensional arrangements; emphasis on individual studio development. Six studio hours. Lab fee.
ART 277. Printmaking I (3) I, II. Basic techniques for woodcuts, silk screen, intaglio or lithography. Six studio hours. Prerequisite: ART 103. Lab fee.

ART 305. Figure Drawing III (3) I, II. 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) I, II. Free handblown glass formation; personal creative use of glass as an artistic medium for expression. Six studio hours. Lab fee.
-ART 320. Enameling on Metal (3) I, II. 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 (3) I, II. Design and fabrication techniques of metal jeweiry-piercing, chasing, repousse, soldering and stone setting. Six studio hours. Prerequisite: ART 101 or ART 102, or consent of instructor. Lab fee.

ART 322. Jewelry Design (3) I, II. Centrifugal casting of silver, gold, tombac, brass and bronze jewelry and related obits, using wax and plastic models. Six didio hours. Prerequisite: ART 321. Lab fee.
ART 325. Fine Art Photography I (3) I, II. Photography as a fine art. Use of camera for creative expression: introduction to history and critical awareness. Black and white lab work. Prerequisites: ART 102 or consent of instructor.
ART 326. Fine Art Photography II (3) I, II. Introduction to view camera techniques, development of critical awareness of contemporary creative photography, personal imagery and perception. Six studio hours. Prerequisite: ART 325.
ART 361. Sculpture II (3) I, II. 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. Lab fee.
Art 363. Ceramics II (3) I, II. Development of throwing techniques, design concepts, surface decoration and sculptural forms. Laboratory development of simple glazes. Kiln stacking and firing. Six studio hours. Prerequisite: ART 263. Lab fee.
ART 365. Weaving (3) I, II. Techniques of weaving on a 4 -harness loom. Emphasis on materials and creative interpretation of fiber forms. Six studio hours. Lab fee.

TY 366. Fiber/Fabric Techniques (3) I, II. oduction to the use of fiber and fabric dyeing, construction techniques and materials used to develop personal creative expression. Feltmaking, plaiting, machine quilting, painting with dyes, coiling. Six studio hours. Lab fee.
-ART 371. Watercolor Painting I (3) I, II. Introductory experimentation with painting techniques on paper; employment of the figure, still life and landscape as initial references. Six studio hours. Prerequisite: ART 103.
-ART 372. Watercolor Painting II (3) I,II. 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 6 hours. Prerequisite: ART 371.
ART 373. Oil/Acrylic Painting I (3) I, II. 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.
ART 374. Oil/Acrylic Painting II (3) I, II. 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 to provide more individual instruction. Prerequisite: ART 373.
ART 377. Printmaking II (3) I, II. 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 378. Surface Design/Silkscreen Techniques (3) II. Approaches to surface design leading to development of understanding of motifs, repeats, expanded pattern. Experiments with silkscreen printing, registration techniques, fiber reactive dyes. Variation registration techniques explored which allow set-up and yardage to develop.
ART 390. Introduction to Computer Art (3) I, II. Methods of producing original computer art, software and appropriate hardware. Prerequisites: ART 102, 103, 112, or consent of instructor. Lab fee.
ART 391. Computer Art II (3) II. Intermediate animation using computers, video equipment, software and languages in creation of original works of art. May be repeated to 6 hours. Prerequisite: ART 390 or consent of instructor. Lab fee.
ART 392. Applications of Computer Art (3) I, II. Computer art in specific disciplines such as design, painting, sculpture, etc. Topic to be announced. May be repeated to 6 hours. Prerequisites: ART 390, 391 or consent of instructor. Lab fee.
ART 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. One or two clock hours per credit depending on type. Prerequisite: as announced for each workshop.
ART 405. Advanced Drawing (3) I, II. 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 415. Advanced Glassworking (3) I, II. Continuation of free handblown glass formation. Cutting, grinding/polishing and cast glass techniques. Studio equipment construction. Six studio hours. May be repeated to six hours. Prerequisite: ART 315. Lab fee.
ART 421. Advanced Jewelry Design (3) I, II. Advanced problems in jewelry design, smithing and forging. Six studio hours. May be repeated to 9 credit hours. Prerequisite: ART 321 and 322. Lab fee.
ART 423. Jewelry Enameling (3) I, II, III. 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) I, II. Advanced level assignments in creative photography; development of personal direction; emphasis on communicative potential of resulting images. Six studio hours. May be repeated to six hours. Prerequisite: ART 325.
ART 426. BFA Thesis Project in Fine Art Photography (3) I, II. Semester-long project emphasizing personal development of philosophy and style in creative photography. Six studio hours. Prerequisite: ART 425.
ART 461. Sculpture III (3) I, II. Advanced sculptural techniques and introduction to environmental and architectural scaling. Six studio contact hours. May be repeated to six credit hours. Prerequisite: ART 361. Lab fee.
ART 463. Ceramics III (3) I, II. Throwing of duplicate forms and functional ware. Glaze development through unity molecular formu; la. Individual projects determined upon consultation with instructor. Six studio hours. Prerequisite: ART 363. Lab fee.
ART 465. Advanced Weaving (3) I, II. 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) II. 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 techniques will be explored which will allow set-up and yardage to develop. Lab fee.
ART 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) I, III. Individual development in watercolor medium emphasizing personal style and presentation. Students are encouraged to find selfdirections and motivation in consultation with instructor. Six studio hours. May be repeated to 6 hours. Prerequisite: ART 372.

AfT 473. Oil/Acrylic Painting III (3) I, II. 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 6 hours. Prerequisite: ART 374.
APT 477. Printmaking III (3) I, II. 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) I, II. The computer and contemporary technology (i.e., video, robotics, light, etc.) in the creation of art forms. May be repeated to 6 hours. Prerequisites: ART 390, 391, 392 or consent of instructor.
Anv 491. Advanced Computer Art (3) 11. The creation of art through computer simulation. May be repeated to 6 hours. Prerequistes: ART 390, 391, 392, 490, advanced math, languages (BASIC and one structured language) or consent of the instructor. Lab fee.
ART 435. Special Topics in Art (1-3). Innovative and intensive group studies in selectad studio research. Prerequisites announced for each offering. May be repeated.

## ART DESIGN (ARTD)

ATMD 211. Introduction to Graphic Design (3) I, 11. Exploration and application of design principles, layout and typography; tools, techniques and terminology of the discipline. Six studio hours. Prerequisite: ART 102 or consent of instructor. Lab fee.

## AnTa 213. Introduction to Environmental

 Dasign (3) 1, II. Fundamentals, terminology, methods of communication for the environmental profession. Use of illustration and throe-dimensional models as means of exploring design and presentation. Six studio hours. Prerequisite: ART 112 or consent of instructor Lab tee.AMTD 311. Intermediate Graphic Design (3) 1. It. Continued exploration in graphic design with an emphasis on typography and editorial and publication design. Prerequisite: ARTD 211 or consent of instructor.
ARTD \$12. Advertising Design (3) I, I. Translating words and ideas into visual realfies of mass communication; magazines, nowspapers, billboards, direct-mail and TV. Use of felt markers, storyboards and videotape. Six studio hours. Prerequisite: ARTD 311 or consent of instructor. Lab fee.
AFTD 313. Rendering (3) I, II. Studio practice with professional techniques for presenting three-dimensional design on a two-dimensional surface. Six studio hours. Prerequisite: ARTD 213 or consent of instructor. Lab fee.
ARTD 314. Intermediate Environmental Design (3) I, II. Continued exploration of environmental design with emphasis on exhibit design and visual merchandising. Six studio hours. Prerequisite: ARTD 213 or consent of instructor. Lab fee.
ATTD 319. History of Design (3) I, it. Slide survey of architectural, graphic and industrial design movements influencing western culture from 1850 to present.

ARTD 411. Advanced Graphic Design (3) I, II. Concentrated study and advanced level problems that allow senior level students to expand and refine their abilities in graphic design. Prerequisite: ARTD 311.
ARTD 412. Packaging and Promotion Design (3) I', II. 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 or consent of instructor. Lab fee.
ARTD 413. Corporate Identity Design (3) 1 , II. Professional presentation of coporate 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 or consent of instructor. Lab fee.
ARTD 414. Senior Design Seminar (3) $I_{2} I I$. Preparation for entrance into the profession. Emphasizes job related skills and practices. Each student prepares a portfolio and designs and prints a personal resume. Prerequisite: ARTD 412 or consent of instructor.
ARTD 418. Senior Design Problems (3) I, II. Specific design problems chosen from actual product or environmental situations. Research, design, and presentation handled as final portfolio project. Six studio hours. Prerequisite: senior standing. Lab fee.
ARTD 419. Trade Show Exhibit Design (3) I, II, Translating concepts, words and ideas into three-dimensional structures and environments for business and commercial communication. Six studio hours. Prerequisite: ARTD 314 or consent of instructor. Lab fee.

ARTD 420. Graphic Design Synthesis (3) t or II. Must be taken in conjunction with VCT 467. A cooperative venture between graphic design and VCT offering valuable work experience in offset lithography that results in a printed portfolio piece. Prerequisites: ARTD 411, VCT 308 and submission of portfolio.
ARTD 422. Nuseum Exhibit Design (3) I, II, Translating concepts, words and ideas into three-dimensional structures and environments for educational communication. Six studio hours. Prerequisite: ARTD 314 or consent of instructor. Lab fee.
ARTD 424. Visual Merchandising Design (3) I, II. Translating concepts, words and ideas into three-dimensional structures and environments for retail sales outlets. Six studio hours. Prerequisite: ARTD 314 or consent of instructor. Lab fee.
ARTD 470. Independent Studies in Design (1-3). Supervised individual problems in selected design research for students who have shown proficiency and marked degree of independence in other design course work. May be repeated. Prerequisite: consent of instructor.
ARTD 489. Design Internship (3-10) I, II, III. 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)

ART 252. Foundations for Teaching Visual Arts (3) I. Lecture, laboratory and fieldbased experiences for teaching art. Clinical analysis of art education settings. Prerequisite: sophomore standing.

- ARTE 343. Art in the Elementary Schools (3) I, II, III. Professional methods lecture, clinical studio laboratory exploration of art media and planning approaches for teaching art to children in relation to their creative and artistic development. Not for arts and sciences credit. Not open to art majors. Prerequisite: ART 101 or 102. Lab fee.
ARTE 352. Approaches to Public School Art (3) I. Theories of creative development in lecture/laboratory and fieid experiences. Lesson content selection, planning and presentation for visual arts teaching. Not for arts and sciences credit. Prerequisites: ARTE 252 and EDFI 302. C/F hrs.: 40. Lab fee.
ARTE 353. Approaches to Art Curriculum and Supervision (3) II. Planning and management of art programs; clinical experiences related to development of
instructional units for art curficula. Not for arts and sciences credit. Prerequisites: ARTE 252 and 352. C/F hrs.: 20.
ARTE 470. Independent Studias in Art Ed ucation (1-3). Supervised individuat problems in selected art education research for students who have shown proficiency and marked degree of independence in other art education course work. May be repeated. Prerequisite: consent of instructor.
ARTE 482. Art for Special Needs Chitdren (3) I, II. Art strategies and media adaptions for exceptionai populations in both regular and alternative educational settings. Uses of art for exceptional children in regular classroom. Not for arts and sciences credit. C/F hrs.: 40. Lab fee.
ARTE 483. Teaching for Art Appreciation
(3) On demand. Fiole of art in society; development of instructional units on art history, art criticism, aesthetic responsing. Prerequisite: senior standing. C/F hrs.: 29.
ARTE 487. Studio Teaching Practicum (3) I, II. Clinical teaching experience in School of Art Children's Program. Prerequisite: permission of program director.
ARTE 492. Student Teaching (1-10) $I_{2}$.ll. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for clementary 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 Edueation (1-3). Workshop topics and intensive group studies relative to special needs of visua! arts teachers.

ARTE 497. Student Teaching (1-10) I, II. llassroom 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 hours. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded $\mathrm{S} / \mathrm{U}_{i}$

## ART HISTORY (ARTH)

fi ARTH 145. Western Art I (3) I, II. Ancient, Medieval and early Renaissance art.
If ARTH 146. Western Art II (3) I, II. Art from High Renaissance to present. May be taken before ARTH 145.

ARTH 440. Modern Architecture (3) Alternate years. Architecture of 19th and 20th centuries in Europe and America.

ARTH 441. American Art to the Civil War (3) I. Painting, sculpture and architecture of colonial era and United States to 1860 ; interrelationship between visual arts and signficant issues in American culture.
ARTH 442. American Art Since the Civil War (3) I. Painting, sculpture, architecture and photography of United States from 1860 to present. Special attention to artists and developments prior to W.W. II frequently overlooked in surveys of modern art.
ARTH 445. Ancient Art I (3) Alternate years. Art and archaeology of prehistoric Aegean and of Greece to Persian Wars.
ARTH 446. Ancient Art II (3) Alternate jars. Art of Greece from Persian Wars and Rome from Late Republic to Constantine.
ARTH 449. Medieval Art (3) I. 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 13 th century through the 16 th 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 17th and 18th centuries.
ARTH 455. Art of the 19th Century (3) I. Painting and sculpture in 19th century, from neoclassicism through post-impressionism.
ARTH 456. Art of the 20th Century (3) II. Painting and sculpture in 20th century Europe and Amierica, from Fauvism to the present.
ARTH 457. Women in the Arts (3) Alternate years. Historical role of women in the fine arts as artists, critics, matrons (patrons) and audiences, from antiquity to present day. Emphasis on issues relevant to conmporary situation in arts and society.
.RTH 458. Art of India and S.E. Asia (3) I. Art and architecture in India and S:E. Asia from the earliest times to present

ARTH 459. Art of China and Japan (3) II Art and architecture of China and Japan from earliest cultures to present.

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 course work. May be repeated. Prerequisite: consent of instructor.
ARTH 495. Special Topics in Art History (13). Innovative and intensive group studies in selected art historical research. Prerequsites announced for each offering. May be repeated.

## ART THERAPY (ARTT)

ARTT 230. Introduction to Art Therapy (3) I, II. Introductory exposure to the theories, practices, and literature of the profession. Lab and lecture. Prerequisites: ART 102 or ART 103 and PSYC-201 or consent of instructor. Lab fee.
ARTT 330. Art Therapy Methods and Theories I (3) I. 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 the development of communication skills for processing art work. Prerequisite: ARTT 230 (PSYC 403 recommended). Lab fee.
ARTT 331. Art Therapy Methods and Theories II (3) II. Involved investigation of art therapy in both theory and practice emphasizing the role of the art therapist, discussion of the art therapy treatment process, and ways to facilitate group and individual work. Lab, lecture, and required field work. Prerequisite: ARTT 330 (PSYC 405 recommended). Lab fee.
ARTT 470. Independent Studies in Art Therapy (1-3). Supervised individual problems in art therapy research for students who have shown proficiency and high degree of independence in other art therapy course work. May be repeated: Prerequisite: Consent of instructor.
ARTT 488. Art Therapy Practicum (10) i, II. Supervised 320-hour art therapy practicum in a specific agency. Required weekly seminar. Prerequisite: All program requirements must be fulfilled before enrolling. Graded S/ $U$.
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)

fA\&S 100. Seminar in Arts and Sciences (15) 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 (15) 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 300. Seminar in Arts and Sciences (15) 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 400. (1-4) Offered 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 489. Internship (1-12) On demand. Applied experience for students in arts and sciences programs. Specific proposal and permission of undergraduate adviser as weII 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 S/U.

## Astronomy (ASTR)

- ASTR 201. Modern Astronomy (3) I, II, III. Recent astronomical discoveries, space travel among planets, birth and death of stars; supernovas, pulsars, black holes, Xray stars, radio galaxies, quasars, extra-galactic phenomena, and origin of universe; some observational work.
- ASTR 212. The Solar System (3) I; III. 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 305. Life in the Universe (3) II. Alternate years. Possibilities for life on other planets and other star systems, methods. 'for communicating with other intelligent life, movement of human life into space.
- ASTR 307. Understanding the Cosmos (3) II. Alternate years. The universe as a whole, gravity, black holes, structure of space; other galaxies and the universal redshift, clusters of galaxies and other large-scale structure; big bang and steady state models; the three degree background radiation; first 'moments of creation.
ASTR 309. Astrophotography Laboratory (1) I. Alternate years. Practice in the techniques of astronomical'observation and photography using small ( 8 inch) telescopes and 35 mm cameras. One three-hour laboratory. Open only to majors or minors in physics or astronomy. Lab fee.
ASTR 321. Recent Progress in Astronomy (2) I. Alternate years. Pulsar dynamics, gravitational collapse and black holes, galaxies, large-scale structure in the universe active galaxies and quasars, cosmology. Two lecture-recitations. Prerequisite: PHYS 212; or PHYS 202 and 1 year of calculus. Not open to students with credit for PHYS 321.

ASTR 403. Stellar Structure and Evolution (3) II. Alternate years. Basic data, stellar interiors, theoretical models; advanced evolutionary states; red giants, white dwarfs, neutron stars, supernovas, biack holes. Prerequisites: PHYS 301 and consent of instructor. Not open to students with credit for PHYS 403.
ASTA 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 Sclences (BIOL)

T $\uparrow$ BIOL 101. Environment of Life (3) I, II, III. Basic ecology and current environmental problems of air, water and land poiliution; human reproduction and population dynamics. Two one-hour lectures and one twohour laboratory. Not accepted toward biology major or minor. Lab fee.
\# $\$$ BIOL 104. introduction to Biology (4) I, II, III. Basic concepts: the cell, metabolism, genetics, production, development, evolution, ecology. Three one-hour lectures, one twohour laboratory. Not accepted toward bioiogy major or minor. Lab fee.
BIOL 103. Lite in the Sea (3) I. Shore and ocean environments, variety and adaptations of marine life. Observations of marine organisms in marine laboratory. Three onehour lectures. High school biology recommended. Not accepted toward biology major or minor.
BIOL H109. Life in the Sea-Honors (4) I. Offered in conjunction with BIOL 108 (see above description). Emphasis on interdisciplinary aspects and lab credit for marine laboratory study. Three one-hour lectures, one one-hour discussion and three hours lab arranged. Prerequisites: University honors.standing and consent of instrucotr. Not accepted toward a biology major or minor.
fil BIOL 204. Concepts in Biology 1 (5) I, II, III (on demand). Introduction to ecological and evolutionary biology, Mendelian and population genetics, and the major groups of plants, animals and microbes. Three onehour lectures, one three-hour lab and one two-hour recitation. Field trips required. Lab fee.
$\$ \uparrow$ BIOL 205. Concepts in Biology II (5) I, II, III (on demand). Introduction to molecular and celluiar biology, physiology and organ systems. Three one-hour lectures, one three-hour lab and one one-hour recitation. Lab fee.

- BIOL 220. Introduction to Horticulture (4) I.

The care of cultivated plants including growth, development, propagation, pest control, pruning, grafting and basic landscape design. Two one-hour lectures, two two-hour labs. Prerequisite: BIOL 104, or BIOL 204 and 205, or consent of instructor. Lab foe.

BIOL 270. Marine Closed Systems (2) I. Theories and techniques of maintaining and studying living marine animals in closed salt water systems, chemical and nutritional studies. One one-hour lecture-discussion and three hours of laboratory arranged. Prerequisites: BIOL 204 and CHEM 125 or equivalent and consent of instructor. Lab fee.
BIOL 295. Oceanus (3) II. Telecourse emphasizing oceanographic and biological aspects of the ocean environment and human impact on the oceans. Thirty televised programs, 8 2-hour biweekly campus meetings with instructor. High school biology recommended. Not accepted twoard biology major or minor.

- BIOL 301. Field Biology of the Vertebrates (3) I. 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. Prerequisite: BIOL 204 or 205. Lab fee.
BIOL 310. Biology of Aging (2) I. 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) I, II, III (on demand). Methods of isolation, culture and identification; physiological, genetic and applied aspects of microorganisms. Two onehour lectures, two two-hour laboratories. Prerequisites: BIOL 204 and 205 and one year of chemistry. Lab fee.
BIOL 314. Microbiology for Health Professionals (3) I. Microbiologic and epidemlologic principles as the basis of practice for nursing, dietetics, physical therapy and other health professions. Three one-hour lectures. No credit for medical technology, microbiology or biology majors or minors. Prerequisites: BIOL 104 or 205 and CHEM 116 or 126 or 136; or consent of instructor.
BIOL 315. Microbiology Laboratory for Health Professions (1) I. Methods for detection, growth and identification of microorganisms. One three-hour laboratory. No credit for medical technology, microbiology or biology majors or minors. Prerequisite: Concurrent or previous registration in BIOL 314.

BIOL 321. Economic Biology I-Insect Pests (3) I. Biology, ecology and control of urban and other pest insects and related arthropods; environmental effects and physiological actions of insecticides; methodology and equipment used in pest management. Two one-hour lectures and one two-hour lab/discussion. Prerequisite: seven hours of biology. Lab fee.
BIOL 322. Economic Biology II-Vertebrate Pesis (3) II. Biology, ecology and control of vertebrate pest animals; types and physiological action of avicides and rodenticides; epidemiology of zoonoses. Two one-hour lectures and one two-hour lab/discussion period. Prerequisite: seven hours of biology. Lab fee.

BIOL 331. Human Anatomy and Physiology:for Health/Allied Professions I (4) I, II, III. Anatomical and physiological aspects of cells and tissues and the integumentary, skeletal, muscular and nervous systems. Three one-hour lectures and one two-hour laboratory. Prerequisite: BIOL 104 or 205. Lab fee.
-BIOL 332. Human Anatomy and Physiology for Health/Allied Professions II (4) I, II, III. 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 (3) I. Survey of plant kingdom; morphology, evolution and economic importance of major plant groups. Two one-hour lectures and one two-hour lab. Prerequisite: four hours of biology. Lab fee.
-BIOL 350. General Genetics (3) I, II. 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) I, II. 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 Eq ogy (3) I. Concepts of modern ecology. Flit damental ecological principles, life history patterns, structure and growth of populations, competition, niche theory, predation, succession, community structure and diversity. Three one-hour lectures. Prerequisites: BIOL 204 and 205 and MATH 131 or equivalent.
BIOL 400. Special Topics in Biology (1-5) I, II, III. Selected topics or subject areas in life sclences. Prerequisite: consent of instructor; maximum of two enrollments, each with different topic but only six hours may be applied toward major in biology. Lab fee may be required.
BIOL 401. Introduction to Biological Research (1-4) I, II, III. For advanced student who has shown proficiency and marked degree of independence in work. İdividual registration. Prerequisite: four semesters of biology and consent of instructor. May be repeated once, but only four hours may be applied toward major in biology. Lab fee. May be taken S/U for major credit.
BIOL 402. Honors Thesis (3) I, II, III. For students in the departmental honors program only. The thesis describes the student's independent research, previously conducted as BIOL 401 H . An approved public presentation of the research is required.

OL 404. Human Genetics (3) II. Alternate irs. Essential principles of modern genetwith special emphasis on humans.
Methods of human genetic analysis; screening and counseling; genetic aspects of public health; genetics and cancer. Two onehour lectures and one two-hour laboratory. Prerequisites: BIOL 204, or permission of instructor.
BIOL 405. General Parasitology (4) I, II. Morphologic, taxonomic, economic and other biological aspects of parasites. Three one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.
BIOL 406. Arthropod Vectors and Parasites (3) II. Biology and identification of diseasecarrying, toxic and parasitic arthropods.
Two one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.
BIOL 407. Cell Biology (4) I. Structure and physiology of ceils, integrating the dynamics of cellular structures with metabolic functions and control. Two one-hour lectures and one four-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.
BIOL 409. Invertebrate Zoology I (3) I. Classification, biology and physiology of lower invertebrates. Two one-hour lectures and one two-hour laboratory. Prerequisite: one course in biology or consent of instructor. Lab fee.
©L 410. Invertebrate Zoology II (3) II. issification, biology and physiology of invertebrates through lower chordates. Two one-hour lectures and one two-hour laboratory. Prerequisite: one course in biology or consent of instructor. Lab fee.
BIOL 411. Animal Physiology (4) II. General and comparative animal physiology with emphasis on vertebrate systems. Two onehour lectures, one three-hour laboratory and one one-hour recitation. Prerequisites: BIOL 204 and 205; organic chemistry and BIOL: 407 recommended; or consent of instructor. Lab fee.

## BIOL 412. Field Experience (2-6) II and 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 414. Plant Systematics (3) II. Elementary principles of plant identification, construction and use of keys and manuals, including winter plants, mosses, ferns and spring flora. Two two-hour lecture-laboratories, one one-hour discussion. Prerequisite: BIOL 204 or consent of instructor. Lab fee.

## BIOL 415. Plant Anatomy (3) II alternate

 years. Development and mature structure of principal tissues of vascular plants; basic patterns and modifications of root, stem, leaf and flower. Two one-hour lectures, one e-hour laboratory. Prerequisite: BIOL or 343 or consent of instructor. LabBIOL 416. Morphology of Vascular Plants (3) I alternate years. Comparative structure and evolutionary trends in vascular plants. Two one-hour lectures, one three-hour laboratory. Prerequisite: BIOL 204 or 343 or consent of instructor. Lab fee.
BIOL 417. Plant Physiology (4) II. Plant growth and development, transport, photosynthesis, mineral nutrition, plant hormones and photoperiodism. Three one-hour 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 (3) II. Genetics, physiology, development and evolution of behavior from an ecological perspective. Two one-hour lectures and one three-hour laboratory. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 421. Advanced Microbiology (4) II. Biochemistry, genetics and molecular biology of cellular structures and processes in selected' procaryontes. Three one-hour lectures and one three-hour laboratory. Prerequisite: BIOL 313 or consent of instructor. Lab fee.
BIOL 422. Plant Population Biology (3) I. Ecology of the growth, regulation and distributions of vascular plant populations. Two one-hour lecture/discussions and one threehour laboratory. One weekend field trip required. Prerequisites: BIOL 204 and 205. Strongly recommended: BIOL 343, 354 or 451. Lab fee.

BIOL 424. Algology (4) I. 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) I: Physical, chemical and biological aspects of aquatic habitats. One two-hour lecture and one threehour lab, and one weekend field trip to upper Great Lakes. Prerequisites: BIOL 204 and 205. Lab fee and field trip fee.
BIOL 426. Pathogenic Microbiology (4) II. Morphologic, physiologic, serologic characteristics of pathogenic microorganisms; their epidemiology; and the host-parasite interrelations resulting in infectious disease. Two one-hour lectures and two two-hour laboratories. Prerequisites: BIOL 313; BIOL - 439 recommended. Lab fee.

BIOL 431. Developmental Biology (4) II. Overview of animal development (primarily embryogenesis) integrating classical morphological studies and current cellular and molecular findings. Two one-hour lectures and one four-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.

## BIOL 432. Comparative Anatomy of

Chordates (5) I. Comparative anatomy of representative chordates; evolutionary significance of structural and developmental changes and relationships of all organ systems. Three one-hour lectures and two twohour laboratories. Prerequisites: BIOL 204, 205 or consent of instructor. Lab fee.

BIOL 433. Human Cells and Systems Physiology (4) I, III (on demand). Physiological principles underlying cellular, organ and organ system function in the human. Limited to registered nurses and other health professionals. Not accepted toward a biology major or minor. Two two-hour lectures. Prerequisites: organic chemistry and BIOL 331 and 332 or equivalent.
BIOL 434. Paleobotany (3) I. Alternate years. Morphology, evolution, geological distribution of fossil plants. Two one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 416 and historical geology or consent of instructor. Lab fee.
BIOL 435. Entomology (4) I. Biology of insects: structure, physiology, ecology, systematics, evolution and importance to man Two one-hour lectures and two two-hour laboratories or equivalent in field trips. Prerequisites: BIOL 204 and 205. Lab fee.
BIOL 438. Endocrinology (4) II. 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 recommendéd. Lab fee.
BIOL 439. Immunobiology (4) I. Immune state in animals; laboratory work on detection and quantitation of antigens and antibodies. Two one-hour lectures, one threehour laboratory and one one-hour laboratory recitation. Prerequisites: BIOL 204 and 205. BIOL 350 and biochemistry recommended. Lab fee.
BIOL 440. Aquatic Vascular Plants (3) I. Alternate years. Techniques and methods of collecting, identifying, preserving aquatic vascular plants; biology, ecology and geography of the flora with respect to the history since glaciation are included. Two one-hour lectures and one two-hour laboratory and some Saturday field trips. Prerequisites: BIOL 204, 205 and 414 or consent of instructor. Lab fee.
BIOL 442. Plasmid Biology (3) I. 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) II. 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) II. Growth, nutrition, biochemical, metabolic and regulatory activities of microorganisms. Prerequisite: Previous or concurrent enrollment in BIOL 443 or consent of instructor. Two two-hour laboratories. Lab fee.

BIOL 446. Scanning Electron Microscopy (4) II. Theory and practice of scanning electron microscopy applicable to biological research. Critical point drying, sample coating techniques, transmitted electron detection, energy-dispersive x-ray microanalysis and computational analysis of data. Two onehour lectures and two three-hour laboratorles. Prerequisite: consent of instructor. BIOL 407 strongly recommended. Lab fee.
EICL 447. Microbial Genetics (3) I. 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) II. 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. Prerequisite: Statistics course, at least junior standing and completion of two biology courses or consent of instructor.
BIOL 451. Evolution (3) II. Historical evidence for evolution. Modern evolutionary theory; modes of selection, speciation, complex adaptations, micro-evolutionary trends. Two one-hour lectures and one twohour discussion. Prerequisite: BIOL 350.
BIOL 470. Readings in Biological Sciences
(1) I, II, III. 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) I. Alternate years. Life histories, systematics, physiology, ecology, evolution and biogeography of major groups of freshwater and marine fishes. Two one-hour lectures and one three-hour laboratory. Saturday and/or weekend field trips required. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 473. Mammalogy (3) I. Alternate years. Identification, natural history, evolutlon, zoogeography, ecology, physiology, behavior, with emphasis on Ohio mammals. Two one-hour lectures and one three-hour laboratory. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 474. Marine Biology (4) II. Biological and oceanographic analysis of marine environment: ecology, populations, laboratory techniques. Three hours of lecture and three hours of laboratory arranged. Prerequlisites: one year of chemistry, invertebrate zoology, and consent of instructor. Lab fee.
BIOL 475. Marine Biology Field Trip (1) II. Field trip to marine environment and research station with collection and study of living marine fauna and flora, oceanographic analysis of environments, study on seagoing vessel using trawl and dredge; discussions of marine research by laboratory staff; tour of fishery station. Prerequisite: BIOL 474. Consent of instructor and transportation fee required.

BIOL 476. Herpetology (3) I. Alternate
years. Amphibian and reptile identification, habits, distribution, behavior. Two one-hour lectures and one three-hour laboratory or equivalent field work, all day and/or weekend field trip. Prerequisites: BIOL 204 and 205. Lab fee.

BIOL 477. Ornithology (3) II. Structure, physiology, behavior, ecology and evolution of birds; identification in field and laboratory. Two one-hour lectures and one threehour laboratory or equivalent field work, allday or weekend field trip. Prerequisite: seven hours of biology. Lab fee.
BIOL 478. Parasites of Marine Animals (6) III. Study of parasites of marine animals. Prerequisite: sixteen hours of biology including parasitology. Taught at Gulf Coast Research Laboratory.
BIOL 479. Marine Microbiology (5) III. 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) ill. Histological preparation for light and elctron 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) III. 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 (4) III. Introduction to marine environment with emphasis on local fauna. Weekly boat trips are made to collect specimens for laboratory study. Prerequisites: BIOL 204 and 205. Taught at Gulf Coast Research Laboratory.
BIOL 484. Marine Invertebrate Zoology (6) III. 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) III. 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 Science (1-6) III. Supervised research on specific problems in all areas of marine science. Prerequisites and credits to be set by problem director and registrar at Gulf Coast Research Laboratory.

BIOL 488. Topics in Marine Science (3-6) III. Various marine courses such as marins ecology, salt marsh ecology, marine fisheries management, aquaculture and others offered when taught by the Gulf Coast Research Laboratory staff. May be repeated for different titled topics as approved by the departmental marine science coordinator.
BIOL 489. Biology Internship (1-3) I, II, III. For biological sciences majors in cooperative education program. Written report required. May be repeated with permission. Only three hours can apply toward biology major or minor. Prerequisite: consent of the departmental CEP representative. Graded S/U.
BIOL 490. Seminar (1) I, II, III. Review of literature to acquaint student with research techniques and important work in various fields of biology. May be repeated, but only two hours may be applied toward a bioiogy major. Prerequisite: ten hours of biology.

## Business Administration (BA)

BA 102. Introduction to Business (3) I, II: Market competition and change, nature and central role of management, our business environment. No credit allowed toward BSBA degree.
-BA 203. Written Communications for Business (3) I, II, III. Theory of written business communications with emphasis on the process approach; the role of analysis, summarization, and synthesis in business writing; and the importance of clarity and precision in written forms such as reports, memoranda, letters, proposals, and executive summaries. Prerequisite: ENG 112.
BA 300. Executive Seminar (2). Exposure to current issues in business administration via guest lecturers who are visiting execu-tives-in-residence. Students have opportunity to examine a variety of career choices in business and current issues in business management.
BA 305. Integrating Career and Family. For description, see HDFS 305.
BA 310. Introduction to Hospitality Management (3) I. First course in hospitalitymanagement curriculum. Scope, structure and economic principles of service management. Operations management considerations for hotels, restaurants and institutional food service. Uniform system of accounts and key operating ratios. Prerequisite: ACCT 221.
BA 325. Organization and Structure of Health Care Services Industry (3) I. 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.
BA 390. Introduction to Multinational Business (3). Environment encountered by U.S. enterprises engaged in businesss abroad; business practices and policies for foreign operations; international organizations.
BA 403. Government and Business (3). F lations of all echelons of government to businessman; instances where government. controls, regulates or otherwise exercises influence on actions of businessman.
405. Business Policy and Strategy (3) I, ill. Strategic management of organizatons; including resource allocation, administrative processes and integration of functional areas and disciplines under conditions of uncertainty at the overall or general management level of the enterprise or profit center. Cases and simulations. Prerequisites; senior standing and prior satisfactory completion of MGMT 300, MKT 300, FIN 300, OR 380 and MGMT 360.
BA 406. New Enterprise Formation (3). Entrepreneurship; systematic decision making in small companies.
BA 429. Health Care Internship (6) I, II, III. 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; practicies and strategies appropriate for foreign operations. Selected case studies for special problems. Prerequisite: BA 390.
BA 480. Hospitality Management Seminar (3) II. Integration of previous course work in business administration with hospitality management. Unit operating concerns, corcate policy and strategy. Prerequisites: 5427 and 800 hours of approved practi.

BA 489. Business Internship (1-3). No credit for students with other internship credit in the College of Business Administration. Program must be approved in advance by college internship director. Work experence must be completed within last year prior to graduation. Graded S/U.
BA 491. Studies in Business Administration (1-3) On demand. Indepth 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 eight 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 repeated to eight hours.
BA 495. Reading for Honors in Business Adminstration (1-3) I, II, III. Supervised, independent program of reading and study. Prerequisites: 3.0 accumulative GPA and consent of department.

## Business Education (BUSE)

-BUSE 101. Business Mathematics (3) I, II. Mathematics of finance, merchandising and business ownership. Consumer application of business mathematics to banking, credit, yest, insurance, home ownership, jes, social security and income taxes.
-BUSE 111. Beginning Keyboarding (3) I, II. Touch operation of alpha-numeric and symbol keys with emphasis on keyboarding accuracy for microcomputers, word processors and computer terminals. Four class periods. Lab fee. The student with two semesters of high school typewriting or keyboarding should enroil in BUSE 210. Those who choose to enroll in BUSE 111 will not receive credit toward graduation.

## - BUSE 202. Principles of Word/Information

 Processing (3) I, II. Organization and operation of word/information processing applications with emphasis on language arts skills, machine transcription, and personal computers utilizing the software package WordPerfect 5.0. Prerequisite: BUSE 111 or its equivalent. Lab fee.-BA 203. Written Communications for Business (3) I, II, III. Theory of written business communications with emphasis on the process approach; the role of analysis, summarization, and synthesis in business writing; and the importance of clarity and precision in written forms such as reports, memoranda, letters, proposals, and executive summaries. Prerequisite: ENG 112.
QBUSE 210. Advanced Typewriting (3) I, II. Typewriting problems and projects; office production standards. Three class periods. Prerequisite: two semesters of high school typewriting or BUSE 111. Lab fee.

- BUSE 213. Beginning Shorthand (3) I, II. Gregg Series 90 shorthand. Introduction to theory; transcription and speed development from 60 to 80 wpm. Four class periods. Prerequisite: BUSE 111 or concurrent registration in BUSE 111. Lab fee. The student with two semesters of high school shorthand should enroll in BUSE 215. Those who choose to enroll in BUSE 213 will not receive'credit toward graduation.
- BUSE 215. Advanced Shorthand (3) I, II. Development of speed in recording dictation from 80 to 100 wpm and transcription skills. Open to students with shorthand background in either Gregg or Century 21. Three class periods and one hour lab. Prerequisite: two semesters of high school shorthand or BUSE 213. Lab fee.
$\dagger$ BUSE 217. Machine Transcription (3) I, II. Development of speed and accuracy in producing documents using transcription equipment or computer transcription software. Skill enhancement through simulation integrating transcription and computer skills. Review of English mechanics, proofreading skills, and document set-up. Prerequisites: BUSE 111 or its equivalent and BUSE 202.
- bUSE 240. Business Problems of the Consumer (3) I, II. 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.
-BUSE 302. Word/Information Processing Applications (3) I, II, III. Application tech-- niques in using the IBM PC, word processing, Display Write 4 and spreadsheet. Prerequisites: BUSE 111 or its equivalent. Lab fee.
- BUSE 311. Dictation and Transcription (3) I, II. Dictation at speeds of 90 to 120 wpm ; emphasis on rapid, accurate transcription. Open to students with shorthand background in either Gregg or Century 21. Three class periods and one hour lab. Prerequisite: BUSE 215 or consent of instructor. Lab fee.
- BUSE 314. Internship in Business Education (1-2) I, II. 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.
- BUSE 321. Computer Data Processing (3) I, II. Computer concepts utilizing BASIC programming language on personal computers with hands-on-experiences.
- buse 335. Office and Records Management Systems (3) I, II. 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) I, II. 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) I, II. Principles, objectives and methods of teaching accounting and data processing; review of the accounting cycle. C/F hrs: 26.

## BUSE 356. Shorthand and Secretarial

Practice in Secondary Schools (1) I, II. Principles, objectives and methods of teaching shorthand, transcription and secretarial practice. C/Fi hrs: 30.
BUSE 358. Typewriting and Clerical Practice in Secondary Schools (1) I, II. Principles, objectives and methods of teaching typewriting, and clerical practice. C/F hrs: 30.

BUSE 364. Marketing Education in Secondary Schools (3) I, II. Principles, objectives and methods of teaching vocational and relative subject matter in marketing education.
BUSE 370. OWA Organization and Program Coordination (3) I. Principles, objectives and methods of teaching Occupational Work Adjustment; program philosophy, organization, coordination, student selection and youth activities.
BUSE 395. Workshop in Business and Marketing Education (1-3) ili. Areas of current interest to teachers in business and marketing education. Possible areas include youth with special needs, cooperative education, vocational education for adults, intensive programs, post-secondary programs and technical programs.
-BUSE 401. Secretarial Administration (3) I, II. Intensive study of procedures, skills and knowledges basic to secretarial administrative positions; refinement of secretarialmanagement operations, office simulations and advanced word processing applications using the IBM PC. Prerequisites: BUSE 210, 215 and 302. Lab fee.

BUSE 441. Consumer Economics in the Schools (3) Alternate II, alternate III. Need for consumer economics. Organization and integration of consumer economics in school programs. Consumer and business background information.
BUSE 455. Administrative Management (3) 1, II. Principles and practices of managing office personnel and operations. Selecting, developing, motivating and appraising office employees. Office layout and design, work measurement and work standards.
BUSE 461. Development of Instructional Materials in Marketing Education (2) I. Methods of developing teaching materials in marketing education.
BUSE 462. Coordination in Cooperative Marketing Education (2) II.Coordination in high school, post-high school and adult education programs for marketing education. Not open to students taking BUSE 468. C/F hrs: 14.

BUSE 463. Community Planning in Adult Vocational Education (3) I. Identification of adult needs, procedures for organizing and promoting adult programs in vocational education, selecting and training adult leaders and financing adult programs.
BUSE 465. Development and Administration of Vocational Education (3) II. Vocational education as sponsored by federal, state and local legislation.
BUSE 468. Vocational Business and Office Education (4) I, Il. Program construction, organization, improvement, implementation, evaluation and development of program guides for both intensive and cooperative vocational business education. C/F hrs: 28.
BUSE 469. DWA Curriculum and Instructional Procedures (3) II. Curriculum development for vocational work experience programs including instructional learning packets, course of study, teaching methodology and techniques.
BUSE 470. Studies in Business and Marketing Education (1-2) I, II. 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.
BUSE 497. Student Teaching (1-10) I, II. Classroom teaching under supervision on fuli-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.
*The sludent with two semesters of high school typewriting and/or shorthand should enroll in BUSE 210 and/or BUSE 215. Those who choose to enroll in lower level courses will not receive credit toward graduation.

## Business Management Technology (BAT)

†EAT 100. Introduction to Real Estate (2) II, III. 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) I, II, III. 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, landlord-tenant, public control of land use, organized forms of multiple ownership, wills and estates.
$\dagger$ BAT 102. Introduction to Business Technology (4) I, II. Business technical process including structure of business and functions of marketing, production, finance, personnel, technical processes of control, and responsibilities of business. Three hours lecture, two hours field study.
$\dagger$ BAT 113. Medical Office Procedures (3) II. Emphasis on medical assistant, administrative functions. Includes handling patient contact, medical record procedures, financial and mediocolegal responsibilities in relation to clinical settings.
$\dagger$ BAT 201. Human Resource Management (4) I. 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. Three hours of lecture, two hours field study.
$\dagger$ BAT 203. Production Management (4) II. 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, two hours field study. Prerequisite or corequisite: STAT 200 or 211.
$\dagger$ BAT 204. Marketing (3) 1. Introduction of organization, management, and practice of marketing by business firms. Two hours lecture, three hours field study.
$\dagger$ BAT 205. Human Relations in Business (4) I, II. Principles of effective management of human resources. Analysis of reactions, interactions, attitudes and activities of persons within goal-seeking organizations; leadership, morale, goal-oriented behavior, relationships between supervisors and subordinates. Three hours lecture, two hours field study.
†BAT 207. Business Finance (3) II. 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.
$\dagger$ BAT 208. Advertising (3) II. Design, layout, production and placement of advertising, historical and cultural precedents of modern advertising. Prerequisite: MKT 300 or permission of instructor.
$\dagger$ BAT 210. Principles of Banking (2) I, II. Fundamentals of banking functions, language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping and bank loans and investments.
$\dagger$ BAT 211. Money and Banking (3) I. Basic monetary theory and policy, emphasis on function of the banking system in the economy; structure of commercial banking system, creation of bank deposits, Federal Reserve policy and operations. Treasury money market operations, the pricing of money and international financing problems.
$\dagger$ BAT 212. Instaliment Credit (2) I, II. Basic knowledge of installment credit and its administration; emphasis on establishing credit, obtaining credit information, and loan servicing and administration; inventory loans, rate structure and advertising.
$\dagger$ BAT 213. Real Estate Finance (3) I, II. Home mortgage investment by savings and commercial banks; channeling of money into mortgages, home mortgage lendings, special purpose mortgages and the administration of mortgage accounts.
†BAT 214. Banking Law (2) 1 , II. 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) I, II, III. 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 analysls, 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) I, II, III. 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.
$\dagger$ BAT 217. Real Estate Brokerage (2) II 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.
$\dagger$ BAT 218. Special Topics in Real Estate (2) II 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.
†BAT 250. Marketing Research (2) III. Secondary information sources and technique alternatives, sampling, response and interpretive problems. Computer analysis intra duced. Prerequisite: BAT 204 or consent instructor.

AAT 280. Retail Management (3) I, II. An roduction to the principles and practices of retail management using a managerial approach. Topics emphasized include strategic planning, store operation, promotional strategy and computer applications.
$\dagger$ BAT 290: Studies in Business (1-3) I, II, III. 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 stānding and appropriate prior course work.
$\dagger$ BAT 291. Field Experience (1-3) I, II, III. Ten weès of work in an appropriate business

- field to be decided in consultation with'student's adviser. Prerequisite: permission of work supervisor and adviser.


## Center for Academic Options (CAO)

CAO 124. State Government (1) III. Issues of government, governmental processes at local and state levels, societal and governmental influences on electoral process. For Boys State students.

## - CAO 131. Career Planning and Decision

 Making (2) I, II, III. Strategies developed for career and life planning decisions. Assessment of values, interests, needs and skills helpful in selecting an academic major and relating that major to a career. Investigation of occupations and issues affecting career choice. Development of interview skills and tsume preparation.ÂO 201. Independent Studies (1-15) I, II, III. Research or project designed by student under general supervision of faculty member. Open to any sophomore, junior or senior with a 2.5 GPA. Contact Center for Academic Options prior to registration. Graded S/U.
CAO 401. Independent Studies (1-15) I, II, III. Research or project designed by student .under general supervision of faculty mem-

- ber. Open to any sophomore, junior or senior wit a 2.5 GPA . Contact Center for Academic Options prior to registration. Graded S/U.


## Chemistry (CHEM)

No credit for two courses in any one of the following groups: CHEM 100, 104, 115, 125, 135; CHEM 126, 136; CHEM 116, 306, 341; CHEM 116, 308, 445; CHEM 321, 454; CHEM 352, 405.

1. CHEM 100. Introduction to Chemistry (3)
I. Non-laboratory 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.
CHEM 104. Chemistry for Elementary Teachers (2) I, II. Non-laboratory examination of basic chemical concepts, vocabulary and 'history as well as role of chemistry in modern society. Not counted toward chemry major or minor. Prerequisites: PHYS or PHYS 104.
-CHEM 115. Elementary Chemistry (4) I, II, III. General chemistry and introduction to organic chemistry. Not accepted toward chemistry major or minor. Three lectures, one three-hour laboratory. Prerequisites: two years of high school science; high school-algegra or its equivalent. Lab fee.
-CHEM 116. Elementary Organic and Biochemistry (4) II, III. CHEM 115 continued. Not accepted toward chemistry major or minor. Three lectures, one three-hour laboratory. Prerequisite: CHEM 1,15. Lab fee.
n $\dagger$ CHEM 125. General Chemistry (5) I, II, III. Chemistry sequence for students majoring in sciences, the liberal arts or in premedical programs. Three lectures, one recitation, one three-hour laboratory. Prerequisite: high school chemistry, algebra, and geometry, or CHEM 115. (Credit for graduation for CHEM 115 or CHEM 125, but not both.) Lab fee.
ITCHEM 126. General Chemistry (5) II, III. CHEM 125 continued, including qualitative analysis. Three lectures, one recitation, one three-hour of laboratory. Prerequisite: C or better in CHEM 125 or CHEM 135. Lab fee.
ICHEM 135. General Chemistry (5) I. General chemistry sequence for well-prepared students. Three lectures, one recitation, one three-hour of laboratory. Prerequisites: high school chemistry and consent of instructor. Corequisite: MATH 130 or MATH 131. LAb fee.
ICHEM 136. General Chemistry (5) II. CHEM 135 continued. Emphasis on quantitative procedures in laboratory. Three lectures, two three-hour laboratories. Prerequisite: C or better in CHEM 135. Lab fee.
CHEM 199. Introduction to Elementary Organic Chemistry (1) I, II, III. Not accepted toward chemistry major or minor. Provides a link between the CHEM 125-126 sequence and CHEM 116; concurrent with the last one-third of CHEM 115. Three lectures, one three-hour laboratory. Prerequisite or co-requisite: CHEM 125 and consent of department.
CHEM 200. Bio-Organic Chemistry and You (2) I, II. Non-mathematical course for nonscientist in topics of contemporary concern. Effect of chemistry on society, chemistry for the consumer, regulatory agencies, chemistry in the news, and other topics in organic biochemistry. Not open to freshmen; not accepted toward chemistry major or minor. No prerequisites.
-CHEM 201. Quantitative Chemical Analysis (3) I. Theory and practice of quantitative analytical procedures, volumetric and gravimetric methods. Two lectures, one threehour laboratory. Prerequisite: CHEM 126. Lab fee.
-CHEM 306. Organic Chemistry (4) I, II, III. For students whose program does not require full-year course. Not accepted toward a chemistry major. Three lectures, one three-hour laboratory. Prerequisite: CHEM : 126 or CHEM 136. Lab fee.
-CHEM 308. Basic Biochemistry (3) I, II. Structure, chemical, physical and metabolic properties of bioorganic molecules. For students whose program does not require fullyear course. Prerequisite: C or better in CHEM 306; BIOL_104 and CHEM 201. recommended.
-CHEM 309. Elementary Biochemistry Laboratory (1) I, II. Basic biochemical techniques. One three-hour laboratory. Prerequisite or corequisite: CHEM 308 or . CHEM 445. Lab fee.
CHEM 313. Special Topics in Chemistry (13) I, II, III. Specific topics of current interest in chemistry. Not applicable toward minimum 32 -hour major or 20 -hour minor. May be repeated with different topics.
CHEM 321. Survey of Instrumental Analysis (3) II.. Elemenatry instrumental methods of analysis. Primarily for biology and medtech majors. Two lectures, three hours of laboratory. Prerequisites: CHEM 201 and either PHYS 212 or PHYS 202. Lab fee.
CHEM 341. Organic Chemistry (5) I, III. Structure and reactivity of organic substances. Four lectures, one three-hour laboratory. Prerequisite: CHEM 126 or CHEM 136. Lab fee.

CHEM 342. Organic Chemistry (5) II, III.
CHEM 341 continued. Three lectures, two three-hour laboratories. Prerequisite: C or better in CHEM 341. Lab fee.
CHEM 352. Physical Chemistry (3) I. For students whose program does not require full-year course. Prerequisites: CHEM 201 (or CHEM 136) and MATH 130. MATH 131 recommended. Prerequisite or corequisite: PHYS 202 or PHYS 212.
CHEM 395. Workshop on Current Topics (13) Intensive course on selected topics. May be repeated if topics differ. Dóes not apply toward first 20 hours of minor or first 32 hours of major.
CHEM 402. Numerical Methods in Chemistry (1) II. Use of computers and numerical methods in chemistry; survey of computer graphics and microcomputer-based instrumentation in chemical research. Prerequisite or corequisite: CHEM 405.
CHEM 405. Physical Chemistry (4) I, III.
Thermodynamics and quantum chemistry. Prerequisite: CHEM 201 (or CHEM 136) and MATH 232, and either PHYS 212 or PHYS 202.

CHEM 406. Physical Chemistry (4) II, III. CHEM 405 continued. Electrochemistry, kinetics, spectroscopy and molecular structure. Prerequisite: CHEM 405.
CHEM 407. Integrated Analytical and Physical Laboratory (2) I. Principles of measurement; spectral, chromatographic and electroanalytical techniques; thermodynamic and kinetic measurements; computerized data acquisition. Two three-hour laboratories. Prereqüisite or corequisite: CHEM 405. Lab fee.
CHEM 408. Integrated Analytical and Physical Laboratory (2) II. CHEM 407 continued. Prerequisite: CHEM 407; prerequisite or coreguisite: CHEM 406. Lab fee.
CHEM 413. Special Problems (1-3) I, II, III. 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. Prerequisite: consent of instructor, 20 hours of CHEM or consent of department, 2.5 minimum overall GPA. May be repeated, but no more than six hour credit may be applied toward degree.

CHEM 442. Organic Reaction Mechanisms
(3) II. Fundamentals of organic reaction mechanisms and methods for their elucidation. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.
CHEM 445. General Biochemistry (3) I. 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.
CHEM 446. Biochemistry Laboratory (1) I. Experimental techniques in biochemistry. Three-hour laboratory. Prerequisite or corequisite: CHEM 445. Lab fee.
CHEM 447. General Biochemistry (3) II. Metabolism, energetics, and regulation of biological molecules and assemblies. Prerequisite: CHEM 445.
CHEM 449. Advanced Biochemistry Laboratory (2) II. Research techniques in biochemistry. Two three-hour laboratories. Prerequisite: CHEM 446 or permission of instructor. Lab fee.
CHEM 453 . Environmental Chemistry (2) 1. Alternate years. Sources, reactions, transport and fates of chemical species in water, soll and air environments. Prerequisites: CHEM 136 (or CHEM 201), CHEM 306 (or CHEM 342), and (CHEM 352) or (PHYS 202).

CHEM 454. Instrumental Methods of Analysis (3) II. Theory of instrumental methods of analysis inciuding electroanalytical, spectroscopic and chromatographic methods. Prerequisite: CHEM 408 or consent of instructor.
CHEM 463. Advanced inorganic Chemistry (4) I. Chemical bonding, stereochemistry, acid-base chemistry, periodicity, nonmetal and transition metal chemistry, organometalic and biolnorganic chemistry. Prerequisite: CHEM 342, CHEM 406.
CHEM 466. Spectroscopic Methods in Organic Chemistry (2) I. Organic structure determination by spectroscopic techniques, with emphasis on infrared, ultraviolet and nuciear magnetic resonance spectroscopy, and mass spectrometry. Also includes a brief introduction to reiated spectroscopic methods. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.
CHEM 483. Advanced Topics in Chemistry (1-3) I, II, III. 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.
CHEM 499. Physical Chemistry (1 or 3) III. Special structure to permit non-BGSU students who have completed one or two quarters of physical chemistry to take selected parts of CHEM 405-406. Prerequisites: same as CHEM 405, and 406, plus consent of department.

## Chinese (CHIN)

CHIN 101. Beginning Chinese I (4) I. Introduction to Mandarin Chinese, the official standard language of China and Taiwan. Development of the four skills: listening, speaking, reading and writing. Three class periods weekly and intensive work with tapes and text.
CHIN 102. Beginning Chinese II (4) II. CHIN 101 continued. Three class periods weekly and intensive work with tapes and text. Prerequisite: CHIN 101 or equivalent.
CHIN 201. Intermediate Chinese I (4) I. CHIN 102 continued. Grammar and character writing review; continued development of the four skills. Three class periods weekly and intensive work with tapes and text. Prerequisite: CHIN 102 or equivalent.
CHIN 202. Intermediate Chinese II (4) II. CHIN 201 continued. Three class periods weekly and intensive work with tapes and text. Prerequisite: CHIN 201 or equivalent.
CHIN 480. Selected Topics in Chinese (1-3) 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. Prerequisite: arrangement with the instructor and consent of department chair prior to registration.

## College Student Personnel (CSP)

CSP 480. Seminar in College Student Personnel (1-3) II. Analysis of issues, practices, and trends in post-secondary student personnel work.
CSP 481. Introduction to Residence Life for the Paraprofessional (1) II. Phiiosophy, skills, competencies of program development and management of university residence units.
CSP 482. Peer Advising Skills (1) I, II. Development of fundamental human relations skills used by peer advisers; listening, interviewing, information sharing, decision making and problem solving.
CSP 485. Peer Advising Practicum (1-2) I, il. Supervised peer advising experience in appropriate predesignated setting. May be repeated with approval of department. Prerequisite: CSP 482 or consent of instructor. Graded S/U.

## Communication Disorders (CDIS)

-CDis 223. Introduction to Communication Disorders (3) I, II, III. Normal speech and language development, description and etiology of various communication disorders, e.g., articulation, voice, stuttering, etc.

CDIS 224. Phonetics (3) I, II. 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 301. Speech and Hearing Science (4) 1, II. Anatomical and physiological principles of the speech and hearing mechanisms including acoustics and the acoustic theory of speech production and perception. Prerequisites: CDIS 223 and 224.

CDIS 311. Articulation Development and Disorders (3) I, II. Development, diagnost. and therapeutic techniques for problems of articulation. Clinical observations required. Prerequisite: CDIS 223 and 224.
CDIS 321. Voice Disorders and Cleft Palate
(3) I, II. Definition and description of normal and disordered voice. Techniques for evaluation and therapy. An introduction to the disorders of cleft palate. Prerequisite: CDIS 301.

CDIS 331. Neurogenic Disorders of Communication (3) I. Etiology, diagnosis and treatment of developmental and acquired neurogenic speech disorders. Prerequisite: CDIS 301 and 311; non-majors must obtain consent of instructor.
CDIS 341. Stuttering (3) II. Definition, description, development and maintenance of stuttering; approaches to assessment and treatment in children and adults. Prerequisite: CDIS 301.
CDIS 351. Language Acquisition, Assessment and Remediation (4) I, II. Normal acquisition patterns and stages, mechanisms of acquisition, techniques for effective evaluation and survey of therapy programs and techniques. Practicum experience with preschool language group. Prerequisite: CDIS 301.

CDIS 361. Introduction to Diagnostic Audiology (3) I, II. Audiometric pure-tone testing methods, immittance testing procedures, otologic pathologies, and associated hearing problems. Prerequisite: CDIS 301.
CDIS 401. Prepracticum in Communication. Disorders (3) I, II. Introduction to clinical setting; student will be involved in planning, observing, and assisting in therapy. Two lectures, two observation periods per week. Prerequisites: CDIS 311, 351, or CDIS 351 concurrent with CDIS 401, and 2.25 GPA. C/F hrs.: 20.
CDIS 411. Diagnosis and Assessment of Communication Disorders (4) I, II. Clinicai techniques and theory relating to the appraisal and diagnosis of communication disorders in children and adults. Practical experience in evaluation and report writing. Prerequisites: CDIS 361 and 401. C/F. hrs.: 15.

CDIS 421. First Practicum in Communication Disorders (3) I, II, III. Supervised clinical experience with children and adults. Prerequisites: CDIS 401 and 411, 2.5 GPA in CDIS courses, 40 approved observation hours, and consent of instructor. C/F hrs.: 45.

CDIS 431. Second Practicum in Communication Disorders (3) I, II, IIl. Supervised clinical experience with chiidren and adults. Prerequisites: CDIS 421, 2.5 GPA in CDIS courses, and consent of instructor. C/F hrs.: 45.

## CDIS 451. Language Principles and Prac-

 tices for the Special Education Professional (4) II. Introduction to language patterns of normal children related to the acquisition of pragmatics, syntax and semantics. Relati ship of these patterns to assessment anc remediation procedures and strategies in atypical populations.DIS 461. Introduction to Rehabilitative Idiology (4) II. Rehabilitation of the hearg impaired. Amplification systems, speech reading, auditory training, speech percep-tion--language problems of the hearing impaired. Prerequisite: CDIS 361.

## CDIS 471. Introduction to Communication

 Disorders for the Classroom Teacher (3) I, II, III. Identification, etiologies, and characteristics of communication disorders. Suggestions for classroom management of communication disorders. Not open to student with credit for CDIS 223.CDIS 481. Organization and Management of School Speech-Language-Hearing Programs (3) I, II. Planning and implementing programs in schools for speech-language and hearing-handicapped pupils. Clinician's roles and responsibilities. Grade of C or better in this course to qualify for student teaching. Prerequisites: all CDIS courses.
CDIS 490. Independent Study in Communication Disorders (1-3) I, II, III. For students who wish to do intensive study in communication disorders independently, or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of instructor and department chair.
CDIS 497. Student Teaching (1-10) I, II. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $\$ 5.00$ per credit hour. Eligibilrequirements must be met. C/F hrs. 0. May be repeated. Graded $\mathrm{S} / \mathrm{U}$.

## Computer Science (CS)

IT CS 100. Computer Basics (3) I, II, III. Computer technology and related social issues. Hardware, software, applications in diverse areas. Problems concerning computerized services, data banks, governmental controls. Problem solving using software packages (such as hypertext, spreadsheets, word processing, database, presentation 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.
T $\downarrow$ CS 101. Introduction to Programming (3) I, II, III. Algorithms; programming in Pascal; introduction to computer organization; structured programming techniques. Several programming assignments required. Prerequisite: two years of high school algebra or MATH 095.
-CS 180. Introductory Topics (1-3). Introduction 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.
CS 201. Assembler Language Programming (3) I, III. Basic computer organization; data representations; addressing techniques. IBM 370 assembler language. Prerequisite: Grade of C or better in CS 101.

CS 202. Systems Programming (3) I, II. Principles of systems programming, including reentrancy and I/O concepts. Subroutines and macros. Techniques for developing loaders, assemblers and macro processors. Large implementation project required. Prerequisite: Grade of $C$ or better in CS 201.
©CS 205. Advanced Programming Techniques (3) I, II, III. Additional Pascal features, including pointer variables. File processing, including sequential and random files. Recursion. Large program development. Introduction to data structures. Interactive debugging. Prerequisite: Grade of C or better in CS 101.
-CS 260. Business Programming Principles (3) I, II. Programming in a modern higherlevel language; introduction to data structures and pointer variables. Does not apply to major or minor in computer science. Not open to students with credit for CS 205. Prerequisite: MIS 200.

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 in Pascal. Can be repeated to three hours if topics differ. Credit not applicable to major or minor in computer science. Prerequisite: CS 101.
CS 305. Data Structures (3) I. Implementation and applications of commonly used data structures, including stacks, queues, trees and linked lists. Storage management; hashing techniques; searching and sorting. Prerequisites: Grades of C or better in CS 201 and CS 205.
CS 306. Programming Languages (3) I, II. BNF description of programming languages. Significant features of existing programming languages. Structure and comparsion of languages for numeric and nonnumeric computation. Languages studied typically include C, SNOBOL and APL. Prerequisite: CS 201 and CS 205.
CS 307. Computer Organization (3) II. Components of digital computer hardware: flipflops, registers, adders, memory devices. Computer system organization: control structure, addressing, interrupts, I/O. Prerequisite: CS 201.

CS 313. Elementary Mathematical Logic (3). 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 360. COBOL Programming (3) I, II, III. COBOL programming language and techniques for use; report generation; table handling; sorting; sequential and randomaccess data files; debugging techniques; COBOL standards. Prerequisite: Grade of C or better in CS 101 or CS 260.
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 Sciences (1-6). For students working in internship or co-op programs. Written report required. Does not apply to major or minor in computer science. May be repeated to three hours. Students working through the co-op office may earn up to six hours of credit. Prerequisite: consent of department. Graded S/U.
CS 407. Advanced Computer Organization
(3). Evolution of computer systems. Detailed studies of several selected computer organizations; comparison of functional components and overall designs. Prerequisite: CS 307.

CS 408. Operating Systems (3) II. Structure of operating systems. Physical input-output, buffering, interrupt processing. Memory, processor, device, information management; resource management interdependencies. Job and processor scheduling. Concurrent programming. Prerequisites: CS 202 and 205.

CS 409. Language Design and Implementation (3) I. Fundamental concepts of languages. Processors, data, operations, sequence control, data control, storage management, syntax, translation. Prerequisites: CS 202 and CS 306.
CS 410. Formal Language Theory (3) I. 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 consent of instructor.
CS 425. Computer Graphics (3) I, every year; III even numbered 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 201 and 205 and MATH 222.
CS 428. Microprocessor Systems (3) I, even numbered years; III, odd-numbered years. Architecture of microprocessors and microcomputers; I/O and data transmission techniques; addressing techniques, interrupt handling. Detailed study of a specific microcomputer system. Prerequisite: CS 202.

CS 429. Data Communication and Net-
works (3) II. Communication equipment; device protocols; network configurations; encryption; data compression and security. Private, public, local and satellite networks. Prerequisite: CS 202. Prerequisite or corequisite: CS 307.
CS 440. Optimization Techniques (3) II oddnumbered 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 MATH 222.
CS 442. Techniques of Simulation (3) II. Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisites: CS 205 and MATH 247.

Cs 451. Numerical Analysis 1 (3) Study of numerical methods for interpolation and approximation, intergration and differentiation, solution of non-linear equations and systems of linear and non-linear equations. Prerequisites: MATH 332 and CS 101. Not open to students with credit for MATH 451.
CS 452. Numerical Analysis (3) II. 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: CS 101 and MATH 337. Not open to students with credit for MATH 452.

CS 462. Database Management Systems (3) II, III Logical aspects of database processing. Concepts of organizing data into integrated database. Hierarchical, network and relational approaches studied. Prerequisite: CS 360 .
CS 464. Software Development (3) I. Indepth study of all aspects of software development process: user requirements, specifications, design, coding, testing, maintenance, documentation, management. Team development of large sottware project. Prerequisite: C or better in CS 305, or consent of instructor.
CS 480. Seminar in Computer Applications (1-3). Prerequisite: consent of instructor. May be repeated up to six hours.
CS 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 sci-1 ence. May be repeated up to six hours. Graded S/U.

## Computer Science Technology (CST)

$\dagger$ CST 171. Terminal Operations (1) I, II, III. Remote entry terminals, operating-systems, commanding line, operation of local terminal interpreter related to operation of RJE; visits to operation site. Three hours of laboratory. Hours arranged. Prerequisites: enrollment in CST program and permission of instructor.
†CST 231. Techniques of RPG Programming (3) II, III. Basic elements in programming techniques using the RPG II Language. Further work on file organization, table look up, JCL , chaining, records and error analysis. A problem-oriented language to maximize time spent on solutions rather than machine characteristics. Three hours lecture, five hours laboratory. Lab tee.
†CST 232. Systems and Procedures (4) II. Continued study of principles in the design and application of data processing systems in business. Analysis of cost controls, operations research and the integrated management information system. Two hours lecture, seven hours laboratory. Prerequisites: CST 261, or consent of instructor. Lab fee.
†CST 251. Microcomputer Assembly Language (3) I. Microcomputer processor architecture. Machine language coding. Assembly language programming. Interfacing with operating system routines. Prerequisite: CST 260 or CS 260 or CS 205. Lab fee.
$\dagger$ CST 260. Advanced Electronic Data Processing (4) I, II, III. Extended programming techniques using the BASIC language and word processing; accessing files, arrays, systems analysis, system design, string operations, layout forms and structured programming. Two hours lecture, seven hours laboratory. Prerequisite: MIS 200. Lab fee.
†CS 261. Microcomputer Database Systems (3) I, II. Examination of database principles through the use of a package currently in general use on microcomputers. Focus on actual application of software capabilities in realistic situations. Lab fee.
†CST 275. Microcomputer Systems (3) II. Microcomputer hardware selection and installation. Software selection and implementation. Discussion and implementation of communications and networking software. Microcomputer issues. Prerequisite: Programming experience with files.
+CST 290. Experimental Studies in Computer Science (1-3) I, II. Contemporary computer topics, particularly software, as it applies to microcomputer applications. Classroom and CAI materials used for instruction.
$\dagger$ CST 291. Student Intern Program (2) I, II, III. Ten weeks of paid field work in data processing applications under the supervision of a governmental, industrial or private business concern. Prerequisite: permission of instructor.

## Construction Management and Technology (CONS)

(Additional costs for materials in all laboratory courses)
CONS 235. Introduction to Construction (3) I, II, III. Basic concepts of construction techniques used today, including office organization, building construction techniques, surveying, building materials, plan reading and estimating. Four hours of lecture and laboratory. Prerequisite: High school math.
CONS 306. Residential Construction (3) I, II, on demand. Materials and methods of framing and finishing residential and light commercial building. Modern construction systems, codes, quantity take-off, communications, and contracting. Four hours of lecture and laboratory. Prerequisites: CONS 235 and DESN 104.
CONS 318. Construction Surveying (3) I, II, on demand. Detaiied study of surveying, including field work, with equipment such as transit, level, and tape. Emphasis on closure. Four hours of lecture and laboratory. Prerequisite: CONS 235 and MATH 129 or equivalent.
CONS 320. Computer Application in Construction (3) I, II. Computer applications of construction programs in the areas of materials, methods and management. Prerequisites: admission to construction program, CS 101 or equivalent. Junior standing.

CONS 335. Construction Materials and Testing (3) 1,11 . Materials and testing as used in commercial construction. Emphasis on foundation, sitework, soils, and concrete. Four hours of lecture and laboratory. Prerequisite: CONS 235 and DESN 243.
CONS 336. Structural Design (3) II and on demand. Standard methods utillzing shear and bending stresses to size structural members. Emphasis on floor framing systems, columns, and connections in steel, concrete and wood per design codes. Four hours of lecture and laboratory. Prerequisite: DESN 243.
CONS 337. Heating, Ventilating and Air Conditioning Systems (3) II. 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 stressed. Four hours of lecture and laboratory. Prerequisite: ET 191 or CONS 235 or permission of instructor.
CONS 406. Temporary Stuctures (3) II, III on demand. Design, construction and performance, including field measurements, of temporary structures in building construction to include concrete formwork, scaffolding, shores and reshores, retaining wails, and sheet piling. Prerequisites: Structural Analysis, Basic Calculus.
CONS 425. Introduction to Construction (3) I, II, III. Basic concepts of construction teci niques used today including office organiza tion, building construction techniques, surveying, building materials, plan reading and estimating. Four hours of lecture and laboratory. For transfer students only.
CONS 435. Construction Methods and Practices (3) II, on demand. Advanced course in commercial construction emphasizing superintendent's role in planning, inspecting, expediting, and supervising construction operations. Four hours of lecture and laboratory. Prerequisites: CONS 335, CONS 336, TECH 389.
CONS 437. Construction Equipment (3) I and on demand. Equipment factors related to construction operations. Ownership and operating costs and productivity of major construction equipment; frequent down-time items. Four hours of lecture and laboratory. Prerequisite: ET 191 and CONS 235.
CONS 439. Estimating and Cost Control (3)
I and on demand. 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. Four hours of lecture and laboratory. Prerequisite: CONS 235.

CONS 440. Construction Contracting (3) 1 and on demand. Project scheduling and control, bidding theories, safety in construction industry, construction contracts. Four hours of lecture and laboratory. Prerequisite: CONS 439.

ONS 442. Construction Scheduling. (3) II, demand. Application of construction lanagement and technology methods utilizing critical path arrow and network precedence diagrams to analyze, schedule, and computer simulate progress on construction progress on construction projects in a laboratory environment. Prerequisite: CONS 335.

CONS 490. Problems in Construction Technology (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in construction technology. Prerequisite: consent of college.

## Creative Writing

ENG 205. Crraft of Poetry (2) I. Traditional and contemporary poetry; emphasis on way poetry is made. Required for majors and minors in B.F.A. creative writing program. Prerequisite: ENG 112.
ENG 206. Craft of Fiction (2) II. The way fiction works, impulses creating it, how it turns out. Emphasis on style and form in traditional and contemporary fiction as way of understanding meaning. Required for majors and minors in B.F.A. creative writing program. Prerequisite: ENG 112.
©ENG 208. Imaginative Writing (3) I, II. 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.
FidG 209. Creative Writing Workshop (3) I, L. Principles of poetic composition and fiction writing; analysis of contemporary models and group discussion of student's work. May be repeated once.

- ENG 308. Creative Writing (3) I, Il. 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) I, II. Original composition, analysis of contemporary literary models, and emphasis on poetry and fiction. 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.


## Cooperative Education (COOP)

COOP 050. Work Block (0) I, II, III. Work and study in business, industry, service, or government agency in a supervised position related to major. May be repeated. Prerequisite: consent of Cooperative Education Program.

## Criminal Justice (CRJU)

-CRJU 210. Introduction to Criminal Justice (3) I, II. Philosophical, historical, operational aspects of criminal justice agencies and processes in a framework of social control in a democracy. Crime and corrections roblems and response of criminal justice agencies to them.

CRJU 220. Law Enforcement in American Society (3) I. An overview of the police role in moderan American Society; emphasis on problems and issues confronting police and solutions within an organizational framework. Prerequisite: CRJU major.
CRJU 230. Investigations: Theory and Practice (3) II. 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 320. Crime Prevention and Security (3) II. 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) I. Examination of the varied agencies, methods and techniques used in handling deviant youths (historic and contemporary); emphasis on agency effectiveness and perspectives. Prerequisite: CRJU major.
CRJU 395. Workshop-Current Topics (1-3). May be repeated. Any semester. Special topics or issues in criminal justice, primarily of a current or unique interest to students/ practitioners. Prerequisites: CRJU 210, junior standing or permission of instructor.
CRJU 470. Independent Study in Criminal Justice (1-3) I, II, III. Student designs and carries out study or special project in area of interest. Prerequisite: consent of instructor. May be repeated.
CRJU 480. Senior Seminar in Criminal Justice (3) I, II, III. 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) I, II, III. Experience working in a criminal justice agency under both practictioner 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.

## Dance (DANC)

DANC 106. Ballroom Dance I (2) II. Basic skills and knowledges specific to social and ballroom styles; beginning teaching methods.
DANC 111. Folk and Square Dance I (2) I. Basic skills and knowledges specific to folk and square dance styles; beginning teaching methods.
DANC 115. Modern Dance I (2) I, II. 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) I, II. 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 215. Modern Dance II (2) I, II. 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) I, II. 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 six hours. Prerequisite: DANC 120 or permission of instructor.
DANC 224. Dance Performance Workshop
(1) I, II. Experience in choreography and participation as members of the concert group; may be repeated up to six hours. Prerequisites: audition and permission of instructor.

DANC 226. Perspectives in Dance (1) II. Introduction to the art of dance, including current trends in modern dance, classical ballet and vernacular dance form, exploration of the philosophies and aesthetic principles.
DANC 315. Modern Dance III (1) I, II. The third in a graded progression including studio instruction in varying styles of modern dance; emphasis will be placed on horizontal and oblique designs, turns, falls, jumps, leaps and complicated rhythms; may be repeated up six times. Prerequisite: DANC 215 or permission of instructor.
DANC 320. Classical Ballet III (1) I, II. The third in a graded series of progressions, including studies instruction in classical ballet techniques, added difficulty in barre, adagio and allegro work and introduction to pointe work; may be repeated up to six hours. Prerequisite: DANC 220 or permission of instructor.
DANC 325. Theory and Methods of Teaching Dance (1) I. A seminar experience in pedagogical practices, in classical ballet and modern dance forms. Prerequisites: DANC 215, 220, or permission of instructor.
DANC 326. Dance Composition (2) II. 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) I. Studio analysis of the elements of choreography; development of dance compositions, evaluation of compositions, evaluation of compositions; specific assignments of selected problems; may be repeated up to six hours. Prerequisite: DANC 326 or permission of instructor.
DANC 424. History and Philosophy of Dance (3) I. Events, personalities and philosophies of dance from primitive to modern times, including the development of ballet and the emergence of modern dance.

DANC 426. Dance Production (3) II. Classroom and hands-on experience; problems and techniques in dance lighting, sound, costuming, direction, publicity and general management.

## Design Technology (DESN)

(Additional costs for materials in all laboratory courses)
QOESN 104. Design and Engineering Graphics | (3) I, II, III. 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.
†OESN 131. CAD I. Basic Computer-Assisted Drafting (2) II. Introduction to the construction of two-dimensional objects using a Computer-Assisted Drafting System. Prerequisites: DESN 104 or equivalent.
†DESN 132. CAD II. Intermediate ComputerAssisted Drafting (2) I. An intermediate course in computer assisted drafting which instructs the student in how to use a threedimensional system to create and edit twodimensional drawings. Prerequisites: DESN '131 or instructor's permission.

## tDESN 133. CAD III. Advanced Computer-

 Assisted Drafting (2) II. Advanced course in computer assisted drafting which instructs the student in how to use a three-dimensional system to create three-dimensional drawings. Prerequisites: DESN 132 or instructor's permission.†0ESN 202. Mechanical Design (5) II 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.
ODESN 204. Design and Engineering Graphies II (3) I, II, III. Application of design analysis and engineering graphics for design solutlons in a variety of technical disciplines. Analysis of point, line and plane probloms using auxiliary views, revolution methods and true length diagrams. Use of working drawings and graphic standards to communicate design solutions. Four hours of lecture and laboratory. Prerequisite: DESN 104.
$\dagger$ DESN 205. Tool, Die, Jig and Fixture Design (4) II Alternate years. Importance and economics of tooling designed for mass production; topics incluce jigs, dies, design and construction, emphasis placed on die design problems and solutions. Field visits to die stamping plants. Two hours lecture, six hours iaboratory. Prerequisite: DESN 104. Lab fee.

DESN 243. Statics and Strength of Materials (3) I, II. Fundamentals of statics including vectors, centroids, moment of interia, 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.
$\dagger$ DESN 290. Problems in Design Technology (1-3) On Demand. For advanced students wanting 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 301. Architectural Graphics I (3) I, II, III. Architectural design and residential construction; development and use of schematics, sketches, elevations, plan, detall and perspective drawings in planning and designing residential, business and industrial structures. Four hours of lecture and laboratory. Prerequisite: DESN 104 or permission of instructor.
DESN 304. Mechanical Design (3) II odd numbered years. Engineering graphics principles applied in design of structures, machines, production systems. Selection and application of standard mechanical components. Four hours of lecture and laboratory. Prerequisite: DESN 204 and 243.
DESN 305. Technical Illustration (3) II. 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.

DESN 307. Land Planning and Development (3) I, II, on demand. Site planning, zoning, community and subdivision design, utility systems, transportation systems, and other environmental considerations. Four hours of lecture and laboratory. Prerequisites: DESN 104 and TECH 102.
DESN 314. Design and Engineering Graphics I (3) I, II, III. Design as process and engineering graphics as vehicle to communicate problem solutions. Documented design analysis, sketching and instrument drawing applied to design problems involving industry and technology. Four hours of lecture and laboratory. For transier students only. Obtain permission of department.
DESN 404. Computer Aided Design (3) I, II, III. 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, CS 101.
DESN 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: DESN 301.

DESN 450. Architectural Graphics II (3) II Architectural design, commercial and indu trial construction; man-made environment considered through the study of advanced problems in the planning and designing of commercial structures. Development and use of schematics, sketches, elevations, plans, details and construction documents. Four hours of lecture and laboratory. Prerequisite: DESN 301.
DESN 452. Design in Industry (3) I on demand. Systems approach applied to solution of one and two dimensional product design problems; emphasis of feasibility in production and use. Prerequistie: DESN 304 and 404.
DESN 455. Engineering Design (3) II, 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.
DESN 490. Problems in Design Technolegy (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in design technology. Frerequisite: junior standing and consent of adviser. Graded S/U.

## Economics (ECON)

ECON 100. Development of the American Economy (3) I, II. Study from colonial times to present to provide perspective for under standing current economic problems. How Americans lived, changes in population ana Income distribution, agriculture, industry, technological change, labor, transportation, money and banking, foreign trade, role of government.
-ECON 200. Introduction to Economics (3) I, II. Alternative economic goals; economic growth, full employment, price stability, fair income distribution, economic security, economic freedom, consumer sovereignty, efficiency. Recommended for students taking only one ECON course. Does not count toward graduation credit for students receiving a BSBA, BS in Economics or BA in Economics.
-ECON 202. Principles of Economics (3) 1, II. Demand and supply; price theory; product and factor markets; income distribution; comparative systems; current problems and public policy. Recommended before ECON 203. Prerequisite: sophomore standing.

- ECON 203. Principles of Economics (3) I, II. American economy, national income and employment, banking system, monetary and fiscal policy; economic growth and development; international economics. Prerequisite: sophomore standing. ECON 202 recommended.
ECON 302. Intermediate Microeconomic Theory (3) I, II. Theory of demand, of the firm, of production and distribution; economics of pure competition. Factor price determination. Prerequisites: ECON 202 and ECON 203. Normally students should not take both ECON 302 and ECON 304.

ON 303. Intermediate Macroeconomic eory (3) I, II. Concepts and measurement of national income. Analysis of forces determining level of national income and employment, price level and rate of economic growth. Prerequisites: ECON 202 and ECON 203.

ECON 304. Managerial Economics (3) I, II. Application of economic theory to decisionmaking problems of the firm; demand analysis and sales forecasting; theory of production and cost analysis; pricing practices and policies; captial budgeting. Prerequisites: ECON 202 and ECON 203 and STAT 212. Normally students should not take both ECON 302 and ECON 304

ECON 311. Money, Banking and Public Policy (3) I, II. Nature and functions of money and commercial banking system. Means of monetary regulation and control. Role of money and monetary policy in affecting total economic activity. Prerequisites: ECON 202 and ECON 203.

ECON 321. Labor Economics (3) I, II. 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 Unemployment (3) II. Structural and cyclical unemployment, alternative responses to poverty, evaluation of training programs and welfare schemes grequisites: ECON 202 and ECON 203

ON 331. Public Finance (3) I, II. 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) | or II. Economic functions of state and local governments; revenue sources, expenditures, debt and intergov ernmental fiscal relations. Prerequisites: ECON 202 and ECON 203 or consent of in structor.

ECON 351. International Trade and Finance (3) I. Structure and regulation of foreign trade, mechanics of international finance, new elemerts in U.S. foreign trade. Prerequisites: ECON 202 and ECON 203.
ECON 400. Mathematics for Economists (3) 1. Elementary mathematical methods and basic applications to economic theory. Not recommended for students who have had MATH 231 or above.

ECON 401. Mathematical Economics (3) II. 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) II. Statistical techniques used to measure economic data and to test validity of theoretical moclels. requisites: STAT 212 and ECON 400, or ivalent; or consent of instructor.

ECON 404. Business Conditions (3) II. Components of gross national product, statistical measurement of business fluctuations. Determinants of the level of economic 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) II. Objectives, means and analysis of monetary and fiscal control; effect on total economic activity. Prerequisite: ECON 303 or ECON 311.
ECON 422. Labor Relations Policy (3) I. Economic effects of government policy towards organized labor. Collective bargaining implications of pertinent federal and state legislation. Prerequisite: ECON 203.
ECON 423. Labor-Management Relations (3) II. Employer-employee relations; collective bargaining process; conciliation, mediation, arbitration procedures. Prerequisite: ECON 203.

ECON 424. Income, Wages and Welfare: Analysis and Policy (3) On demand. Theories of income and wage determination. Effect of employers and labor organizations and economic effects of various income policies. Prerequisites: ECON 202 and ECON 203.

ECON 436. Economics of Public Expenditures (3) I. Purposes and economic effects of governmental expenditures; budgeting techniques and their effect on resource allo cation. Prerequisites: ECON 202 and ECON 203.

ECON 441. Real Estate Finance and Capital Markets (3) II. Market factors affecting residential property values, private sources of funds, role of governmental agencies in residential markets. Prerequisties: ECON 202 and ECON 203. Not for arts and sciences credit.
ECON 447. Economics of Regulated Industries (3) II. Historical development of public regulation of certain industries, including transportation; methods of regulation and evaluation of public policy towards regulated industries. Prerequisites: ECON 202 and ECON 203.

ECON 451. International Economics (3) I. Theory of international economics; international trade as factor in national income; significance of international investment, public policies to promote trade, international economic cooperation. Prerequisite: ECON 351 or consent of instructor.

ECON 452. International Monetary Economics (3) II. Alternative international monetary systems; emphasis on present system. Prerequisites: ECON 311 and ECON 351, or consent of instructor.
ECON 454. Economic Development (3) I. Obstacles to and current efforts for promotion of economic growth in emerging nations. Prerequisite: ECON 202 or consent of instructor.

ECON 460. Regional Economics (3) I. Location and land use theories, central place theory, tools of regional analysis, regional growth theory, and regional public policy issues. Prerequisites: ECON 202 and ECON 203

ECON 462. Urban Economics (3) II. 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) II. Forces that lead to bigness and resulting impact of bigness on competition; public policy, including regulation, designed to cope with business size. Prerequisite: ECON 202 or consent of instructor.
ECON 472. Comparative Economic Systems (3) II. 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) I. 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) I, II. 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)

-EDCI 100. College Reading/Learning Skilis (2-3) I, II, III. Designed to improve basic reading/learning habits of college stu-dents-vocabulary, 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.
-EDCI 101. Speed Reading. (2) II, III. 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.
-EDCI 121. Transition Course (1) I, III. Transition to University life through orientation to University facilities and options; activities . stressing study skills and personal growth.

EDCI 202. Introduction to Teaching (2) I, II. One and one-half hour on-campus 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 enrollment. Prerequisites: Recommended that students have completed at least two semesters of undergraduate course work. Required in all teacher certification programs except those offering an approved alternative. Grade of C or better required to be eligible for student teaching. Cross-listed in EDFI. C/F hours: 50.
EDCi 348. Literacy and the Young Child (3) I, II, 111. Young child's acquisition of oral and written fanguage, special emphasis on roles of child development, social interaction, culture and environment. Prerequisites: EDFI 302 or consent of instructor. C/F hours: 30.
EDCI 349. Fundamentals of Reading (3) I, II , III. Basic understandings and instructional implications of reading acquisition and development from linguistic, social, psychological, cognitive, historical and curricular perspectives. Prerequisites: EDFI 302 or consent of instructor.
EDCI 350. Planning and Implementing Instruction in the Classroom (3) I, II. Course demonstrates interdisciplinary nature of media, methodiology and classroom management in curriculum. Practicum experience in a selected classroom allows student to demonstrate his/her ability to apply this knowledge in a structured, supervised learning environmnet. MEP and Project AIM students only. Prerequisite: Admission to elementary education program. C/F hours: 30.

EDCI 351. Social Studies in the Elementary School (3) I, II, III. The teaching of social studies in K-8. Objectives, content learning experiences, instructional resources, evaluation of teaching, learning in the classroom. Musi obtain a minimum grade of $C$ prior to student teaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.

EOCI 352. Mathematics Methods for the Elementary Schooi (3) I, II, III. Teaching contemporary mathematics in grades K-8. Objectives, curriculum, materials of instruction, methods of teaching and evaluation. Minimum grade of C required prior to student teaching. Prerequisite: admission to elementary education program. C/F hours: 30.

EDCI 353. Science in Elementary Schools (3) I, II, III, Teaching of science in grades K8. 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 .

EDCI 355. The Teaching of Reading in the Elementary School (3) I, II, III. 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 EDCl 349. Must obtain a minimum grade of C prior to student teaching. C/F hrs.: 30.
EDCI 356. Language Arts in the Elementary School (3) I, II, III. Teaching the language arts, emphasis on language acquisition, developmental procedures in guiding growth in oral and written expression, listening, literature and handwriting. Minimum grade of C required prior to student teaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.
EDCI 357. Kindergarten-Primary Curriculum and Methods (3) I, II, III. 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 EDCI 348. C/F hrs: 30.

EDCI 359. Individualization of Reading Instruction in Classroom (3) I, II, III. Use of diagnostic measures and materials to aid teacher in developing student's learning and reading capabilities. Behavioral objectives, organiztion of classroom, sequencing skills, developing own materials and diagnostic teaching. Prerequisite: EDCl 355. C/F hrs: 25.

EDCI 360. Content Reading for Specialized Subject Areas (2) I, II, III. Designed for preservice teachers seeking certification 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 EDFI 302. C/F hrs: 30.
EDCI 365. Computer Utilization in the Classroom (3) I, II, III. Impact of the microcomputer on educational methods and applications in the classroom. Evaluation and modification of software. Introduction to instructional programming through tracing and hands-on experience.
EDCI 370. General Teaching Methods in Secondary Schools (2) I, II. General processes and issues that form the basis of instruction in all content areas; development of strategies and teacher behaviors associated with effective instruction; critical elements of planning, implementing, evaluating instruction, application of those elements in clinical setting. Prerequisites: Grade of C or better in EDCI 202 or EDFI 202 and Grade of $C$ or better in EDFI 302, or consent of instructor. C/F hrs: 35.
EDCI 371. English in Secondary Schools (3) I, II. Philosophies of, experiences in and methods of teaching English in secondary schools. Prerequisites: ENG 380, ENG 381, EDCI 370, EDFI 302 and senior standing. Grade of C or better required. C/F hrs: 40.
EDCI 372. Speech in Secondary Schools (3) I, II. Principles, objectives, instructional and resource materials, and methods for teaching of speech in secondary schools. Prerequisites: EDFI 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) I, II. Principles of seconc 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/FI 202, EDFI 302 and junior standing. C/F hrs: 30.

## EDCI 374. Mathematics in Secondary

Schools (3) I, II. Principles, objectives, curriculum, materials and methods of teaching mathematics in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. Grade of C or better required. C/F hrs: 40.
EDCI 375. Science in Secondary Schools
(3) I, II. Principles, objectives, curriculum, instructional and resource materials, and methods of teaching science in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. Grade of C or better required. C/F hrs: 40.
EDCI 376. Social Studies in Secondary Schools (3) I, II. Principles, objectives, curriculum, instructional and resource materials, and methods of teaching social studies in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. Grade of C or better required. C/F hrs: 40.
EDCI 378. Journalism Methods for High School Teachers (3) I, II. Principles, objectives, curriculum, materials, methods of teaching mass media in secondary schools.an. Prerequisites: EDCI 370, EDFI 302 and st. nior standing. Grade of C or better required. C/F hrs: 40.
EDCI 395. Workshop on Current Topics (13) 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 420. Developmental Reading in the Content Areas (3) I, II, III. Orients the teacher to the developmental reading process as it applies to the various subject matter areas, including diagnosis and prescription, vocabulary, word analysis, comprehension and study skills. Prerequisite: EDFI 302, content methods course or consent of instructor.
EDCI 423. Investigations in the Teaching of Mathematics (3) I, II, III. Research in mathematics education as it affects 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 demand. 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 zanguage 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 353 recommended.
EDCI 429. Teaching Foreign Language Skills in the Schools II (3) II. Advanced-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: EDCI 373. C/F hrs: 30.

EDCI G471. Directing Speech Activities in High School (3) III. Administration of secondary cocurricular speech programs in forensic events, mass media and theatre.
Prerequisite: B.S. in speech education or EDCI 372, IPCO 204, THEA 241, 243 and 341.

EDCI 490. Problemis in Education (1-3). On demand. For advanced student wanting to conduct intensive study of selected froblems 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) I, II. 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.
EDCI 497. Student Teaching (1-10) I, II. 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 repeatéd. Graded S/U.

## Educational Adminstration and Supervision (EDAS)

EDAS 395. Workshop on Current Topics in EDAS (1-3) On demand. Study, readings, activities, projects, development of materials related to needs of EDAS undergraduate. Topics vary semester to semester. May be considered for professional growth. Graded S/U.

EDAS 409. Organization and Adminstration of Education in American Society (3) I, II, III. Local, state and federal involvement in American education as related to society. Teacher interrrelationships; classroom management, school finance, legal issues, job placement and professional relations, teacher evaluation, school-community relations, current educational issues and politics of education as related to societal control. Prerequisites: EDFI 302 and junior status. C/F hrs: 20.
EDAS 413. Administration of School Discipline and Student Behavior Problems (3) On demand. Student behavior problems and school discipline in educational setting; methods for analyzing problem behavior, comprehensive positive process approach to dealing with student behavior problems and school discipline.
EDAS 460. Workshop in Teacher's Role in Staff Problems (1) On demand. Acquaints teachers in preparation and beginning teachers with staff problems in public schools; teacher's role related to other teachers, supervisors and administrators.
EDAS 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) I, II. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for eiementary 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.
EDAS 497. Student Teaching (1-10) I, II. 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.
EDAS 498. Workshop in Community Relations (3) On demand. Available teaching resources in the community and how they can be utilized efficiently in teaching; production of teaching units, resource files, other materials which effectively implement use of community resources.

## Educational Foundations and Inquiry (EDFI)

EDFI 202. Introduction to Teaching (3) I, II.
One and one-half hour on-campus 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 enrollment. Prerequisites: Recommended that students have completed at least two semesters of undergraduate course work. Required in all teacher certification programs except those offering an approved alternative. Grade of C or better required to be eligile for student teaching. Cross-listed in EDCI. C/F hours: 50.
EDFI 302. Educational Psychology (3) I, II, III. 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) I, II, III. Behavior and development of children through elementary school age. Prerequisite: PSYC 201. EDFI 302 recommended.

EDFI 395. Workshop on Current Topics (13) 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. May be repeated on approval of adviser.
EDFI 402. Assessment and Evaluation in Education (3) I, II, III. Assessment and evaluation applied to instructional procedures; construction of assessment tools; interpretations of assessment results. Prerequisites: EDFI 302. C/F hrs: 20.
EDFI 408. Education in a Pluralistic Society (3) I, II, III. Critical interdisciplinary examination of selected policies and assumptions about education. Development of a dynamic, personal philosophy of education in the context of a multicultural world. Prerequisites: EDFI 302 amd junior standing. C/F hrs: 10.
EDFI 411. 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.
EDFI 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.

EDFl 415. Spaceship Earth Seminar (3) On demand. Integrating, synthesizing, environmental education seminar for upperclass and graduate students. Using inquiry approach, participants 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 critically analyzing current educational practices, program and policies of urban schools. Resource peopie used. Library and field research required. Prerequisite: commitment to, or at least serious interest in, urban education.
zOFI 429. Assessment of Young and Atypical Children (3) !, II, III. Concepts and principies of measurement and instruments used in assessing young and atypical children; integration of measurement and instruction. Prerequisite: 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 equi-错 in education.
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.
EOFI 482. Direct Study of the Child (1-5) On demand. Part of behavior analysis program. A child studled using predetermined framework.
EDFI 490. Problems in Education (1-3) On demand. For advanced student wanting to conduct intensive study of selected probiems in education. May be repeated to 6 hours; undergraduate credit only. Prerequisite: permission of instructor.
EDFI 492. Student Teaching (1-10) I, II. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary andfor kindergarten-primary certification. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.
EDFI 497. Student Teaching (1-10) I, II. Classroom teaching under supervision on fulf-day basis. Conferences and seminars supplernent 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.

## Electronic Technology

(Additional costs for materials in all laboratory courses)

- ET 191. Energy, Power, Instrumentation and Control (3) I, II, III on demand. Principles of automated systems, how machines work and emphasizing energy, power, measurement and controlling devices. Four hours lecture and laboratory. Lab fee at Firelands.
-ET 240. Electricity (4) I, III 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. Prerequisite: TECH 121 or MATH 120 or equivalent. Lab fee at Firelands.
-ET 241. Electronics (4) II, III 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. (Three hours of lecture at Firelands.) Prerequisite: ET 240 or permission of instructor. Lab fee at Firelands.
\&ET 244. Communication Circuits (3) II odd numbered years. Communication circuits including teiecommunications and amplifiers; amplifier design, components and applications, oscillators, communication components and principles of receivers and transmitters. Four hours of lecture and laboratory. (Five hours of lecture and laboratory at Firelands; course is worth 4 hours.) Prerequisite: ET 241 or permission of instructor.
ET 245. Communications Systems (3) I even numbered years. Appiications 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. Four hours of lecture and laboratory. (Five hours of lecture and laboratory at Firelands; course is worth four hours.) Prerequisite: ET 241.
$\dagger$ ET 247. Electrical Measurement (3) II. 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.
†ET 248. Industrial Equipment and Controls (3) 1. Automation and industrial control principles. Study and application of typical devices such as time control switches, motor controls, servo-mechanisms, photo-electric switches. Two hours of lecture and three hours of laboratory. Prerequisite: ET 241. Lab Fee.
$\dagger$ ET 249. Digital Electronic Components and Systems (4) !. Basic digital system logic analysis and synthesis techniques; number systems and codes; Boolean algebra and circuit minimization techniques. Characteristics of modern digital integrated circuit components. Three hours of lecture and three hours of laboratory. Prerequisite: ET 191. Lab fee.
$\dagger$ ET 250. Real Time Microcomputer System* for Industrial Control (4) I. Principles and practices of interfacing microcomputers in the real time environment of industrial process control. Organization and operation of computers, various process control modules ( $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ ), signal conditioning and converting, and design of process control systems. Two hours of lecture and four hours of laboratory. Prerequisite: ET 442 and CS 101 or equivalent. Lab fee.
$\dagger$ ET 290. Experimental Studies in Industrial Education and Technology (1-3) I, II, summer. Experimental study projects, seminars and workshops dealing with topics in industrial technology.
ET 300. Electric Machinery and Controls (3) I or II, III on demand, even numbered years. Electric motors, generators, assorted controls; operating characteristics, selection, testing of direct current single and three-phase machinery. Four hours of lecture and laboratory. Prerequisite: ET 191.
ET 357. Electrical Power Transmission (3) II. Power converters, polyphase distribution systems including conductors, transformers, voltage regulation, protection, control, phasing and metering. Electrical codes, methods and materials used in electric installation. Problems in eiectrical construction work. Four hours of lecture and laboratory. Prerequisite: ET 191.
ET 358. Digital Electronics (4) I, II on demand. Digital integrated circuit devices with medium and large scale applications. Digital families, their functions, use of specification sheets, discussion of digital system. Five hours of lecture and laboratory. Prerequisite: ET 241 or PHYS 201.
ET 392. Energy, Power, Instrumentation and Control (3) i, II, II on demand. Principles of automated systems, how machines work and emphasizing energy, power, measurement and controiling devices. Four hours lecture and laboratory.
ET 441. Instrumentation (3) II, III on demand. Industrial instrumentation, measuring mechanical, fluid and electric phenomenon, transducers, recorders, indicators and controllers. Principles underiying their design and applications. Four hours of lecture and laboratory. Prerequisite: ET 241 or consent of instructor.
- ET 442. Digital Computer Analysis (3) II, III on demand. Organization and construction of mini-micro computers, machine language programming, interfacing, including developing logic design, seiection of integrated circuits, assembly, testing, and system diagnostic testing procedures. Four hours of lecture and laboratory. Prerequisite: ET 358 or consent of instructor.
ET 443. Solid State Devices (3) I, ill on demand. Semiconductor devices, operational amplifiers, SCR, unijunction and FET transistors. Theory of operations, manufacturing procudures, parameter specifications, performance, testing and applications. Four hours of lecture and laboratory. Prerequisite: ET 241 or consent of instructor.

453. Digital Computer for Process Con(3) II, III on demand. Basic concepts, erminology, 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. Four hours of lecture and laboratory. Prerequisite: ET 358 or CS 307, CS 101, MATH 125.
ET 490. Problems in Electronic Technology (1-3) on demand. For advanced students wanting to conduct intensive study of selected problems in electronic technology. Prerequisite: consent of College.

## English (ENG)

ENG 100. English as Foreign Language (4) I, II. For student whose native language is not English. Development of skills in listening, speaking, reading and writing standard American English. Placement on basis of proficiency tests. Though it may be necessary for student to repeat course, only four hours of credit counted toward graduation. Graded S/U.
ENG 110S. Developmental Writing (3) III only. Development of skills in sentence structure, edited American English usage, mechanics, paragraph and short essay corlstruction. Placement through departmental pretesting. Students must complete course and departmental proficiency examination successfully to receive $S$ and to be eligible to enroll in ENG 111; students who receive No Record must enroll in ENG 110. No re than 6 hours from ENG 110S, ENG ; ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.
-ENG 110. Developmental Writing (5) I. 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 500 words for college-educated audience.
Placement through departmental pretesting. Student must complete course and departmental proficiency examination 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 thar 6 hours from ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.
-ENG 111. Introductory Writing (3) I, II. Basic expository writing; emphasis on organizing and developing coherent essay of approximately 500 words for college-educated audience. Placement through departmental pretesting or unsuccessful completion of ENG 110. Students must complete course and departmental proficiency examination 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.
-ENG 112. Varieties of Writing (3) I, II. Expository writing including research paper, emphasis on analytical writing based on
wal reading. Placement through depart-
ftal pretesting or successful completion ENG 110 or ENG 111. Student must complete course and departmental proficiency examination successfully to receive passing grade. Graded A, B, C/No Record.

T®ENG 150. Response to Literature (3) I, II. 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.

I $\$$ ENG 200. Introduction to Literature: various topics, Short Story, Literature and Film, Science Fiction, Fantasy, Women in Literature, Black Literature $(2,3)$ I, II. A general education course with emphasis on humanistic themes and basic literary concepts. Some topics for 2 hours, most for 3. Can be repeated once if topics differ. Not accepted for English major or minor. Prerequisite: enroliment in or completion of ENG 112.
-ENG 201. Literature and Writing (4) I, II. Literary interpretation and criticism of poems, short stories, novels and plays. Study 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.
-ENG 205. Craft of Poetry (2) I. Traditional and contemporary poetry; emphasis on way poetry is made. Required for majors and minors in B.F.A. creative writing program. Prerequisite: ENG 112.
© ENG 206. Craft of Fiction (2) II. The way fiction works, impulses creating it, how it turns out. Emphasis on style and form in traditional and contemporary fiction as way of understanding meaning. Required for majors and minors in B.F.A. creative writing program. Prerequisite: ENG 112.

- ENG 207. Intermediate Writing (3) I, II. 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.
- ENG 208. Imaginative Writing (3) I, II. Explorations 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) I, II. 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) II. Same amount of writing as in ENG 207; deals entriely with film theory, films, film scripts, novels on which films are based and film reviews. Equivalent of ENG 207. Prerequisite: ENG 112.
- IENG 261. Masterpieces of World Literature (3) I. Major works of world literature since 1400 , including such authors as Homer, Confucius, Aeschylus, Sophocles, Plato, Aristophanes, Virgil and Dante. Prerequisites: any ENG literature course or ENG 112.
IENG 262. Masterpieces of World Literature (3) I, II. 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) I. Major authors in the context of major literary traditions from Anglo Saxon times through the Restoration; introduces historical approach to the study of literature. Prerequisites: any ENG literature course or ENG 112.
IENG 265. English Literature Survey, 1700 1900 (3) II. 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.

- IIENG 266. American Literature Survey to the Civil War (3) I. 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.
ๆ $\downarrow$ ENG 267. American Literature Survey, Civil War to World War I (3) I, II. 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) I, II. 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.
ENG 269. Canadian FIction (3) II. Short stories and novels by leading Canadian authors from English-speaking areas, with major emphasis on recent writers. Titles are chosen to represent the diversity of expression from various regions, with some attention to women's concerns as well as Indian, Eskimo and ethnic views. Prerequisite: any ENG literature course or ENG 112.
ENG 272. Literature of Minorities (3) I. Minority literary expression: aims, methods and accomplishments. Prerequisite: any ENG literature course or ENG 112.
ENG 290. Language Study (3) II. 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 gorup or individual basis.
- ENG 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. Prerequisite: any ENG literature course and ENG 112. May be repeated once if themes differ.
- ENG 301. Shakespeare (3) I, II. Representative comedies, history plays, tragedies and traglcomedies, and sonnets. Designed for student with no previous Shakespeare courses. Prerequisite: any ENG literature course and ENG 112.
ENG 306. Bible (3) I. English Bible as literary classic; its development and influence on literary culture. Prerequisite: 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. Prerequisite: any ENG literature course and ENG 112.
-ENG 308. Creative Writing (3) I, II. Imaginative writing, fiction and poetry. Class discus sion and individual conferences. Required for creative writing major. Prerequisite: B or better in ENG 209 or permission of instructor. May be repeated once.
- Eng 320. Modern Poetry (3) 1. 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. Prerequisite: any ENG literature course and ENG 112.


## -ENG 322. 19th-Century American Fiction

 (3) I. Short stories and novels. Includes Poe, Hawthorne, Melville, Twain, James and Crane; minor writers including regional humorists. Prerequisite: any ENG literature course and ENG 112.- ENG 323. Modern Fiction (3) I, II. Emphasis 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. Prerequisite: any ENG literature course and ENG 112.
- ENG 325. Modern Drama (3) I. Great plays by Ibsen, Chekhov, Shaw, O'Neill, and others; dramatist's insight into human condition. Prerequisite: any ENG literature course and ENG 112.
-ENG 330. Contemporary Poetry (3) II. Cross section of English and American poetry and European poetry in translation, mostiy written since 1945; writers and works representing major trends in development of poetry. Required for creative writing major. Prerequisite: any ENG literature course and ENG 112.
- ENG 333. Contemporary Fiction (3) II. 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. Prerequisite: any ENG literature course and ENG 112.

ENG 335. Contemporary Drama (3) II. Plays since 1945 by American, British and European dramatists (in translation); new techniques, thematic trends, and aspect of human condition revealed through plays. Prerequisite: any ENG literature course and ENG 112.
©ENG 342. Children's Literature (3) I, II. Reading and evaluation of books for children from nursery school through junior high school; novels, folklore, informational literature, poetry and bibliographical sources. Not open to student with credit for LEM 342. Prerequisite: any ENG literature course and ENG 112.
ENG 343. Literature for Adolescent (3) I, II. Reading and evaluation of books for junior and senior high school students; emphasis on fiction; also biography and other nonfiction, folklore, myth, poetry. Prerequisite: any ENG literature course and ENG 112.
ENG 380. Introductory English Linguistics (4) I, II. 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) I, II. 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. Prerequisite: any ENG literature course and ENG 112.

ENG 388. Introductory Technical Writing (3). 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. Prerequisites: junior standing.
ENG 389. Professional Editing (3) I. 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) I. The Canterbury Tales, Troilus and Criseyde, and such dreamvision poems as The Book of the Duchess and lyrics, in Middle English. Prerequisite: 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. Prerequisite: any ENG literature course and ENG 112.

ENG 403. 16th-Century English Poetry are Prose (3) Alternate years. Renaissance I: ature, including great sonnets, early novels, Spenser's Arthurian epic. Skelton's satires and Marlowe's erotic love poetry. Prerequisite: 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. Prerequisite: 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. Prerequisite: any ENG literature course and ENG 112.
ENG 407. Writer's Workshop (3) I, II. Original composition, analysis of contemporary literary models, emphasis on poetry and fiction. 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 poerns and prose. Prerequisite: any ENG literature course and ENG 112.
ENG 410. English Restoration and 18thCentury Drama (3) Alternate years. Restoration features heroic drama, pathetic tro dy and libertine comedy; 18th-century sentimentality and laughing comedy. Stage and theatre design, historical and social background. Prerequisite: any ENG literature course and ENG 112.
ENG 411. 18th-Century Writers (3) Alternate years. Prose and poetry from Restoration, Augustan and Johnsonian periods; neoclassical and preromantic writers; Dryden, Swift, Pope, Johnson, Boswell. Prerequisite: any ENG literature course and ENG 112.
ENG 415. English Novel: Defoe to Austen (3) Alternate years. Defoe, Richardson, Fielding, Smollett, Sterne, Austen and contemporaries. Prerequisite: any ENG literature course and ENG 112.
ENG 416. 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. Prerequisite: any ENG literature course and ENG 112.
ENG 417. Romantic Writers (3) Alternate years. English poetry and prose from 17891832; Blake, Wordsworth, Coleridge, Byron, Shelley, Keats. Prerequisite: any ENG litera ture course and ENG 112.
ENG 418. Victorian Writers (3) Alternate years. Prose and poetry of Carlyle, Mill, Tennyson, Browning, Arnold, the Pre-Raphaelite poets and successors. Prerequisite: any ENG literature course and ENG 112.
ENG 419. Modern British Writers (3) Ait nate years. British writers from 1900 to 1945: Joyce, Lawrence, Conrad, Forster, Woolf, Yeats, O'Casey, Shaw, Auden. Prerequisite: any ENG literature course and ENG 112.
420. Modern American Writers (3) II. American writers from 1900 to 1945: Pound, Stein, Frost, Stevens, O'Neill, Hemingway, Fitzgerald, Faulkner. Prerequisite:' any ENG literature course and ENG 112.

ENG 423. Women's Studies in Literature (3)

1. Topics such as women poets or women novelists, depiction of women in works by men, feminist criticism; primarily British and American writers. May be repeated once if topics differ. Prerequisite: any ENG literature course and ENG 112.
ENG 430. American Transcendentalism (3) Alternate years. Major writers of Transcendentalist movement and social and philosophical background of their time; Emerson and Thoreau. Prerequisite: 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. Prerequisite: any ENG literature course and ENG 112.

ENG 442. Studies in Children's Literature
(3) Alternate years. Problems in children's
literature; history, criticism, trends, individual authors, types. Not open to student with credit for LEM 442. 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, analytical. Prerequisite: ENG literature course and ENG 112.
470. Directed Readings in Language and Literature (1-4) I, II. For advanced student or small group of students to work independently in specialized subject not covered by existing courses. Prerequisite: 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.
ENG 480. Studies in English or American Literature (3) Intensive study of author, literary school, genre or theme. May be repeated once if topics differ. Prerequisite: 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. Prerequiste or corequisite: ENG 290 or 380.
ENG 483. Advanced Writing (3) I. Expressive, expository and argumentative writing. For anyone interested in developing rhetorical skills such as invention, arrangement and style in discourse. Especially recom-
ried for students who plan to write as of their careers. Prerequisite: junior. standing.

ENG 484. The Writing Process (3) I, II. 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) I, II. Advanced study of theory of and research in documentation. Student produces a proposal for funding and a full-length, portfolioquality manual or report. Prerequisite: ENG 388 or approval of instructor.
ENG 489. Internship in Technical Writing (1-9) I, II, III. Full-time technical writing internship for 15 weeks in industrial publications office under supervision of professional publications director. Available only for students with exceptional skill in technical writing, with approval and recommendation of technical writing staff. Prerequisites: ENG 488 and approval of technical writing staff. Graded S/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 (1 and 3) I, II. Student selects faculty member to guide work on topics such as major author, theme, period, genre or linguistics. Student works over the first semester of his/her senior year on research module and topic selection (1 hour credit); research and writing done during the second semester ( 3 hours credit). One to three students may work with one faculty member. Prerequisites: senior standing and 20 hours of English.

## Environmental Health (ENVH)

ENVH 301. Public Health and Sanitation (3) I. 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 (4) I. Basic concepts in ergonomics, noise, vibration, temperature and radiation. Protection from chemical and biological agents. Three hours lecture, three hours lab. Prerequisites: CHEM 126 or 136 , PHYS 201 or 211 or instructor's consent.
ENVH 303. Principles of Water Quality (4) I. Properties of water and biological, chemical and physical pollutants. Relationship between use and quality. Management strategies. Three hours lecture, three hours lab. Prerequisites: CHEM 126 or 136, BIOL 205 or instructor's consent.

ENVH 304. Air Quality Pollution, Measurement and Control (4) I. Principles of air quality control. Sampling and analysis methods; pollution sources and control strategies. Three hours lecture, three hours lab. Prerequisites: CHEM 126, PHYS 201 or instructor's consent.
ENVH 305. Water Supply and Pollution Control (4) II. Water sources, requirements and treatment for potable use, and wastewater treatment and disposal.' Three hours lecture, three hours lab. Prerequisites:
CHEM 126 or 136 or instructor's consent.
ENVH 306. Environmental Regulation, Organization and Administration (3) II. 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 (4) II. Recognition of occupational hazards, including safety practices, fire prevention, material handling, machine guarding and personal protective equipment.
ENVH 308. Industrial Ventilation (2) I. Principles of ventilation; design and evaluation of general dilution and local exhaust systems. One hour lecture, three hours lab. Prerequisites: PHYS 201, MATH 124, 128 or 130.

ENVH 405. Hazardous Material Management (3) II. Principles of managing hazardous waste and material, disposal, treatment, emergency response and cleaǹup. Consideration of environmental toxicology and risk assessment. Prerequisite:
CHEM 126 or 136.
ENVH 406. Epidemiology and Biostatistics (3) II. Principles and methods of epidemiological investigation. Statistical methods for population evaluation. Epidemiological investigation techniques and design. Prerequisite: SOC 369 or equivalent.
ENVH 470. Special Problems in Environmental Health (1-2) I, II, III. Student designs and carries out study or special project in area of interest. Prerequisite: program director's permission. May be repeated.
ENVH 491. Practicum (1-4) I, II, III. 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. Graded S/U. May be repeated up to 4 hours.

## Environmental Studies (ENVS)

ENVS 101. Approaches to Environmental Studies (2) I, II, III. 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.
ENVS 301. Environmental Problems (3) I. 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.

ENVS 400. Special Topics in Environmental Studies (1-3) I, II, III. 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 maximum of 6 credits, if topics differ.
ENVS 401. Environmental Strategies (2) II Investigation of the strategies used by various organizations, institutions and government agencies relating to current environmental issues. Models, games 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 Statements (3) II. History, philosophy and legal authority for environmental impact statements and assessments. Specific documents are analyzed and the development of evidential information and techniques for environmental arbitration are included Practice in writing an environmental impact statement is given using one or more current issues as a focus.

## Environmental Health Technology (ENVT)

tENVT i10. Basic Microbiology (3) II. Fundamentals of microbiology; emphasis on morphology, growth, genetics and pathogenic microorganisms and their control. Two hours lecture, three hours lab. Lab fee.
tENVT 121. Environmental Regulation (2) II. Basic foundations of environmental law; historic precedents, current legislation, environmental impact statements and how to testify in a court of law.
†ENVT 160. Environmental Sanitation (2) 1. Communicable disease control, individual water and sewage treatment, and solid and liquid waste disposal. One hour of lecture and three hours of laboratory and field siudy.
†ENVT 211. Biological and Chemical Examination of Water (6) II. Quantitatlve and qualItative analysis of bacteria, algae, common aquatic organisms and chemical composition of water, wastewater and bottom materials. Four hours of lecture and six hours of laboratory. Prerequisite: one semester of laboratory CHEM or consent of instructor, Lab fee.
+ENYT 222. Water and Wastewater Treatment (4) 1. Introduction to water supply and treatment and wastewater treatment and disposal. Three hours of lecture and four hours of laboratory and field study. Prerequisites: one semester of laboratory CHEM, PHYS 201 and MATH 120, or consent of instructor. Lab fee.
tENVT 223. Wastewater Package Treatment (1) II. Operator personnel and inspectors of package type extended aeration plants the basic concepts of routine operations, maintenance, process control and safety. Twen-ty-eight hours of lecture.
†ENVT 225. Environmental Health and Protection (4) II. Basic concepts in noise, vibration, illumination effects of temperature and radiation uses and protection. Three hours of lecture and three hours of laboratory and field study. Prerequisites: one semester of laboratory CHEM, PHYS 201 and MATH 120, or consent of instructor.
$\dagger$ ENVT 226. Institutional Health and Sanitation (2) II. Elementary inspection techniques of marinas, housing, schools, temporary residences, trailer parks, migrant labor facilities, and food and milk protection. One hour of lecture and three hours of field study. Prerequisites: ENVT 160 and 280, or consent of instructor.

## †ENVT 260. Air Pollution Surveillance and

 Control (4) I. Introduction to the fundamentals of industrial toxicology, air pollution and industrial hygience surveillance, monitoring, analysis and control. Three hours of lecture and three hours of laboratory and field study. Prerequisites: One semester of laboratory CHEM, PHYS 201 and MATH 120, or consent of instructor. Lab fee.†ENVT 261. Industrial Ventilation (2) II. Principles of ventilation; includes design and evaluation of general, dilution and local exhaust ventilation systems. One hour of lecture and three hours of laboratory. Prerequisite: ENVT 260 or consent of instructor.
†ENVT 270. Occupational Safety and Hy-
giene (3) l. Regulatory considerations, evaluation and controi of industrial hazards, personal protective equipment, employee assistance programs, accident prevention and investigation, and emergency planning. Three hours of lecture.
$\dagger$ ENVT 272. Hazard Recognition (2) II. Hazard recognition in the work environment with special emphasis on construction and factory operations. One hour of lecture and three hours of field study.
†ENVT 280. Food Manager Certification (1) I. Microbiology, inspection techniques, safety analysis, prevention of food-borne diseases, Ohio food service laws and planning and equipment review. Twenty-eight hours of lecture.
$\dagger$ ENVT 290. Experimental Studies in the Environment (1) I, II, III. Environmental study projects, workshops, seminars and computer simulation classes dealing with air, water or land resource utilization and planning.
$\dagger$ ENVT 291. Student Field Experience (3) I, II, III. Eleven weeks of field work in environmental health under the supervision of a regulatory agency or a private industrial concern and the director of environmental health at Firelands College. Prerequisite: permission of supervisor.

## Environmental Technology (ENVR)

ENVR 421. Industrial Pollution Control (3)
II. Air and water pollution control regulations as they apply to industry. Functioning and selection of parameters of industrial pollution control equipment and selected case studies.

ENVR 490. Problems in Industrial Environsare ment Technology (1-3) On demand. For $\approx$ vanced students wanting to conduct intensive study of selected problems in industrial environment technology. Prerequisite: consent of college.

## Ethnic Studies (ETHN)

IETHN 101. Introduction to Ethnic Studies (3) I, II, III. Introduction to important views about ethnic groups and ethnic relations in America. Included are ethnic group reviews needed to understand the effect of ethnicity upon the individual, family, church, education and employment.
ETHN 110. Introduction to Latinos in the United States (3) 1, II. Latino experience in the United States; cultures, life experiences and the limited political, education, socloeconomical opportunities of this minority.
ETHN 120. Introduction to Black Studies (3) I, II, III. Introduction to the black experience with special emphasis upon but not limited to the cultural experience of the United States.

ETHN 205. European Ethnic Americans (2) I, II. Immigration experience of several European groups in the U.S. and their cultural adaptation thereafter. Specific groups to be studied might include Irish, Polish, Italian, Jewish and German Americans.

ETHN 210. Chicanos in American Society (3) II, III. The Mexican-American culture and its place in American society. Topics include family, migration, religion and others.
ETHN 215. History of the Mexican Amertcans (3) I. History of Mexican Americans from the Texas Revolution, Mexican American War to the present.
IETHN 220. African Literature (3) I. Creatlve and critical writing in the English language by writers of African descent. Also writers from the Caribbean.
ETHN 300. Topics in Ethnic Studies (3) I, II, III. On demand. Special ethnic topics of interest to students provided as a part of regular offering.
ETHN 304. Ethnic Groups in America (3) I, II, III. Anthropological survey of some of the ethnic and regional groups in America. Discussion of both their traditional and contemporary cultures. Prerequisite: SOC 101 or SOC 231, or lower-level ETHN course.
ETHN 306. Ethnic Women in America (3) 1, II, III. Study of women from different ethnic groups in America from a social science perspective; includes an examination of the portrayal of ethnic women on TV and in fiction.
ETHN 308. Origins of Latino Culture (3) I, II. Origins of Latino culture and its contributions to art and folklore.
ETHN 310. Mexican Culture (3) II. 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 cul-. ture. ,
ETHN 312. West African Literature and Ne. tionalism (3) II. Contributions made by West African writers to the rise of national consciousness in West Africa.

ETHN 315. Novels of Black Liberation (3) II, III. A study of artistic, historical, social and cultural influences on the new world contemporary Black novel.

ETHN 395. Workshop on Current Topics (13) I, II, III. Comprehensive study of America's ethnicity with special emphasis upon the represented ethnic groups in northwest Ohio.
ETHN 410. Mexican-American Social
Thought (3) II. The development of the Mexican philosophical thought as related to the Chicano ideologies, their significant parallels withiry their comtemporary periods and institutions.
ETHN 415. Novels of Chinua Achebe (2) II. Study of Chinua Achebe, one of the foremost writers from English-speaking West Africa.
ETHN 470. Readings in Ethnic Studies (13) I, II, III. 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) I, II, III. 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 (2-8) I, II, III. Placement of students in a variety of agencies or businesses, which are relevant to the study of ethnicity or resparch/study outside of Bowling Green. Frerequisites: junior standing; 6 hours of upper division ETHN courses relevant to the study; and permission of instructor. Graded S/U.

## Finance (FIN)

-FIN 200. Personal Finance (3) I, II, III. For non-business majors. Personal financial management; borrowing sources and costs; auto, property and life insurance; homeownership financing; personal investment strategy, and long-range personal financial planning. No credit allowed toward BSBA degree.
$\star$ FIN 300. Business Finance (3) I, II, III. Acquisition of assets and funding in business enterprise. Fundmentals of financial analysis, working capital management, and investment and financing decision-making. Prerequisites: ACCT 222, ECON 202., MIS 200 and STAT 212.
FIN 420. Risk \& Insurance Analysis (3) I, II, III. Analysis of situations of non-speculative risk. Emphasis is on risk indentification, measurement and handling for both the business firm and the individual. Theory underlying approaches to eliminating, reducing, retaining and transferring pure risk is discussed. Prerequisite: grade of C or better in FIN 300.
FIN 422. Risk Management (3) II. Nanagement of corporate risk through identificaon, measurement and control of loss גposures utilizing primarily non-insurance methods. Case problems and supplemental text assignments. Prerequisite: grade of C or better in FIN 420.

FIN 424. Insurance Company Management (3) I. Insurance company functions; types of insurance carriers; marketing and underwriting problems; agency/carrier relationships; reinsurance, rate-making, financial analysis and regulation. Prerequisite: grade of C or better in FIN 300.

FIN 426. Life and Employee Benefits Management (3) I. Encompasses studies of social security; group and individual life insurance; group and individual health insurance; pensions; other employee benefits. Prerequisite: grade of C or better in FIN 420.

FIN 428. Property and Liability Insurance (3) II. Protection provided by and legal aspects of fire, casualty, transportation, workmen's compensation, multiple-lines and corporate surety-ship insurance coverages. Prerequisite: grade of $C$ or better in FIN 420.

FIN 430. Investment Analysis (3) I, II, III. Security evaluation theory. Presentation of the functions and operations of securities markets, appraisal of investment risks of specific securities; valuation and suitability of specific securities for investment; appropriateness of securities for inclusion in investment portfolios. Prerequisite: grade of C or better in FIN 300.
FIN 435. Investment Management (3) I, II, III. 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 430.
FIN 440. Financial Markets (3) I, II, III. Nature and function of money and capital markets, with emphasis on interest rate determination and forces shaping structure of financial markets, including issues of regulation and control. Prerequisite: ECON 203 and grade of C or better in FIN 300.
FIN 445. Bank Management (3) I, II, III. 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 440.

FIN 447. Real Estate Management (3) III. 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 two required coures for licensing exam. Prerequisite: grade of $C$ or better in FIN 300.
FIN 450. Corporate Finance (3) I, II, III. Advanced practices of financial management are developed. Financial models used in de-cision-making and their application to major areas of business finance are emphasized. Prerequisite: grade of C or better in FIN 300.

FIN 455. Financial Management (3) I, II, III. The case method is used to apply decisionmaking procedures to realistic problems in financial management. Prerequisite: grade of C or better in FIN 450.

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)

F\&N 207. Nutrition, Health and You (3) I, II. A non-technical course. Application of fundamental principles of nutrition in selection of adequate diet for optimal health; current nutrition controversies. Not open to home economics education, dietetics, or food and nutrition majors.
F\&N 210. Fundamentals of Food Science (3) I, II. Art and science of foods. Scientific 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) I, II. 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) II. Techniques of preparation and presentation germaine to food service catering specialists. Laboratory fee. Prerequisite: F\&N 210 or equivalent. Professional liability insurance required.

F\&N 307. Nutrition (3) I, II. Principles of nutrition with applications to planning dietaries for individuals under different conditions. Two hours of lecture and two hours of laboratory. Prerequisites: CHEM 116 or 308 or consent of instructor. Lab fee.
F\&N 326. Foods of Other Cultures (2) I, II. Geographic, economic, political, religious and cultural influences on dietary patterns in selected regions of the world. Includes variety of experiences with cultural and ethnic foods. Lab fee.
F\&N 331. Quantity Food Production (3) I, II. 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.
F\&N 333. Evaluation of Foodservice Facilities Layout and Equipment (3) I. Interpretation and evaluation of layout, design and space requirements of contemporary foodservice facilities. Includes development of work analysis, prospectus, equipment requirements, atmosphere and work environments for efficient utilization of human and monetary resources. Two hours lecture, one two-hour lab.
F\&N 335. Principles and Practice of Food Protection (3) I. Introduces the principles involved in identification and prevention of the causes of food contamination. The role of public health regulations will be emphasized as they relate to microbiologic control measures in the various food service operation. Could lead to NIFI Certification.

FaN 431. Experimental Foods (3) I, II. Exparimental 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) 11. Topics in normal nutrition, nutrient interrelationships, and nutritional assessment. Analysis of current literature and validity of content. Prerequisite: BIOL, 332 and CHEM 116 or equivalent.
F\&N 433. Principles of Foodservice Managemenः (3) I, II. 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) I. Diseases and dietary modifications they necessitate. Determination of rationale for inclusion or exclusion of specific foods in prescribed diets; clinical dietitian's roles. Two hours of lecture and four hours of clinical experience. Prerequisite: F\&N 432. Professional liability insurance required.

F\&N 435. Nutrition for Infants and Young Children (3) I. 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 or F\&N 307. Professional liability insurance required.
F\&N 436. Nutrition for the Aging (3) II. Psychological, physioiogical and socio-economic factors affecting dietary practices and nutritional needs of the elderiy in group and individual situations. Two hours of lecture and two hours of clinical experience. Prerequisites: F\&N 207 or F\&N 307, and BIOL 332, or consent of instructor. Professional liability insurance required.
F\&N 437. Adyanced Foodservice Managemens (3) II. 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: AHE 489 or consent of instructor.

Fan 438. Applied Clinical Nutrition (3) II.
Principles of dietetics practice germane to specialized nutrition problems. Expansion of clinical theory introduced in F\&N 434. Prerequisite: F\&N 434 or consent of instructor.

## Prench (FREN)

Students who had French in high school should take the placement test during summer preregistration or prior to enrollment in a course. Credit will not be given for course work more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.

ITFREN 101. Elementary French I (4) I, II.
Beginning oral-aural study; attention to grammar. Four class periods and scheduled oral practice each week.
I†FREN 102. Elementary French II (4) I, II. FREN 101 continued. Four class periods and scheduled oral practice each week. Prerequisites: FREN 101 or one year of French in high school.
T $\rightarrow$ FREN 201. Intermediate French I (3) I, II 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.
ITFREN 202. Intermediate French II (3) I, II. FREN 201 continued. Three class periods and scheduled laboratory each week. Prerequisite: FREN 201 or three years of French in high school.
IFREN 211. French Culture Series III (3) I, II. Development of reading comprehension in French using cultural materials concerning France and Francophone areas. Conducted in English. Prerequisite: FREN 102 or FREN 112, or two years of French in high school. Cannot be taken for credit if 201 credit has been received.
qFREN 212. French Culture Series IV (3) I, II. FREN 211 continued. Prerequisite: FREN 201 or FREN 211 or three years of French in high school. Cannot be taken for credit if 202 credit has been received

## FREN 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) I. Intensive grammar review for development of oral and written skills. Prerequisite: FREN 202.
FREN 352. French Composition and Conversation II (3). Continued development in oral and written expression. Prerequisite: FREN 202.
FREN 353. French Diction (2). French pronounciation; syllabification, stress, linking, intonation. Prerequisite: FREN 202.
FREN 355. French Linguistics (3) I. 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 Middle Ages to 1850. introduction to techniques of literary analysis.Prerequisite: FREN 202; FREN 351 or 352 strongly recommended.
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 202; FREN 351 or 352 strongly recommended.

FREN 371. French Civilization I (3). Political, social, intellectual, artistic life of Fren people from prehistoric times to Industria. Revolution; study of geographic and ethnic divisions. Prerequisite: FREN 202.

FREN 372. French Civilization II (3). FREN 371 continued; political, social, intellectual, artistic life of modern France and Francophone areas. Prerequisite: FREN 202.

FREN 389. Contemporary Touraine (3) III. Individual research projects culminating in term paper dealing with some aspect of region of Touraine. Prerequisite: FREN 202. Offered only abroad.
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 Diction (3). Continued study of pronunciation, stress and intonation. Prerequisite: FREN 353.
FREN 454. Translation Workshop (3). Intensive practice in transiating 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 | (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). Advance 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. Prerequisite: consent of department chair and instructor.
FREN 474. Eighteenth Century French Literature (4). Literature of the Enlightenment. Prerequisite: 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 Studies (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 Litepature (4). Contemporary French and Francophone novel, theatre and poetry. Prerequisite: FREN 362.

## Geography (GEOG)

ITGEOG 121. World Geography: Eurasia and Africa (3) I, II. Geographical analysis or selected topics in Asia, Africa and Europe. Ecological aspects of cultural, political and economic problems. Open only to freshmen and sophomores.

T GEOG 122. World-Geography: Americas
ind Pacific (3) I, II. Geographical analysis of selected topics in Americas and Pacific world. Ecological aspects of cultural; political and economic problems. Open only to freshmen and sophomores.
-GEOG 125. Weather and Climate (3) I, II: Atmospheric elements and controls; earthsun relationships, weather components, weather prediction, and climatic types and disribution. Two one-hour lectures, one-hour demonstration-discussion.
-GEOG 126. Vegetation and Soils (3) I. Physical geography; distribution and classification of vegetation and soil types using maps and profiles. Two one-hour lectures, one-hour discussion-demonstration.
-GEOG 127. Land Form Development and Distribution (3) II. 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) I, II. Physical processes of atmosphere and relationships to daily weather patterns. Two one-hour lectures, one two-hour laboratory.
-GEOG 225. World Economic Geography (3) I, II. Ways in which people have developed natural and human resources to meet economic needs; which result in different economic patterns and landscapes.
If GEOG 230. Cultural Geography (3) I, II. Geographic influences upon population disfibution, 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) II. 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. Introduction to Map Communication (3) I. Practical map planning and construction; basic cartographic theory and use of drafting materials and equipment.
GEOG 32\%. Thematic Cartography (3).II. Thematic mapping of quantitative data and map reproduction; with emphasis on isarithmic and choropleth maps. 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.
PEOG 325. Population Geography (3) II. spacial 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) II. 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 elderly.
GEOG 331. Principles of Conservation
Ecology (3) I, II. 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) I. 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 world.
GEOG 335. Geography of Human Migrations (3) I. Causes and consequences of selected historical and contemporary human migrations, both international and internal; spatial analysis of characteristics of migration streams and places of origin and destination.
GEOG 337. American Indian (3) II. 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. Soviet Union (3) II. Description and interpretation of geographic factors related to present development.
GEOG 342. Eastern Europe (2) On demand. Nations of eastern Europe; description and interpretation of geographic factors related to present development.
GEOG 343. Western Europe (3) I, II. Geographic aspects in understanding presentday status of countries of Western Europe.
GEOG 344. Eaśtern Asia (3) I. Problems and factors influencing development of countries of eastern Asia; emphasis on China and Japan.
GEOG 345. Southern and Southeast Asia (2) On demand. Countries extending from Philippine Islands to Pakistan; different cultures; utilization of resources, future opportunities and problems of development.
GEOG 346. Middle East (3) I: Contemporary problems of Middle East; petroleum development and impact on soclety, food needs, population problems, and spatial characteristics of religious and linguistic groups.
GEOG 347. Africa (2) On demand. Geographic factors influencing development of African countries.

GEOG 349. Latin America (3) I. Problems related to contemporary development of societies of Latin America.
-GEOG 350. Anglo-America (3) II. Problems and factors influencing development of U.S. and Canada.
GEOG 351. Ohio (3) I, II. 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.
GEOG 402. Regional Economic Geography' (3)! or II. Problems of subnational area units in county and regional planning, poverty pockets, delivery of services; emphasis on individual projects.
GEOG 404. Climatology ${ }^{\prime}(3)$ I or II. Fundamentals and applications; drought, water resources, human comfort, health, architecture; short- and long-term climatic changes.
GEOG 405. Meteorology and Society (3) II. Interrelationships between human beings and the atmospheric environment; sociological and economic implications of air pollution and acid rain, snow, floods, drought and temperature extremes; urban effects. Prerequisite: GEOG 125, GEOG 213 or GEOG 303.
GEOG 410. Field Techniques (3) On demand. Instruction and practice in techniques of field data collection and interpretation. Physical and cultural elements of landscape investigated; emphasis or rural land use systems.
GEOG 411. Theoretical Cartography (3) AIternate years. Analysis of cartographic research. Four hours per week; two hours lecture or discussion and two hours of laboratory. May be repeated once upon consent of instructor: Prerequisite: GEOG 322 or consent of instructor:
GEOG 412. Use and Interpretation of Aerial Photographs (3) I. 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) II. Principles and procedures used to obtain information about natural and cultural features through imagery derived from photographic, multispectral and side-looking airborne radar sensor systems. Prerequisite: GEOG 412 or consent of instructor.
GEOG 422. Computer Mapping (3) II. Map construction and display of geographical data using the computer. Prerequisite: CS 101 or consent of instructor.
GEOG.425. Food Resources and Rural Development (3) On demand. Changes and trends in availability, production and consumption of food resources; related rural problems such as pollution; zoning, recreating and future expectations of rural areas by urban populations.
GEOG 426. The American City (3) I. Internal organization of cities. Ecological and land use problems, ghetto development, ur-ban-economic base, urban sprawl and intraurban delivery of services.

GEOG 427. Genetic and Regional Analysis of Physical Landscapes (3) On demand. Selected aspects of physical geography (excluding meteorology and climatology); indepth analysis of man's natural environment. Prerequisites: GEOG 126 and GEOG 127 or consent of instructor.

GEOG 433. Soil Classification and Map-
ping (3) II. 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.
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 451. Historical Geography of AngloAmerica (3) On demand. Reconstruction of natural environment of U.S. and Canada; how different groups perceived environment and used available resources; emphasis on how man has modified earth's surface.
GEOG 452. Geopolitics (3) II. Geographic factors influencing development of states and interrelationship of these countries.
GEOG 460. Hydrology (3) II. Analysis of the earth's water resources. Topics inciude surface water systems (drainage basins, rivers, lakes and reservoirs), distribution, supply, demand, quality and hydrologic extremes. Prerequisite: GEOG 125 or consent of instructor.
GEOQ 471. Oceanography (3) On demand. Geographic aspects of oceanography.
GEOG 489. Internship (3) I, II. 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)

- GEOL 100. Introduction to Geology (3) I, II, III. The earth; physical and historical geology; including economic, social and environmental aspects. Not open to geology majors and minors. Credit not given for both GEOL 100 and GEOL 101 or GEOL 104.

GEOL 101. Earth Science (3) I, II, III. Survey of eart' 's geology, oceanography, meteorology and place in the universe. Credit not given for both GEOL 101 and GEOL 100 or GEOL 104.

Ti\$GEOL 104. Physical Geology (4) I, II, III. Introduction to the science of geology, common rocks and minerals, physical processes operating on and in the earth, land forms and geologic structures. Three lectures and one two-hour laboratory. Credit not given for both GEOL 104 and GEOL 100 or GEOL 101. Lab fee.
It GEOL 105. Historical Geology (4) I, II, III. Introduction to the history of the earth and its inhabitants. Three lectures and one twohour laboratory. Lab fee.
q $\$$ GEOL 205. Geologic History of Man (3) I. Evolution, distribution, way of life and geologic history of prehistoric hominids.
GEOL 300. Mineralogy (4) I. Minerals; the chemistry, crystallography, identification, classification, association and genesis of the rock-forming and economic materials. Two lectures and two two-hour laboratories. Prerequisite or corequisite: GEOL 104 and CHEM 125 or CHEM 135.
GEOL 301. Petrology (5) II. Identification, classification and origin of igneous, sedimentary and metamorphic rocks. Common rock associations, suites and facies will be examined utilizing megascopic, microscopic and $x$-ray techniques. Three lectures and two two-hour laboratories. Field trip is required. Prerequisite: GEOL 300.
GEOL 304. Geology of the National Parks (4) II, alternate years and III. U.S. regional geology as illustrated in the national park system. Three lectures and one two-hour laboratory. Prerequisite: GEOL 100 or GEOL 104.
GEOL 305. Life of the Geologic Past (4) III only. Study of fossils and the factors that influence the progressive devalopment of life through geologic time. Three lectures and one two-hour discussion-demonstration laboratory. For nonscientists; not open to geology majors in the B.S. program; not open to students with credit for GEOL 315. Prerequisite: GEOL 100 or GEOL 101 or GEOL 105. Lab fee.
GEOL 306. Rocks and Minerals (4) Summer only. Non-technical study of earth materials as illustrated by gems, minerals, and rocks. Two lectures and two two-hour laboratories. Not open to geology majors in B.S. program. Credit not given for GEOL 306 and GEOL 300. Prerequisite: GEOL 100 or GEOL 104. Lab fee.
GEOL 309. Structural Geology (4) I. Identification and interpretation of geologic structures; mechanical principles of deformable bodies, fracture and faulting, flow and folding; elementary concepts of tectonics. Three lectures and one three-hour laboratory. Prerequisites: GEOL 301, PHYS 201 or PHYS 211, and MATH 129 or equivalent; or consent of instructor.
GEOL 310. Geomorphology (3) II. 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. Prerequisite: GEOL 104.
GEOL 315. Invertebrate Paleontology (4) I. Classification, evolution and paleoecology of the fossil invertebrates. Three lectures and one two-hour laboratory. Field trips required. Not open to students with credit for GEOL 305.

GEOL 316. Sedimentation and Stratigraphu. (4) II. Classification and origins of sedimer tary rocks; depositional environments; stra igraphic principles and procedures. Three lectures and one two-hour laboratory. Prerequisites: GEOL 105 and 301.
GEOL 322. Human Environmental Geoiogy (3) I. Aspects of geology critical to wise use of human environments. One half-day field trip required. Credit not given for both GEOL 322 and 420. Prerequisite: GEOL 104.
GEOL 401. Economic Geology (4) I Alternate years. Classification and genesis of metallic ore deposits illustrated by study of classic areas. Three lectures and one twohour laboratory. Prerequisites: GEOL 309 and GEOL 301.
GEOL 402. Computer Applications in Geology (3) I. Methods for the retrieval, extraction and manipulation of geological information and numerical data using computers. Prerequisites: minimum of 9 credit hours in GEOL and knowledge of FORTRAN (students may co-register for CS 280); or consent of instructor.

GEOL 411. Optical Mineralogy (2) I. First half of semester only. Optical properties and methods of studying natural substances with a polarizing-light microscope. Two two-hour discussion-laboratories. Prerequisite: GEOL 300.
GEOL 412. Advanced Historical Geology (3) II. Regional and stratigraphlc geology, including classical areas in North America and Europe. Prerequisites: GEOL 315 and GEOL 316.
GEOL 418. Geology of Ohio (3) I. Alternate yaers. 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 GEOL 104 and GEOL 105.

GEOL 419. Vertebrate Paleontology (3) II. Alternate years. 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 GEOL 101 or GEOL 105 or BIOL 104.
GEOL 420. Environmental Aspects of Geology (3) I. Contributions of geological concepts to environmentals concerns. One halfday field trip required. Credit not given for both GEOL 322 and 420. Prerequisites: GEOL 104 and GEOL 310 or consent of instructor.
GEOL 423. Tectonics (3) II. Tectonic elements of the continents and ocean basins interpreted within the framework of plate tectonics. Prerequisites: GEOL 309 and GEOL 316.
GEOL 424. Igneous and Metamorphic Petrology (4) I. Classification, mode of occurrence and genesis of igneous and metamorphic rocks. Three lectures and one three-hour laboratory. Prerequisite: GEOL 301.

GEOL 425. Microinvertebrate Paleontology II. Alternate years. Fossil bicroinvertebrates; morphology, phylogeny, classification and identification. Two twohour discussion and laboratory sessions. Prerequisite: GEOL 315 or consent of instructor.
GEOL 431. Introduction to Geochemistry (3) I. Principles of mass action, acidity, solubility and introductory thermodynamics; applications to natural systems. Prerequisite: CHEM 126.

GEOL 432. Geophysics (3) II. Earthquake seismology; gravity, magnetic and temperature fields of Earth; plate tectonics. Prerequisites: GEOL 309, PHYS 211, and MATH 131; or consent of instructor.
GEOL 433. Stratigraphic Chorology (3) I. Biochronology, evolution and distribution of fossii faunas through geologic time. Two lectures and one two-hour laboratory. Prerequisites: GEOL 315 and GEOL 316.
GEOL 440. Geologic Remote Sensing (4)। alternate years. 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 472. Marine Geology (3) II. Alternate years. Processes, sediments and organisms of modern environments; interrelationships and expression in rock record. Prerequisite: consent of instructor.
EOL 473. Field Experience in Marine Geology (1) II. Alternate years. Field experience in marine environments as related to geologic record. Prerequisite or corequisite: GEOL 472, consent of instructor.

GEOL 475. Workshop in Seismology (1) I, II. Supervised program in theory of seismol: ogy, operation of seismological observatory, interpretation of seismic records. May be repeated to four hours. Prerequisite: consent of instructor. Graded S/U.

GEOL 480. Seminar in' Geology (2) I, II. Study of selected topic. May be repeated to four hours. Prerequisite: consent of instructor.

GEOL 483. Coastal Marine Geology (3) 'ill only. Inshore and nearshore geological processes, sedimentation patterns and landform development. Prerequisites: physical and historical geology. Taught at Gulf Coast Research Labortaory under their number GEOL. 431 :
GEOL 490. Geological Problems (1-3) I, II, III: Individual work for student who has shown proficiency and marked degree of independence in work. May be repeated to four hours. Prerequisite: consent of instructor.
GEOL 493. Field Experience (1-6) III 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 id GEOLIO5, or GEOL 304 and consent instructor. Lab fee.

GEOL 494. Field Geology (6)'Ill 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 316, and consent of instructor. Lab fee.

GEOL 496. Field Course in Modern Marine Environments (1-6) ill only. Field study of shallow-water marine environments. Prerequisite: consent of instructor.
GEOL H499. Honors Thesis (3) I, II, III. 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 take the placement test during summer preregistration or 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.
IGERM 101. Elementary Language and CuIture I (4) I, II. Cultural approach to beginning language study in the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.
ПGERM 102. Elementary Language and Culture II (4) I, II. GERM 101 continued. Four class periods and laboratory practice each week. Prerequisite: GERM 101, or by placement.
! $G$ GERM 117. Beginning Conversational German I (2) I. 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) II. Basic conversational German continued. Prerequisite: GERM 117 or GER 101 or permission of instructor. Not open to students who have begun or completed GERM 201.
ПGERM 201. Intermediate German I (3) I, II. ;, Grammar review; development of the four skills. Three class periods and laboratory practice each week. Prerequisite: GERM 102, or by placement.
IGERM 202. Intermediate German II (3) I, II. GERM 201 continued. Three class periods and laboratory practice each week. Prerequisíte: GERM 201, or by placement.
GERM 215. German Culture and Civilization (3) I, II. Cultural-historical treatment of the social, intellectual and artistic life of the German-speaking peoples from medievai times to World War II. Lectures, audio-visual presentations and readings in English.
GERM 216. Contemporary German Life (3) I. Lecture-reading course on contemporary East and West Germany. Rebuilding and development of the two German states from 1945 to the present: political, economic and social systems, geography, education, mass media, inter-German relations, patterns of daily living. Lectures and readings in. English.

GERM 217. Intermediate Conversational
German I (2) I. Practice in conversation at the intermediate level. Suggested as supplemental course to accompany GERM 201, or may be taken independently. Not open to students who have begun or completed GERM 317. Prerequisite: GERM 118 or 102 or permission of instructor.
GERM 218. Intermediate Conversational German II (2) II. GERM 217 continued. Not open to students who have begun or cómpleted GERM 318. Prerequisite: GERM 217 or 201 or permission of instructor.
GERM 231. Intermediate Reading (3) I, III. Development of reading skills in expository prose from various fields (scientific, technical, commercial and others). Vocabulary building, analysis of syntax and grammar for reading. Prerequisite: GERM 102 or equivalent.
IIGERM 260. Modern German Literature in Translation (3) II. Readings in English of internationally known aüthors from Germanspeaking countries. May include Kafka, Mann, Hesse,' Brecht, Grass and others. Course does not count towards a German major or minor.
GERM 300. Introduction to Study Abroad (1) II. Preparation for study abroad. Limited to Salzburg and German Exchange Program participants. Course does not count towards German major or minor. Graded S/ U.

GERM 311. Introduction to Literature: 20th Century (3) I. 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) II. Major authors and representative works of the 18th and 19th centuries; literary movement as reflection of future; development of reading skills. Prerequisite: GERM 202, or by placement.
GERM 317. Composition and Conversation I (2-4) I. 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) il. 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) II. Theory and practice of German pronunciation; introduction to phonetic principles. Prerequisite: GERM 102.
GERM 331. Workshop in Translation (1-3) II. 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. Prerequisite or corequisites: GERM 317 and GERM 311 or 313 or 331.
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) AIternate years. Selected major representatives of modern German drama from Hauptmann to the present. Prerequisites: GERM 311 or 313, GERM 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 cuitural
phenomena and the film.
GERM 416. Contemporary Austria (3) I. Offered in AYA Salzburg Program. Survey of political and social life, education, mass media, the arts and cultural iife in present-day Austria. Guest lectures, discussion sessions, field trips. Prerequisite: admission to AYA program.
GERM 417. Advanced Composition and Conversation (2-4) l. Development of increased facility in speaking and writing. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 318 or permission of instructor.
GERM 418. Stylistics, Syntax and Structure of German (2-3) II. 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.) Prerequisite: GERM 318 or permission of instructor.
GERM 419. German Drama Workshop (3) On demand. Practical advanced linguistic training trhough active participation in theatrical projects; advanced phonetics; methods of utilizing dramatic productions as part of foreign language instruction. Prerequisite: GERM 417 or permission of instructor.

GERM 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 GERM 331.

## GERM 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 differences between languages through error analysis. General practice; individual projects. May be repeated to six hours. Prerequisites: six hours from GERM 317 and/or GERM 318 and/or GERM 331.GERM 480. Selected Topics in German (14) 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.
GERM 482. Introduction to Germanic Linguistics (3) On demand. Derivation of modern Germanic languages from Proto-IndoEuropean. Classification and history of the Germanic language group. Development of the German language to New High German. Prerequisites: GERM 318 or permission of instructor.
GERM 491. Studies in German (1-3). Independent study project for advanced students in German. May be repeated to six hours with different projects. Prerequisite: arrangement with instructor and consent of department chair prior to registration.

## Gerontology (GERO)

GERO 100. Seminar in Gerontology (1-5) I, II. Interdisciplinary study of special topics in gerontology. May be repeated by consent of the director of the gerontology program. Prerequisite: consent of instructor.
GERO 101. Introduction to Gerontology (3) I, II. Study of aging from a multidisciplinary perspective. Focus on the way people are thought about, evaluated and treated on the basis of their age.
GERO 301. Aging and Ethnicity in the United States (3) I, II. Examination and analysis of cultural diversity and ethnicity in the older population residing in the United States.
GERO 400. Special Topics in Gerontology (1-3) On demand. Independent study on subject matter related to gerontology not otherwise offered. May be repeated. Prerequisite: consent of program director.
GERO 405. Cross-Cultural Aging (3) I, II. 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 (2) I. 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) II. A capstone course for prospective nursing home administrators $\dagger$. 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 (2) I, II. Funding potential, methods, design and proposals in human service agencies. Prerequisite: senior standing.
GERO 440. Seminar in Gerontology (1-5) I, II. Interdisciplinary study of special topics in gerontology. May be repeated by consent of the director of the gerontology program. Prerequisite: consent of instructor.
GERO 470. Special Topics in Gerontology (1-3) On demand. Independent study on subject matter related to gerontology not otherwise offered. May be repeated. Prerequisite: consent of program director.
GERO 491. Practicum in Gerontology (2-10) I, II, III. 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 S/U.
GERO 493. Practicum Seminar (1). I, II, III. Analysis of problems and experiences en- wo countered in practicum. Prerequisites: permission of program director and GERO 43:. Graded S/U.

## Health and Human Services (HHS)

HHS 100. Seminar in Health and Human
Services (1-5) On demand. Interdisciplinary study of special heaith or human service topics. May be repeated. Prerequisite: consent of dean's office.
HHS 440. 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.
REHB 401. Introduction to Rehabilitation Counseling (3). Characteristics and principles of the rehabilitation process; disabilities and agencies serving the disabled.

## Health Education (HED)

HED 209. Advanced Concepts in Personal and Community Health (3) I, II. Detailed study of factors that influence personal and community health in a contemporary society. Primarily for health education and physical education students.

- HED 215. Personal Wellness (3) I, II, III. 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.

4ED 216. Introduction to Health Education
3) I, alternate summers. Introduction into 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) II. Health topics of special interest and importance to women. Open to all students. Prerequisite: HED 338 highly recommended.
HED 310. Planning and Assessing Health Promotion Programs (3) I. Overview of the theories, princlples and methods involved in the planning and evaluation of health promotion programs. Prerequisites: HED 215 and 216.

## HED 313. Cardiopulmonary Resuscitation

 and Advanced First Aid and Safety (3) I, II, III. 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. Fee $\$ 7.50$.- HED 314. Instructors Advanced First Aid and Emergency Care (1) II. 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.


## HED 315. Cardiopulmonary Resuscitation

 Recertification (1) I, II, III. Basic life support For victim of sudden cardiac arrest and/or espiratory failure. Satisfactory completion may result in American Red Cross Certification. Participation in skill practice required. Prerequisites: junior standing and prior CPR Certification. Fee $\$ 7.50$.HED 338. Concepts of Human Sexuality (3) I, II, III. 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) I, II. Knowledge regarding the ambiguity of drugs in society. Physical, psychological and social ramifications of drug use/abuse will be discussed. Prerequisites: HED 209 and junior standing or consent of instructor.
HED 346. Health Education for the Elementary School Teacher (3) I, II, II. Content and techniques for teaching personal and community health in the elementary school.

## HED 348. Instructional Techniques in

 Health Education K-12 (3) I, III on demand. Principles, planning methods, materials, resources and human relations of teaching health. C/F hrs.: 4.HED 362. Instructors Drivers Education (3) I, III. 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 exising driver education programs. Fee $\$ 15$. Prerequisites: junior standing and driver's litense. C/F hrs.: 5.

HED 393. Practicum in Health Education (2-5) I, II, III. 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 5 credit hours. Prerequisites: HED 313, and HED 348 or 310.

HED 395. Workshop on Current Topics (1-3) 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) I, II, III 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: junlor standing. C/F hrs.: 20.HED 462. Advanced Instructors Driver Education (3) I, III. 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 346. Fee: \$20. C/F hrs.: 15.
HED 470. Independent Study in Health Education (1-3) On demand. An in-depth 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)
I, II. Discussion of issues and problems faced by the health educator. Prerequisites HED 393 and senior standing.
HED 492. Student Teaching (1-10) I, II. 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 requirement must be met. C/F hrs.: 300. May be repeated. Graded S/U.
HED 497. Student Teaching ( $1-10$ ) I, II: 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.

## History (HIST)

- IHIST 151. World Civilizations (3) I, II. Comparative study of selected Western and Asian civilizations in terms of how and why economic, social, political and intellectual factors shaped and defined history of ancient and medieval worlds.
qHIST 152. The Modern World (3) I, II. Comparative study of how and why selected economic, social, political and intellectual revolutions of the modern world have transformed and are shaping contemporary European and non-Western cultures

HIST 180. Asian Civilizations (3) I, II. Interdisciplinary study of Asian civilizations, such as China, Japan, Korea and India; emphasis on how and why socio-economic, political and intellectual developments shaped traditional cultures of Asia and transformed modern Asia into the fastest growing region of the world.
ITHIST 205. Early America (3) I, II. Selected constitutional, intellectual, political and social developments that defined and shaped American between its first European settlement and the end of the Civil War and Reconstruction.
7 HIST 206. Modern America (3) I, II. How and why selected economic, intellectual, political and social developments transformed post-Civil War America and shaped 20thcentury American society.
-HIST 240. Historical Perpectives on American Culture (3). Interdisciplinary study of the historical development of selected aspects of American culture with emphasis on the relationships between historical events and cultural expression. Recommended for students electing history/American studies for general education or group requirements (same as AMST 240). May be repeated.

- HIST 291. Studies in History (1-3). Introductory approaches to history. Content and theme vary with instructor. For students electing history for general education or group requirements.
HIST 301. American Military History (3) I, II. Development of American military institutions, policies, strategy, tactics from American Revolution to present.
HIST 302. Crime, Poverty and Violence in 19th Century (3) II. Development of criminal justice systems in England, France and U.S. Impact of differing national cultures on emergence and development of professional police in these countries.
HIST 303. World War II (3) I. How and why Atlantic-European, Mediterranean and Pacif-ic-Asian theaters of war produced global dynamics in three acts: 1. 1939-1942-German and Japanese expansion, innovative tactics; 2. 1942-43-mobilization and technology, propaganda and intelligence, air and sea war; 3. 1944-45-U.S. and U.S.S.R.
counterexpansion, grand strategy and politics of war.
HIST 304. The Bible as History: The New Testament (3) II. Based on modern Biblical scholarship; analyzing the New Testament as a historical medium 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) I. Major problems relating to text, content, and context of Old Testament as historically interpreted in modern Biblical scholarship; keyed to demonstrating authenticity of evidence, integrity of explanation and continuity of experience found in Bible.
-HIST 306. History of Ohio (3) I, II.
Precolonial background, early exploration, settiement; Northwest territory; Ohio in French and Indian War, American Revolutlon, War of 1812; Ohio's place in national development.
HIST 307. Afro-American History (3) I. History of black Americans from African origins, slavery and emancipation through rural Southern and 20th century urban experiences.
HIST 308. 20th-Century U.S. Presidents (3) I. 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) I. Latin-American history treating these phases: pre-Columbian; discovery and conquest; colonial; wars of independence. Role of indigenous and European culiures in development of Latin America.
HIST 310. Modern Latin America (3) II. Common and unique social, economic, political and inteliectual features of Latin American nations and Latin America in world affairs.
HIST 311. United States-Latin American Relations, 1810-Present (3) Development of the Western Hemisphere Idea, Panamericanism, Doliar Diplomacy, The Good Neighbor Policy, cooperation in World War II, the Cold War, the role of multinational corporations and U.S. response to social change in Latin America.
HIST 315. Slavery in the Americas (3) African slave trade and various slave societies which that traffic gave birth to in Western hemisphere. Emphasis on Cuba, Jamaica, Brazil and American South.
HIST 316. Famine and Revolution in Peasand Nations: Historical Roots (3) II. Indonesia as model to understand problems facing peasant nations in Asia, Africa and Latin America. European imperial penetration and traditional peasant values; why peasant societies are vulnerable to periodic famine. Revolutionary changes that have transformed England, Russia, Japan and China to understand what changes must take place if industrialization is to succeed in peasant nations.
HIST 319. Indian in American History (3) II. Indian responses to the European invasion of North America, Indian-White relations in the 19th and 20th centuries, Indian contributions to American culture and contemporary Indian life and culture on and off the reservation.


## HIST 320. Social History of American

Medicine (3) Leading theorists; major social and public policy determinants of health care in America from 1780 to present.
HIST 323. History of American Journalism (3) I, II. American journalism from colonial newspapers to multimedia age, emphasizing 20th century.

- HIST 325. Business History of the United States (3) II. American business in its historical setting from 1607 to present. Interaction between economic and political forces in explaining unique role orivate enterprise has played in American line.

HIST 326. Women in American History (3)
II. Major issues and movements in American history that have involved women from colonial period to modern times.
HIST 337. The Vietnam War (3) II. 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). Three centuries of changing American attitudes and actions toward naturai environment, rise of conservation movement and development of ecological perspective.
HIST 340. World of the Bible (3). Major civilizations of ancient Near East (Mesopotamia, Egypt, Syria and Israel); defining, comparing and contrasting Oriental and Biblical social traditions as embodied in respective institutions, art, literature, religion.
HIST 353. Topics in Public History (3) II. Acquaints students with the practice and varieties of public history with special attention given to understanding its rigors as a discipline and its importance to the larger field of history. Specific topics will involve archives and records management, oral history, historical editing, historical preservation, museums and exhibits, and public policy.
HIST 357. English Origins of American Law (3) II. Medieval and early modern English history; origin and growth of legal and constitutional doctrines, institutions and procedures important to understanding American legal system.
HIST 360. Major Personalities of 20th Century (3) II. Biographical study of individuals whose lives made substantial changes in aspects of modern society, examined both as individuals and as representatives of major movements of 20th century.
HIST 363. French Revolution and Napoleon (3) II. Impact of French Revolution on society of Old Regime; formation of revolutionary creed; Great Revolution, Jacobin Republic, Thermidor; Napoieon and principles of 1789.

HIST 367. Hitler's Germany: Rise and Fall of Nazism (3) I. 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.
HIST 370. The Soviet Union in the Twentieth Century (3) I. Survey and analysis of the development of Soviet social, political and economic systems in the twentieth century. Designed to provide an understanding of the USSR today.
HIST 377. 20th-Century Europe (3) I. European historical deveiopment in 20th century; major forces, events and experiences that have shaped Europe and its place in contemporary world.

HIST 381. United States and Asia (3) U.S. relations with China, Japan, India and southeast Asia in 20th century; interaction of domestic politics and foreign policy; Asian nationalism, mllitarism, communism; America's involvement in wars and peacemaking.
HIST 382. Chinese Culture and Institutions (3) I. Historical development of Chinese thought and institutions from traditional to modern times. Classical philosophy and religions, family, soical system, bureaucracy, autocracy, nationalism and communist state. Intrinsic values of broadening perspectives through exposure to major non-Western cultural experience.
HIST 386. Japanese Culture: Multi-Media Approach (3) II. Higher culture in traditional Japan. Religion, visuai arts, literature, theatre and uniquely Japanese arts. Political and institutionai history as it relates to cultural development.

- HIST 391. Special Studies in History (1-3) Content and theme vary with instructor. Designed to meet needs and interest of nonmajors.
- hist 395. Workshop on Current Topics (13) 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.
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) I. Basic issues and problems involved in tensions and conflicts between pagan and Christian that were eventually accommodated in 4th century A.D.; social disaffection, political resistance and cultural alienation.
HIST 411. Modern Mexico (3) II. Analysis of first Latin-American state to experience political, social and economic revolution in 20th centruy; causes of the revolution, leaders and institutions produced, emergence of Mexico as relatively stable and progressive state.
HIST 413. Caribbean and Spanish Main (3) II. Political, economic and social development of Greater Antilles and Spanish Main from 17th to 20th centuries; war and trade, slavery, revolution, caudilism and communism in Caribbean.
HIST 414. Canada (3) I. European colonial rivalry, problems of European-settled colonies, emergence of colonial self-government, 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) Political, economic and social development in Iberian peninsula from invasion of Moors to 20th century dictators; reconquest, reign of $\mathrm{Ha}_{\mathrm{i}}$ sburgs, Spanish Civil Wars, regimes of Franco and Salazar.

IST 419. Westward Movement in America ) 1. Development of Trans-Mississippi West during 19th century; American Indian, territorial expansion, sectional conflict, economic development.
HIST 421. American Colonial History, 1492 1763 (3) I. European backgrounds of American history, establishment of European settlements and institutions, emergence of colonial culture, conflict between France and England for New World.
HIST 422. American Revolutionary Era, 1763-1815 (3) II. Causes, course and consequences of War for Independence; organization of government and emergence of national party system; economic, sócial, diplomatic problems of young republic.
HIST 425. Conflict and Division in U.S. (3) I Economic, social, political institutions of 1815-1860; Old South and forces that produced Civil War.
HIST 426. Civil War and Reconstruction, 1861-1877 (3) II. Political, economic and cultural conditions during War; resulting problems to peoples and governments of both sections continuing through postwar period.
HIST 427. American South, 1865-Present
(3) II: Reconstruction South, new industrial growth, evolution of Southern agriculture, racial and labor problems. South in American political life; southern education and culture, South today.

ST 428. U.S., 1877-1917 Industrialization Reform (3) I. Transformation of U.S. magrarian nation to industrialized society and attencant political and economic problems: urbanization, immigration, farmers' protest, rise of political reform movements, the Progressive Movement.
HIST 429. U.S., 1917-1945 Normalcy and Depressin Between the Wars (3) II. Political, economic ánd social impact on America of increasing role of the federal government; World War I; the 'Twenties'; the Great Depression; World War II.
HIST 430. U.S. Since 1945: Affluence and Anxiety (3) I. 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 revoit, challenge to sexism, Middle America and reaction to protest.
HIST 433. Arnerican Constitutional History (3) I. Consititutional developments from framing of the Constitution in 1787, which established a federal republic that protected states rights, to creation of a national republic after Civil War, aiding rapid industrialization and creating need for business regulation, social welfare state, national protection of civil rights and expanded role of presidential leadership.
HIST 436. American Social and Intellectual Higtory (3) I. Select topics in American soand emotional experience durng 19th 20th centuries: nationalism, regionalism, urbanization, immigration, ethnicity, professionalism, gender, childrearing, education, mental health. "isolationism"; World War II-background to Pearl Harbor, wartime alliances, peace settlements.

HIST 437. U.S. as World Power in 20thCentury (3) I. American involvement in world affairs; imperialism in Asia and Latin America; World War 1-response to German militarism and Russian communism; postwar "isolationism"; World War II-background to Pearl Harbor, wartime alliances, peace settlements.
HIST 441. Classical Hellenism ( $1000-400$ B.C.) (3) I. Ancient Greek society and culture from "dark ages" through "golden age" of 5th 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 Athe-no-Peloponnesian war.

- HIST 442. Roman Revolution: From Gracchi Through Caesar Augustus (3) II. 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) II. Cultural, religious, political and economic aspects of the Middle Ages which laid the framework for modern European civilization; cross-cultural contacts with the Christian and Islamic East.
HIST 446. Early Modern Europe 1450-1750 (3) I. Comparative study of European societies in an age of transition. Renaissance, Reformation, growth of absolutism and constitutionalism, economic expansion, social change, intellectual development and emer1 gence of baroque art forms.


## HIST 448. Modern European Society and

 Thought (3) II. Major social and intellectual trends in modern European society; including liberalism, socialism, Marxism, fascism, existentialism and post-war disillusionment.HIST '454. European Foreign Relations, 1914-Present (3) I. Foreign policies and diplomatic practices of the great powers and their statesmen: World War 1, postwar quest for stability; World War II, Europe in the Cold War; contemporary problems.
HIST 458. England, 55 B.C.-1689 (3) I. Major constitutional, economic, political, religious and social developments through 17th century: making of the Anglo-Saxon 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) II. 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). Rationale of imperialism, expansion of Britain overseas, development of colonial holdings, evolution of concept and reality of Commonwealth of Nations.
HIST 464. History of France Since 1815 (3)
II. Social and economic development of France, 1815 -Third Republic; Jacobin radi--calism, emergence of French labor movement; France between two world wars; Vichy and the Resistance; problems of Fourth and Fifth Republics.

HIST 469. Medieval and Imperial Russia 900-1825 (3) I. Radical, political and religious origins; development of autocracy; national and imperial problems to death of Alexander I.
HIST 470. Modern Russia, 1825-Present (3) II. Major topics in 19th and 20th century Russian history; political systems and personalities, territorial control and foreign relations, economic development, dissidence and revolutionary movements, social structure and demographic change.
HIST 471. Education and Revolution in Russia (3). Russian-Soviet struggle to create perfect society dominant in world through interplay of education and revolutionary ideology as reciprocal political tools.
HIST 480. Senior Pro-Seminar (3) I, II. Required capstone experience for all history majors. Selected historical interpretations and discussion of various historical methods and problems encountered in historical research. Writing of carefully argued position paper based on primary sources.
HIST 483. Revolution and Tradition in Modern China (3) II. China's modern transformation from the Confucian empire to the socialist nation of one billion people. Culturalism, nationalism, Marxism and Communism; China's culturai legacy, problems of modernization; China's relations with the West.
HIST 486. Japan: New Superstate (3) II: Japan's successful modernization since "opening" to West in 1853; political development, industrialization, expansion; Japan's rise from defeat in World War II to world economic power.
HIST 495. Readings in History (1-3). Individual readings in consultation with instructor in fields of special historical interest. Prerequisite: consent of department chair and instructor.

## Home Economics (HOEC)

HOEC 205. Home Management (3) I, II. Effects of values and philosophy on decisions regarding family resources: time, energy, knowledge, ability, skills and attitudes in achieving family goals. Work simplification, history of discipline and evaluation in home management.
HOEC 206. Household Equipment (3) I odd years. Selection, operation, care and management of household equipment for efficient use, safe operation and increased consumer satisfaction. Two hours lecture, two hours lab per week. Lab fee.

HOEC 250. Foundations of Home Economics (3) I even years. Home economics: the profession, the role of the educator and understanding students; development of educational strategies including peer teaching through field and clinical experiences. One, hour of seminar and three hours of experience in a professional setting.
HOEC 311. Family Resource Management (3) II even years. Integration and application of concepts; processes and principles of family resource management within household environment. Four hours lecture/lab plus arranged. Prerequisites: HOEC 205 and F\&N 307. Lab fee.

HOEC 352. Vocational Home Economics in Secondary Schools (3) I odd years. Principles, objectives, curriculum instructional materials and methods of vocational home economics. No S/U grade for home economics majors. Prerequisites: HOEC 250, EDFI 302 or junior standing.
HOEC 353. Organization and Teaching in a Vecational Job Training Program (3) II 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 home economics education majors. Prerequisites: HOEC 250; HOEC 352 prerequisite or concurrent.
HOEC 354. Curriculum Management in Home Economics (2) II odd years. Field experience and coordinated seminar examining curriculum management as it differs in urban, suburban or rural schools. No S/U grade for home economics majors. Arrangements made in consultation with home economics education faculty. Prerequisite or corequisite: HOEC 352.
HOEC 405. Family and Consumer Economios (4) On demand. 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.
HOEC 497. Student Teaching (1-10) I. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certlification program. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## Human Development and Family Studies (HDFS)

HDFS 105. Human Development in the Family (3) I, II. Growth and development of individuals in relationships in family and community; activities and functions of persons in families.
HDFS 107. Black Families in America (3) I, II. Living patterns of the American black family: historical development, present status, strengths, problems and prognosis.
MDFS 120. Survey of Child and Family Community Services (3) I, II. Focus on institutions and agencies serving children and families. Principles of effective services including qualifications and preparation of professionals. Transportation required.
HDFS 123. Introduction to Early Childhood (3) I, II. Introduction to human development and program for young children which enables students to view themselves as potential parents, teachers and practitioners in the school and community.
HDFS 223. Child Study (2) II. 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) I, II. Play, materials, methods for enhancing development of children under six. Planning, implementing and evaluating experiences and activities with groups of young children. C/F hours: 50.HDFS 302. Foundations of Intimate Relationships ( 3 ) I, II. Development and maintenance of intimacy; social-psychological aspects of marriage, family and other forms of interpersonal relationships. Prerequisites: HDFS 105 or SOC 101 and junior or senior standing.
HDFS 305. Integrating Career and Family (3) I, II. Issues facing dual-career families; applied problem-solving as approach to family decision making, communicaiton, childrearing, career patterning. Not open to students with credit for BA 305.
HDFS 320. Infant and Toddler Development (3) I. Growth and development of infants and toddlers from conception to two years. Developmental theories and characteristics. Implications for enhancing development. C/ F hours: 15.
HDFS 321. Child Development (3) II. 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.
HDFS 322. Child Development Practicum (3) I, II. 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 enroliment. Prerequisites: HDFS 224 and 321 or EDFI 342. C/F hours: 120.
HDFS 328. Preadolescent and Adolescent in Family and Community (3) I. 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) I, II. 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.
HDFS 408. Investigations in Family Life of Minority Groups (3) II. Directed investigation of family life of racial and cultural minority groups in United States. Prerequisite: junior or senior standing.
HDFS 421. Parenting and Parent Education (3) I, II. Theories related to process of parenting and interactive effects of parentchild 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) I (odd years). 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.
HDFS 423. Organization of Program for Young Children (3) II. Factors in organization and administration of programs for young children. Prerequisite: HDFS 322 or consent of instructor. C/F hours: 20.

HDFS 424. Children Under Transitory
Stress (2) I. Infants' and children's efforts cope with situational stresses such as illness, hospitalization, death, divorce, separations from family, birth of siblings and illness or disability of parent. Prerequisites: HDFS 320, HDFS 321 or consent of instructor.
HDFS 425. The Hospitalized Child (3) 1. Analysis, synthesis and integration of theory, research and practice from a multidisciplinary perspective for understanding needs of hospitalized children. Prerequisites: HDFS 320, HDFS 321 or consent of instructor.
HDFS 426. Studies in Individual and Family Potential (3) I, II. Theories of human behavior and family interaction which promote fully functioning individuals and families.
Family communication; various patterns of family adjustment to internal and external stress. Prerequisites: HDFS 105 or HDFS 302, or consent of instructor.

## HDFS 427. Facilitation of Individual and

 Family Potential (3) II. Development of personal skills and personal awareness which facilitate effective interpersonal-familial and/ or professional functioning. Methods of affirming self-esteem, encouraging authentic communications and stimulating personal growth. Prerequisites: HDFS 105 and HDFS 426 or consent of instructor.HDFS 428. Sexuality and the Family (3) II. Interrelationships of areas of human sexuaiity and family development/interaction. $\ln -\ldots$. tended for students with background in sexual physiology and psycho-social aspects of human sexuality. Prerequisite: PSYC 307 or HED 338.
HDFS 429. The Family in the Middle and Later Years (3) II. 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.
HDFS 491. Pre-kindergarten Student Teaching (1-12) II. Classroom teaching in a pre-kindergarten setting under supervision. Conferences and seminars supplement classroom teaching. Required of students in pre-kindergarten certification program. Prerequisites: 90 semester hours including ENG 112, IPCO 102, PSYC 201, EDFI 302, HDFS 224, 320, 321, 322. Fee: $\$ 5$ per credit hour.

## Humanities (HUM)

-HUM 101. Introduction to the Humanities (3) II. Experience of art including music, film, theatre, literature, dance, painting, sculpture, architecture, philosophy and the combined arts.
$\dagger$ HUM 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 for credit if toms. ics differ. Prerequisite: HUM 101 or cons of instructor.

## Interpersonal and Public Sommunication (IPCO)

-IPCO 102. Speech Communication (3) I, II, III. Basic principles of interpersonal, smallgroup and public communication; field of speech communication with attention to individual needs.
-IPCO 203. Small Group Communcation (3) $\mathrm{I}, \mathrm{II}, \mathrm{III}$. 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. Prerequisites: IPCO 102 and IPCO 209.
-IPCO 205. Public Speaking (3) I, II. Principles of public communication composition and public speaking, including practice. Prerequisites: IPCO 102 and IPCO 209.
IPCO 207. Interpersonal Communication' I (3) I, II, III. Introduction to dyadic communication with a focus on factors which influence effectiveness. Practical experience in behaviors associated with interpersonal competence. Prerequisites: IPCO 102 and IPCO 209.
IPCO 208. Simulation of Organizational Communication Assessment and development of communication skills and practices prevalent in contemporary profit and nonprofit organizations. Direct participation in a simulation of organizational communication. Prerequisites: IPCO 102 and 209.
-IPCO 209. Human Communication (3) I, II,
III. Development of theoretical formulations o speech communication. Emphasis on pecial heuristic (not general explanatory) theories which focus on relationship factors, as well as speaker and message aspects. Interdisciplinary perspectives utilized. Prerequisite: IPCO 102.
IPCO 303. Persuasive Communication (3) I, II, III. Theories and concepts of persuasive communication; attitude change, audience analysis and strategies of persuasion. Prerequisites: IPCO 102 and IPCO 209.
IPCO 304. Leadership in Group Communication (3) I. Conception, methods and techniques of leadership related to group communication processes. Emphasis on understanding and application of contingency theories. Prerequisites: IPCO 102, IPCO 203 and IPCO 209.
-IPCO 306. Interpersonal Communication (3) I, II, III. 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.
IPCO 307. Speech Communication in Organizations (3) I, II, III. Message initiation, diffusion and reception in organizational setting. Function and conduct of meetings, including both parliamentary procedure and relationships to organizational settings. Prerequisites: IPCO 102 and IPCO 209.
IPCO 308. Argumentation (3) I, II, III. Principles of argumentation; case analysis and ynstruction; practice in forms of debating sing contemporary topics. Prerequisites: TPCO 102 and IPCO 209.

IPCO 395. Workshop on Current Topics (13) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. May be repeated on approval of adviser, if topics differ. Prerequisites: IPCO 102 and IPCO 209.

IPCO 403. Assertivèness (3) I, II. Methods for developing effective coping strategies under a wide variety of life situations. Special emphasis on dynamic negotiation and on dealing with difficult people.
IPCO 404. Communication and Conflict Training communication skills and monitoring situations likely to include communication conflict. Assist supervision of IPCO 208. Prerequisite: IPCO 208.

IPCO 406. Topics in Interpersonal and Public Communcation (3) I, II, III. Selected topics or subject areas within the field of communication, marital communication, legal speaking, assertivesness and nonverbal communication. May be repeated.
IPCO 407. Interpersonal Communication II (3) I, II, III. 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: IPCO 102, 209 and IPCO 207 or 306.
IPCO 489. Communication Internship (1-10) I, II, III. Field experience in communication. Study of communication as intern in public or commercial agency. Open only to IPCO majors in BAC program. Prerequisites: 2.5 overall GPA, junior status and 12 hours of completed IPCO courses. Graded S/U. Prerequisites: IPCO 102 and IPCO 209.
IPCO 490. Problems in Interpersonal and Public Communication (1-3) I, II. 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. Prerequisite: consent of department. Prerequisites: IPCO 102 and IPCO 209.

## Italian (ITAL)

Students who had Italian in high school should take the placement test during summer preregistration or prior to enroliment in a course. Credit will not be given for course work more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.
IITAL 101. Elementary Italian I (4) I. Cultural approach to beginning language. Development of the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.
ๆITAL 102. Elementary Italian II (4) II. ITAL 101 continued. Four class periods and laboratory practice each week. Prerequisite: ITAL 101 or one year of Italian in high school.
IITAL 201. Intermediate Italian I (3) I: 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.
fITAL 202. Intermediate Italian II (3) II. 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.
ITAL 352. Italian Composition and Conversation II (3). Improvement of oral and written skills in the language; emphasis on conversation. Prerequisite: ITAL 202.
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. Prerequisite: 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. Prerequisites: ITAL 361 and ITAL 362.

## Japanese (JAPN)

qJAPN 101. Elementary Language and Culture I (4) I. Introduction to modern spoken Japanese. Four class periods and scheduled oral practice each week.
IJAPN 102. Elementary Language and Culture II (4) II. JAPN 101 continued. Four class periods and scheduled oral practice each week. Prerequisite: JAPN 101 or equivalent.
ПJAPN 201. Intermediate Japanese I (4) I. JAPN 101-102 continued. Conversation, writing, reading, grammar. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 102 or equivalent.
qJAPN 202. Intermediate Japanese II (4) II. 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) II. JAPN 301 continued. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 301 or equivalent.

IAPN 480. Selected Topics in Japanese (13) On demand. Topics chosen from Japanese lizerature, 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. Prerequisite: arrangement with instructor and consent of department chair prior to registration.

## Joumalism (JOUR)

©JOUR 103. Introduction to Mass Communication (3) I, II, III. Survey of modern journalism and mass communication; mass communication media and effects; role and influence of newspapers, magazines, radio, television, photography, and related fields of advertising and public relations. Open to non-majors.
sOUR 203. Mistory of Joumalism (3). English background, development of American mass media from colonial days to present. Historical factors affecting reporting and presentation of news in print and electronic journalism.
JOUR 206. Introduction to Photojournalism (3) I, II. Function of pictures in newspaper, magazine and television reporting. Practice in picture taking and darkroom procedures. Lecture and laboratory. Student must provide own camera and supplies. Lab fee.
tJoun 291. Foundations of Journalism (1-3) 1, II. Lecture and laboratory experience in journalistic writing and editing. Not available to students on the main BGSU campus. Prerequisite: permission of instructor.

## JOUR 300. Introduction to Journalistic

 Writing (3) I, II, III. 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 semester hours of course work consisting of general education requirements including ENG 112 and JOUR 103. An overall grade point average of 2.7 must have been sarned in the aforementioned course work at the time of admittance into JOUR 300 , as well as a minimum grade of C in JOUR 103. In addition, students must have passed an English proficiency examination administered by the Department of Journalism. This course is reserved for pre-journalism majors, journalism minors and exceptions approved by the Department of Journalism. Application for this course must be made at the journalism ofice, 319 West Hall.JOUR 301. Journalism Techniques for NonMaiors (3) I, 11. Introduction to news gathering, news writing, news editing and journalistic graphics foi non-journalism majors whose programs might benefit from such a course. Not open to those who are presentiy journalism majors. Does not serve as a prerequisite to other journalism classes. Prerequisite: completion of freshman English composition requirements.

JOUR 302. Copy Editing (3) I, II. Theory and practice in editing local and wire news, headline writing, picture editing, evaluating news, layout and design, video display terminal operation. Prerequisites: B or C or better in JOUR 103 and 300 ; junior standing. Lab fee.
JOUR 303. Editing Specialized Publications (3) I, II, III. Theory and practice of editing functions and techniques in producing specialized publications: magazines, newsletters, newspapers and brochures for business and non-profit organizations. Graphics skills, including electronic typesetting. Prerequisites: B or C or better in JOUR 103 and 300 ; junior standing. Lab fee.
JOUR 304. Feature Writing (3) I, II. Discovering, researching and writing the newspaper feature story and short magazine article. Prerequisites: B and C or better in JOUR 103 and 300 ; junior standing. Lab fee.
JOUR 305. Photojournalism Editing (3) II. Assignment, selection, preparation and display of photographs for publication, especially in newspapers, magazines and newsletters. Prerequisites: B and C or better in JOUR 103 and 300 ; junior standing. Lab fee.
JOUR 307. Advanced Photojournalism (3) I. Practice in advanced problems of photography, including picture stories, and evaluation of photographs for reproduction and communication. Lecture and laboratory. Student must provide own camera and supplies. Prerequisite: C or better in JOUR 206. Lab fee.
JOUR 311. Reporting (3) I, II. Newsgathering and newswriting for all types of news stories ranging from the simple factual story to the complex, specialized story. Practice in covering assignments for publication. Prerequisites: $B$ and $C$ or better in JOUR 103 and 300 , junior standing. Lab fee.
JOUR 312. Reporting of Public Affairs (3) I, II. Field practice in covering governmental and community affairs with attention both to general and specialized areas. Prerequisite: C or better in JOUR 311 or 330.
JOUR 315. Press Management (3) Business problems of publishing-organization, financing, circulation, promotion. Concentration on management philosophy and problem solving. Open to non-majors.
JOUR 330. Radio/Television News (3) I, II. Techniques of writing, reporting and editing news for radio and television broadcasting; rewriting wire copy; introduction to ENG shooting and editing techniques; preparation and utilization of television graphics. Student must provide own tape recorder and cassettes. Prerequisites: B and C or better in JOUR 103 and 300 ; junior standing. Recommended: broadcast production course in RTVF. Lab fee.

## JOUR 331. Advanced Radio/Television

 News (3) I, II. Writing, editing and producing the radio and television newscast. Emphasis on ENG shooting and editing; field reporting; producing the newscast in a TV studio; advanced television graphics. Student must provide own videotape cassette. Prerequisite: C or better in JOUR 330 and RTVF 250. Lab fee.JOUR 340. Principles of Public Relakions (3) I, II. Public relations problems, policies, practices applied to business and non-profit organizations; media methods of communicating, survey research and attitude change. Open to non-majors.
JOUR 380. Writing for Public Communication (3) I, II. Public relations writing skills for business and nonprofit organizations. Prerequisites: B and C or better in JOUR 103 and 300 ; junior standing. Lab fee.
JOUR 402. Joumalism Law and Ethics (3) I. II, III. Legal concept of freedom of the press, constitutional guarantees, libel, privacy, copyright, broadcast regulation, contempt, obscenity, ethical problems, right to know. Open to non-majors.
JOUR 403. The Editorial (3) I. Techniques of persuasive and critical writing and the role of editorial opinion in modern mass medla. Prerequisites: B and C or better in JOUR 103 and 300 ; junior standing.
JOUR 404. Magazine Article Writhng (3) I, II. Searching for story ideas, analyzing magazine markets, researching subject matter, writing and polishing stories. Prerequisite: JOUR 304.

JOUR 407. Color Photography (3) II. Theory and application of color processes and their limitations and advantages. Production of color transparencies and prints. Prerequisite: C or better in JOUR 307. Lab fee.
JOUR 412. Field Experience (1-3) I, II, 111 . Journalism internship program required of all journalism majors and minors. Activity may be in more than one medium, full or part time, paid or voluntary. Two hours required of all majors, one of which must be with a campus medium. ( 120 hours of internship service equals one credit hour). Prerequisites: 2.5 JOUR grade point average; 2.25 overall grade point average; junior standing. Graded S/U.
JOUR 414. Supervision of High School Publications (3) II. For prospective teachers of high school journalism or advisers of school newspapers or yearbooks. Problems of editorial supervision, business management and production. Open to non-majors.
Jour 416. Magazine Journelism (3) I, II. Practices, problems and trends in modern magazine publishing; analysis of editorial objectives, content, audience, format, production and management. Open to non-majors.
JOUR 423. Introduction to Mass Communication Research (3) II. Mass communication from the scientific viewpoint. Research techniques in advertising, public relations, newspapers, radio and television. Application of behavioral science research methods to communication research. Open to non-majors.
JOUR 430. The Documentary (3) I, II. Research, writing and preparing news, informational and public service features, documentary and magazine-type programs; writing a program treatment and budget; production of a documentary of broadcas quality. Prerequisite: C or better in JOUF 331. Lab fee.

YOUR 431. Interpretive Reporting (3) I. ReSearch and writing of in-depth reports, interpretive news, profiles, background stories, news analyses. Investigative reporting of current events and issues. Prerequisite: C or better in JOUR 312 or consent of instructor.
JOUR 432. Newsroom Decision Making (3) II. Newspaper editorship, goal setting, problem analysis, readership analysis, publication conception and creation, staff management. Prerequisite: senior standing in journalism or consent of instructor.
JOUR 433. Government and the News Media (3) !. Origins and concept of freedom of information and evolution in constitutional law and judicial decisions; contemporary problems of censorship in publishing, broadcasting and film. Open to non-majors.
JOUR 435. Press and Society (3) I, II, III. Press as institution, its role, content, effects and responsibilities as a cultural force in society. Open to non-majors.
JOUR 440. Public Relations Techniques (3) I, II. Application of public relations theories, tools and techniques to the public relations campaign. Fesearch, planning and execution are practiced. Prerequisites: senior status in the public relations sequence and C or better in JOUR 303, 340 and 380.
JOUR 470. International Press Systems (3) I. Social, economic and political factors, organization and control in the national news and informational systems of countries yound the world. Open to non-majors.
JOUR 471. International Media Networks (3) II. Factors affecting flow of world news and public information; regional and international networks. Open to non-majors.
JOUR 481. Topics and Problems in Public Relations (1-3) I, II, III. Issues and problems that confront pubic relations practitioners in corporate and non-profit communications programs. Prerequisite: instructor's consent.
JOUR 490. Special Problems in Journalism (1-3) I, II, III. Research problems, practical projects, intensive reading or mini-courses to meet needs of students' special interests. Prerequisite: instructor's consent. Graded S/U.

## Latin (LAT)

Students who had Latin in high school should consult the department about placement during summer preregistration or prior to enrollment in a course. Credit will not be given for course work more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.
qLAT 101. Elementary Latin I (4) I. Cultural approach to beginning language. Development of the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.
ILAT 102. Elementary Latin II (4) II. LAT 101 ontinued. Four class periods and laboratopractice each week. Prerequisite: LAT or one year of Latin in high school;

LAT 141. Great Greek Minds (3) I. Masterpieces of Greek literature: Homer, Sappho, Pindar, Aeschylus, Sophocles, Euripides, Artistophanes, Herodotus, Thucydides, Plato, Aristotle. No Greek required. No credit for both LAT 141 and 485.
LAT 142. Great Roman Minds (3) II. Masterpieces of Latin literature: Lucretius, Cicero, Catullus, Vergil, Horace, Livy, Ovid, Petronius, Tacitus, Juvenal, Martial. No Latin required. No credit for both LAT 142 and 486.
LAT 145. Greek and Latin Elements in English (3). Terms and concepts derived from Greek and Latin occurring in English; designed for premedical, predental, prelaw, language, sciences majors.
qLAT 201. Intermediate Latin-I (3) I. 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.
ILAT 202. Intermediate Latin II (3) II. 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). Developing increased ability to understand structural peculiarities of classical Latin. Prerequisite: 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) I, II. Advanced reading for students wishing to study special period or great author. Prerequisite: consent of chair of department and instructor.
LAT 480. Classical Mythology (3). Study in English of Greek and Roman myths; historical meaning and influence on life, literature and art. No Latin required.
LAT 481. Roman Life (2). Study in English of daily life and customs in Rome as described in literature and attested by history, art, archeology. No Latin required.
LAT 485. Greek Literature in English (3) I. Thought and action of ancient Greeks as seen mainly through their literary works. For majors and minors in Latin and other languages and students wanting to fulfill Arts and Sciences humanities requirement; no Greek required. No credit for both LAT 141 and 485.
LAT 486. Latin Literature in English (3) II. Thought and action of ancient Romans as seen mainly through their literary works. Intended for majors and minors in Latin and other languages and for students wanting to fulfill Arts and Sciences humanities requirement; no Latin required. No credit for both LAT 142 and 486.

## Latin-American Studies (LAS)

LAS 401. Latin-American Studies Senior Seminar (3) II. For seniors majoring in Latin American Studies and other interested students. Examination of literature, problems of research and writing, discussion of methods. Required of Latin-American studies major.

## Legal Studies (LEGS)

LEGS 200. Perspectives of American Law (3) I, II. 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.
-LEGS 301. General Business Law (3) I, II, III. Historical, political, economic background to business law. Origin, development, fundamentals of contracts, sales and the legal environment of business. Prerequisite: junior standing.
LEGS 302. General Businesis Law II (3) II, III. LEGS 301 continued. Law of sales, common carrier, partnerships, corporations, agency law and economic implications of business entities. Alternate years. Prerequisite: LEGS 301.
LEGS 305. Comparative Legal Philosophy (3) I. 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 310. Law and the Citizen (3) I. Major social issues of today and how judicial system shapes social policy and reform; consumer protection and other annually selected social issues being adjudicated in courts: discrimination and reverse discrimination, capital punishment, reform of legal system, problems in criminal justice system, freedom of speech and assembly, obscenity and pornography, etc. Prerequisite: junior standing or permission of instructor.
LEGS 401. Law of Business Relationships | (4) I. 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 CPA exam.
LEGS 402. Law of Business Relationships II (4) II. Commercial law including secured transactions, bankruptcy, bailments, agency, partnership, corporation, insurance, trusts and wills. Prerequisite: LEGS 301 or 401.
LEGS 406. International Legal Transactions (3) II 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 413. Trusts and Estates (3) I alternate years. Execution, administration, revocation of wllls and trusts, guardianships, life insurance estates; insurance law relating to estates, thesir protection, and liability; role of wills and trusts in distribution of wealth. Prerequisite: LEGS 301 or 401.
LEGS 414. Liability Law (3) I alternate years. History and development of modern concepts in areas of personality, privacy, product and service liabilities, legal problems in advertising, responsibility to work force.
LEGS 415. Realty Law (3) II. Creation, 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. Labor Law (3) I. Federal legislation in defining roles of labor organizations and management as they interrelate in private industry; National Labor Relations, as amended, and 1964 Civil Rights Act, as amended, prohibiting discrimination in employment.
LEGS 421. Administrative Law (3) II. Regulation of business and policy implications for public; antitrust, trade practices, equal opportunity employment, environmental restraints, public utilities.
LEGS 423. Technology and Computer Law (3) I. 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) I. 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 Discrimination and Affirmative Action Law (3) II. Federal laws, Ohio laws, Federal Executive Order \#11246, federal regulations interpreting these laws and orders that govern employment decisions in hiring, firing, testing, promotion, demotion, transfers, etc.
LEGS 431. Environmental Law (3) II alternate years. 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) II. 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 401.
LEGS 450. Hospitality Law (3) II alternate years. Legal regulations, duties, llability and relationships of persons and businesses engaged in the food service, restaurant, hotel/motel and hospitality industries.

LEGS 490. Legal Research and Dratting Seminar (3) II. 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). In-depth study of selected areas. Offered to individual student on lecture basis or as seminar depending on student needs and nature of material. May be repeated to six hours. Research paper required.
LEGS 495. Readings for Honors in Business Law (1-3) I, II, III. 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.

## 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) I, II, III. 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 de: velopment of materials to meet the needs of practitioners. Topics vary from offering to offering. May be repeated with consent of adviser. C/F hrs.: varies.
LEM 403. Reference Services and Materials (3) Basic sources of information and use in providing library/information/media services. Lecture; discussion/questioning; viewing/listening/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 agencies. Lecture; discussion/questioning; practice/drill; laboratory. 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.
LEM 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 411. Materials for Secondary School Media Centers (3) Print and nonprint mate: ials and program activities for secondary school media centers. Special needs of adolescents including gifted and retarded. Lecture; discussion/questioning; viewing/listening/answering; problem solving. Prerequisite: 9 hours of LEM courses or consent of instructor. C/F hrs.: 20.
LEM 428. Advanced Utilization of Educational 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/an swering; 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 learn-ing/self-instruction; probiem solving; discover. Prerequisite: LEM 428 or consent of instructor. C/F hrs.: 20.
LEM 441. Storytelling (3) I. Techniques and practice of storytelling in libraries, classrooms, etc. Selection of traditional and modern literature to tell and read aloud. Lecture; practice/drill; viewing/listening/an-* swering; role playing. Prerequisite: ENG 342 or consent of instructor. C/F hrs.: 8.
LEM 445. Computer Systems for Library Services (3) Information and bibiographic retieval 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/questloning; practice/drill; problem solving; practicum; role-playing. Prerequisite: just prior to student teaching. C/F hrs.: 20.

EM 455. Instructional Media in Industry, Isiness 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. 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) I, II. 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.
LEM 497. Student Teaching (1-10) I, II. 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. C/F hrs.: 300. May be repeated. Graded S/U.
inguistics (LING)
LING 310. Introduction to Linguistics (3) II. 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)

- MGMT 300. Introduction to Production and Operations Management (3) I, II, III. Fundamentals of management of operations of firm; design of production systems, operation, coordination and control of procluction activity; major analytical tools for managment. Prerequisite: STAT 212 or equivalent.
MGMT 305. Principles of Organization and Management (3) I, II, III. Fundamentals of organization theory; objectives, policies, de-cision-making, authority, management development, leadership, communication, motivation and effective human relations to management principles. No credit allowed toward BSBA degree.
MGMT 330. Procurement (3) I, II, III. Management of procurement; process of establishing need, source selection, pricing,
becifications, negotiation and bidding, mality assurance, value analysis, make or buy, procedures, legal considerations and information systems. Related to industrial, governmental and institutional purchasing operations. Prerequisite: STAT 212 or equivalent.

MGMT 360. Organizational Theory and Be havior (3) I, II, III. Micro-relationships in organizations; historical perspective, changing nature of organizations, and individual and overall group behavior. Specific topics include motivation, decision-making, leadership, group dynamics, organizational structure, etc. Prerequisite: STAT 212.
MGMT 361. Personnel Administration (3) I, II, III. Design, organization and operation of personnel function. Planning manpower needs, developing human resources, appraising performance, developing compensation systems and compliance with applicable government regulations such as Equal Employment Opportunity (EEO), Occupational Safety and Health (OSHA), etc. No credit for students specializing in human resource management or to students with credit for MGMT 450 or MGMT 451. Prerequisite: MGMT 305 or MGMT 360.
MGMT 430. Materials Management (3) I, II. Conceptual and analytical framework for materials management problems. Development and evaluation in depth of materials management system components; facility location, transportation, inventory requirements, materials handling, order processing. Prerequisite: MGMT 300 or permission of instructor.
MGMT 439. Procurement and Materials Management Problems (3) I, II. 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. Prerequisite: MGMT 330 or 430.
MGMT 441. Production Process Design (3) I, II. Effective design of production transformation process. Product decision, process selection and capacity-related issues. Macroprocessing modes and attendant problem areas such as layout of production facilities, project management and line balancing; microprocessing aspects such as work design and measurement. Quality control and safety. Prerequisite: MGMT 300.
MGMT 442. Inventory Systems Planning (3) I, II. Forecasting methods for output requirements. Traditional theories and techniques of inventory control. Current inventory methodology such as material requirements planning; broad range of inventory control problems. Prerequisite: MGMT 300.

MGMT 445. Production Planning and
Scheduling (3) I, II. Short range production scheduling such as job/flow shop scheduling and maintenance scheduling; intermediate range scheduling such as aggregate planning and master scheduling; long term scheduling including capacity planning and control; project scheduling with resource constraints. Prerequisite: MGMT 300.
MGMT 449. Problems in Production and Operations Management (3) II. Integrates all principles, theories and techniques gained from previous courses in production and operations management area to gain a broad perspective for effectively managing the operations of manufacturing and service organizations. Case study, simulation and team projects/presentations used for instructional purposes. Prerequisites: any two of MGMT 441, 442 and 445.

MGMT 450. Human Resource Management I (3) I. Concepts and skills involved in staffing, appraisal, placement, training, development and compliance with applicable governmental regulations including Equal Employment Opportunity (EEO) and Affirmative Action (AA). Prerequisite: MGMT 360.
MGMT 451. Human Resource Mangement II (3) il. Concepts and skills required in job evaluation, wage and salary adminstration, health and safety, and compliance with applicable governmental regulations, including Occupational Safety and Health Act (OSHA) and the Employee Retirement Income Security Act (ERISA). Prerequisite: MGMT 360.
MGMT 452. Human Resource Management in the Hospitality Industry (3) I. 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.
MGMT 461. Advanced Organizational Theory and Behavior I (3) I, II. Individual and interpersonal variables which influence organizational behavior, motivation theory, personality theory, interpersonal processes and helping relationship. Prerequisite: MGMT 360.
MGMT 463. Advanced Theory and Behavior II (3) I, II. Group and organizational variables which influence organizational behavior, group development and behavior, organizational design and organizational processes. Prerequisite: MGMT 360.
MGMT 465. Organization Development Theory and Technology (3) I. Theory and technology of organization development; history, philosophy, process and major technology of organization development; the consulting process and the diagnostic methodology used in organization development. Prerequisite: MGMT 360.

## MGMT 468. Organization Development

Field Experience (3) I, II. 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) I, III. 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 other internship credit in College of Business Adminstration. 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 495. Readings for Honors in Management (1-3) I, II, III. 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)

仑WIS 200. introduction to Management Information Systems (3) I, II, III. Principles of computer systems, role of information systems in organizations; introduction to information systems theory; programming in a high-level procedural language, using microcomputers; introduction to packages, e.g., spreadsheets. Lab fee at Firelands. Credit allowed for at most one of the following courses: MIS 200, CS 100.

Mils 360 . Introduction to Systems Concepts (3) I, II, III. 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 buslness-oriented information systems. Prerequisite: MIS 200
MIS 370. Database Management (3) I, II. Logical database design and effective implementation including hierarchical, network, and relational models. Prerequisites: MIS 360 and CS 260.
MIS 412. Decision Support Systems/Expert Systems (3) I, II. This course provides the student with skills necessary to conceptual ize, design and implement decision support systems (DSS) and expert systems (ES) in organizations. It includes the use of a variety of software in creating DSS and ES. Prerequisite: MIS 360.
MIS 421. Business Data Communication and Distributed Processing (3), 1, II. Basic Concepts, Security and Design of Business Data Communication Systems and Distributed Processing of Business Information Systems. Prerequisite: MIS 360 .
MIS 432. Microcomputer Uses in Business (3) 1, II. This course 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 the instructor.

MIS 433. Artificial intelligence in Business Decision Making (3) I, II. Survey of the area of A.l. 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) I, II. Concepts and methods of systems analysis and design; includes a project involving design of a computer-based information system. Prerequisites: MIS 370 and CS 360 .
fils 472. Contemporary Topics in MIS (3) I, II. Logical database design; distributed information systems. Relational and entity-relationship models; data transmission, distributed system architectures, ISO 7-layer architecture. Prerequisites: MIS 371, CS 360.

MIS 479. Information Resource Management (3) I, II. 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. Prerequisite: MIS 471, FIN 300, MKT 300, MGMT 360, MIS 412 (or concurrent registration), and MIS 421 (or concurrent registration).
MIS 489. Internship Seminar (1-3) I. To be completed at firsts opportunity following suitable internship experience. Work experience to be preceded by at least 70 hours of academic credit and advanced approval by program coordinator. Nocredit for students with other internship credit in College of Business Administration. Graded S/U.
MIS 491. Studies in Management information Systems (1-3) On demand. Selected areas or contemporary problems. May be repeated. May be offered individually as well as in classes, depending upon student needs and nature of material. Prerequisite: approval of department.

## Manufacturing Technology (MFG)

(Additional costs for materials in all laboratory courses.)
-MFG 112. Introduction to Manufacturing Processes and Systems (3) I, II, III 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 at Firelands.
$\dagger$ MFG 134. Time Study (4) I, II. Responsibilities of a time study technician and equipment utilized; emphasis on performance, rating, conducting a time study, determining allowances, work sampling.
†MFG 143. Quaiity Control (3) II. Quality assurance, product reliability; acceptance, attributes and variables sampling; and control charts.

## $\dagger$ MFG 211. Manufacturing Processes II-

 Forming, 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.$\dagger$ MFG 213. Manufacturing Processes II (3) II alternate years. Numerical control, EDM, advanced machining and material removal. Programming, testing and cutting with computer numerical controlled and standard metal cutting tools. Two hours lecture, three hours laboratory. Prerequisites: MFG 114 and MATH 128.
$\dagger$ 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 for measuring dimensions and surface finishes of machine tools. Two hours lecture, three hours laboratory. Lab fee.

- MFG 223. Metallic Materials and Processes I (3) I. A survey of metallic machining practices and techniques. Laboratory applications and techniques are studied. Prerequisites: MFG 112.

MFG 229. Metallic Materials and Processes il (3) I. A survey of hot metal practices and technology. Laboratory applications and techniques are studied. Prerequisite: MFG 112.
$\dagger$ MFG 245. Automated Systems (3) II. Manufacturing Automation including Bar Code, part handling, and automated assembly, CAD/CAM, robots, programmable controllers and logic controls systems. Prerequisites: MFG 223 and ET 191.
$\dagger$ MFG 290. Probiems 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 323. Non-Metalic Materials and Processes I (3) II. Wood, wood composite and ceramic materials, processing methods, and product applications. Two one-hour lectures and one two-hour laboratory. Prerequisite: MFG 112.
MFG 326. Quality Assurance (3) I. Use and selection of inspection equipment, planning and controlling of quality at strategic points in manufacturing process, and assurance of receiving, fabricating and shipping acceptable materials. Four hours of lecture and laboratory. Prerequisites: MATH 128 or $1{ }^{1}$ or equivalent, STAT 200, TECH 289 and tu. of the following manufacturing materials and processes courses: MFG 223, 229, 323 or 329.
MFG 327. Manufacturing Engineering Applications (3) II. Work measurement, methods design, motion economy, process analysis, plant layout, and material handling applications in industry. Two one-hour lectures and one two-hour laboratory. Prerequisites: TECH 289 and two of the following manufacturing materials and processes courses: MFG 223, 229, 323 or 329.
MFG 328. Metrology, Inspection and Gaging (3) I, Ill on demand. The study of metrology, inspection and gaging systems including major characteristics and relationships. Emphasis is on technology of inspection for process control and product acceptance. Prerequisites: MFG 223, 229 and 326 or permission of instructor.
MFG 329. Non-Metalic Materials and Processes il (3) I. Identification, properties, characteristics and selection of plastics materials. Set-up and operation of primary and secondary plastics processing equipment. Two one-hour lectures and one twohour laboratory. Prerequisite: MFG 112.
MFG 424. Manutacturing Systems (3) I, III on demand. Production methods, process equipment, tooling, organization and control employed in manufacturing industries. Four and one-half hours of lecture and laboratory. Prerequisites: Two of the following: MF $223,229,323$ or 329 , or obtain permissic of College.

MFG 428. Automation and Computer Integrated Manufacturing (3) II. Automation and computer integrated manufacturing in industrialized cultures, including ergonomics, planning, organization, management, numerical control, computer control, robotics, computer-aided design and computer-aided manufacturing. Prerequisites: MFG core, CS 101 or consent of instructor.

MFG 438. Naterials and Metallurgy (3) I. Metallurgical structure and its effects on properties of ferrous and nonferrous metals and alloys. Properties of metallic and nonmetallic materials that affect their selection and performance in industrial products. Four hours of lecture and laboratory. Prerequisites: MFG 223 and 229.
MFG 490. Problems in Manufacturing Technology (1-5) On demand. For advanced'students wanting to conduct intensive study of selected problems in manufacturing technology. Prerequisite: consent of College.

## Marketing (MKT)

- MKT 300. Principles of Marketing Management (3) I, II, III. Introduction to the discipline. Topics inlcude buyer behavior; demand forecasting; market research and information systems; product, promotion, pricing and distribution strategies; strategic planning and control systems. Prerequisites: any ECON course and any ACCT course and STAT 200 or PSYC 270 or SOC 369 or MATH 115 or MATH 120 (or a MATH placement score beyond MATH 120) or any
MATH course equal to or higher in level
In MATH 124. (NOTE: These prerequisites apply to all students.)
MKT 400. Topics in Marketing (1-3) I, II. 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 dernand and course content. Typical topics, which may vary from semester to semester, could include nonprofit; demand analysis and forecasting; distribution systems; product (brand) management; and pricing strategies. May be repeated to 6 hours. Prerequisites: depending upon course content, prerequisites in addition to MKT 300 may be required.
MKT 402. Eluyer Behavior (3) I, II, III. Pertinent theoretical and empirical findings about buying behavior (consumer, industrial and institutional); topics include attitude formation and change; motivation; personality; social/cultural forces; and concepts underlying strategies of market segmentation and positioning. Prerequisite: MKT 300.
MKT 405. Services Marketing (3) II. Conceptual and analytic framework for the application of marketing principles to the service sector of the economy. Development and understanding of the impact of unique service characteristics on the development of marketing strategies. Prerequisite: MKT 300.

MKT 410. Principles of Advertising and Promotion (3) I, II, III. Theory and decision making in advertising and promotion. Topics relate to the promotional mix from a manager's point of view, including decisions about promotional campaign design, budgeting, message and media selection, and measurement of effectiveness. Prerequisite: MKT 300:

MKT 411. Creative Strategies and Tactics in Advertising (3) I, II. The creative process applied to advertising and promotion. Theory and practice of creative aspects of advertising strategy development and tactical implementation; copy, layout and production. Prerequisites: MKT 300 and MKT 410.

MKT 412. Managerial Problems in Advertising (3) I, II. Case studies evaluating opportunities for effective advertising program development and implementation. Experience will be gained (typically via cases, major campaign development exercises or focused projects) in making decisions regarding the setting of objectives; campaign design; budget allocation; message and media selection. Prerequisites: MKT 300 and MKT 410.

MKT 420. Marketing Research (3) I, II, III. Marketing research as a process, tool and source of information relevant to marketing decision making. Examines marketing research methods and techniques used in the collection and interpretation of primary and secondary data. Prerequisites: STAT 212 and MKT 300.
MKT 421. Advanced Marketing Research
(3) I, II. Application of research principles to solve marketing problems. Research projects are designed, implemented and completed.' Topics include: sampling; sample design; questionnaire construction, data collection, tabulation and analysis. Prerequisites: STAT 212 and MKT 300 and MKT 420.

MKT 430. Retail Management (3) I, II, III. Evolution, organization and operation of retailing; a managerial emphasis is maintained. Prerequisite: MKT 300.
MKT 436. Retail Merchandising (3) I, II. Merchandising functions: buying, selling. Merchandise planning, budgeting, procuring, pricing; sales promotion, inventory evaluation, cost analysis and control.
Prerequisites: MKT 300 and MKT 430.
MKT 440. Professional Selling (3) I, II, III. The selling process is studied from a theory, techniques, and application perspective. Topics include: behavioral aspects of sales; prospecting; qualifying; approaching; presenting; handling objections; closing; follow-up; and other special interest topics. Research paper and sales presentation are required for all students. Prerequisites: MKT 300 and MKT 402.

- MKT 442. Sales Management (3) I, II, III. Theory, principles and practices of selling and sales force administration for manufacturing and wholesaling enterprises. Topics include: recruiting; training; compensation; sales force size and design; selling techniques; performance appraisal. Prerequisites: MKT 300 and STAT 212 (or STAT 200 or MATH 115).

MKT 450. Industrial Marketing (3) I, II. Management of the industrial marketing process; the marketing of goods and services to organizations (business, institutions and government). Theory and practice applied through case study. Topics include organization buying; market measurement and segmentation; product/service offering; pricing; channels; and promotion. Prerequisite: MKT 300.
MKT 460. Strategic Marketing (3) 1, II, III. Strategic planning is explored in terms of marketing strategy development per se and its relationship to corporate-wide planning. Topics include: product/market planning strategies; and strategy-related tools and mode. Central to the course are case studies and/or computer simulation games. Prerequisites: MKT 300 and MKT 402 and MKT 420. Marketing majors only.

MKT 489. Marketing Internship (1-3) I, II, III. 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: Nine hours of MKT course work and permission of department chair. Graded S/U.

MKT 491. Special Studies in Marketing (13) I, II. 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 Marketing (1-3) I, II. For superior student who wishes individual reading program or independent research experience with guidance from an appropriate adviser. Prerequisite: open only to marketing student in BSBA with an overall GPA of 3.0 or better at time of registration. Letter grade only.

## Mathematics and Statistics (MATH)

## Mathematics Placement

The following are the principal sequences of courses which are used for meeting, in part, program requirements.

Sequence !: MATH 131; 232, 233
Sequence II: MATH 126*
Sequence III: MATH 115, 116
*Since the last catalog, MATH 124 and 125 have been replaced by MATH 126 and will be phased out for students in the College of Business Administration.
Sequence I: Sequence I is the traditional calculus sequence leading to advanced courses. This sequence is designed for mathematics majors, science students and other students whose background in mathematics includes two years in high school algebra, geometry, and trigonometry. One of the following is required to enter MATH 131
(a) A satisfactory placement score (see "Mathematics Placement Examination"); or
(b) MATH 128 (grade of C or better); or
(c) MATH 130 (grade of C or better); or
(d) Both MATH 120 and 129 (grade of C or better).

Sequence II: Sequence II is designed for the students in the College of Business Administration, as well as students in other major programs not requiring the standard calculus sequence. MATH 126 is a terminal course covering some of the material in Se quence l. One of the following is required to enter MATH 126:
(a) A satisfactory placement score (see "Mathematics Placement Examination"); or (b) MATH 120 (grade of C or better); (c) MATH 128 or 130 (grade of C or better).
Students in the College of Business Administration may satisfy their mathematics requirement by either MATH 126 or MATH 131. Some programs require MATH 131. Note that the MATH 131 option aliows for much greater flexibility of major than does MATH 126, and similariy, MATH 128 and 130 allow for more choices than does MATH 120.
Sequence II: Sequence III is a general introductory statistics sequence. MATH 115 is required by certain majors in the College of Healih and Human Services. A satisfactory placement score is required to enter MATH 115 (see "Mathematics Placement Examination").
Other program and college group requirements may be satisfied, in part, by using MATH 111, 120, 128, or 130.
The Department of Mathematics and Statistics also ofiers MATH 095 (Intermediate AIgabra) and MATH 098 (Algebra Review), designed for students not prepared to enter the prerequisites for Sequences I, II, or III above. These courses are offered without credit toward any degree program. Students are placed into MATH 095 and 098 through the Mathematics Placement Examination.
Prerequisites are strictly enforced with exceptions made only by the instructor. Admission to 300 and 400 level courses require that a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or S has been earned in the prerequisite.

## flathematics Placement

The department administers placement examinations to aid students in selecting an appropriate entry point into one of the sequences of courses, or to determine if remedial work is necessary. Placement testing and advice on course selection are available at pre-registration, and at other times in the department office ( 450 Mathematical Sciences Building). These entry points are:
(for Sequence I) MATH 120, 128, 130, or 131
(ior Sequence II) MATH 120 or 126
(for Sequence III) MATH 115
Students should use the Mathematics Placement Exam scores and consult with their advisor before selecting an initial course in mathematics.

## Advanced Placement

Students who have taken a calculus course in high schoool may be eligible to enter the calculus sequence (MATH 131, 232, 233) at MATH 232 or 233, and may also be eligible for credit for some of the courses in this sequence. These students should take the Calculus AB or Calculus BC advanced placement examinations from the College Entrance Examinations Board given at their high school. The department also gives An Advanced Placement Qualifying Examination in calculus for those students who do not have these examinations available, or who did not score high enough to earn credit. Students should register for MATH 131, pending examination results.
© MATH 095. Intermediate Algebra (5) I, II. A review of high school algebra topics, designed solely to bring a student up to the minimal level necessary to enter a beginning mathematics course. Credit for this course cannot be applied towards any degree program. Additional fee. Graded S/No Record.

- MATH 098. Algebra Review (3) 1, II, III. 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 towards any degree program. Additional fee. Graded S/No Record.
П§ MATH 111. Topics in Modern Mathemat-
ics (3) I, II. 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 school algebra.
I) MATH 115. Introduction to Statistics (3) I, II, III. Description of data, binomial and normal distributions, estimation and testing hypotheses for means and proportions.
Prerequisite: Two years high school algebra, one year of geometry and a satisfactory placement exam score.
ITMATH 116. Introduction to Statistics II (3) II. 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.
I© MATH 120. College Algebra (5) I, II, III. 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 127, 128 or 130 has been received. Prerequisite: Two years of high school algebra, one year of geometry AND a satisfactory placement exam score.
If MATH 124. Basic Calculus I (4) I, II, III. Graphing techniques, exponential and logarithm functions, dfferential calculus with applications. Not intended for students in physical sciences. Not open to students with a grade of C or higher in MATH 131. Prerequisite: a grade of C or higher in MATH 120; or two years of high school algebra and one year of geometry AND satisfactory placement exam score.
fl MATH 125. Basic Calculus II (3) I, II, II. Integral calculus, multivariate differentiai calculus and matrix algebra. Applications. Prerequisite: a grade of C or higher in MATH 124.
ๆf MATH 126. Basic Calculus (5) I, II, III. Differential and integral calculus, multivariate differential calculus and matrix theory; applications. Not open to students with a grade of $C$ or higher in MATH 125 or 131. Prerequisite: 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.
I\$MATH 128. College Algebra and Trigonometry (5) I, II. Topics of MATH 120 plus trigonometric functions and their graphs, trigonometric equations, and complex numbers. Not to be taken if credit for MATH $120,127,129$ or 130 has been received. Prerequisite: Two years of high school algebra, one year of geometry AND satisfactory placement exam score.
- MATH 129. Trigonometry (2) I, II. Trigonometric functions, graphs, identities, equa* tions, 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.
ๆIMATH 130. Precalculus Mathematics (3) I, III, III. Theory of equations, coordinate geometry, exponential, logarithmic and trigonometric functions, applications. Overiaps 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 geometry and a satisfactory placement exam score.
I§MATH 131. Calculus and Analytic Ceometry ( 5 ) 1,11, ill. 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, one-half year of trigonometry, ACT math score of 24 or higher and satisfactory score on department placement test; or (2) grade of C or higher in MATH 128, 129 or 130.
-MATH 222. Discrete Mathematics (3) I, II. 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 125 or 131.
MATH 226. Mathematics of Finance (3). Simple and compound interest, ordinary annuities, amortization, sinking funds, bonds, life annuities, life insurance. Prerequisite:' grade of C or higher in MATH 125 or 131.
ISMATH 232. Calculus and Analytic Geometry II (5) I, II, III. MATH 131 continued. Techniques of integration, sequences and series, vector valued functions, analytic $g$ ometry. Prerequisite: grade of C or highe. MATH 131.

4MATH 233. Calculus and Analytic Geometry III. (3) I, II. MATH 232 continued. Partial derivatives, multiple integrals, vector fields, power series, introduction to differential equations, applications. Prerequisitie: grade of C or higher in MATH 232.

## **MATH 241. Mathematics for Elementary

 Teachers I (3) I, II, III. 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: satisfactory placement exam score.**MATH 242. Mathematics for Elementary Teachers II (3) I, II, III. MATH 241 continued. The real number systems, informal geometry, basic probability. Open only to elementary and special education majors.
Prerequisite: grade of $C$ or higher in MATH 241.
**MATH 243. Mathematics for Elementary
Teachers (4). 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 placement exam and permission of instructor. Not open to students who have taken MATH 241 or 242.
§MATH 247. Fundamentals of Statistics (3). Discrete probability models, sampling theory, solving problems in statistical inference using nonparametric techniques. Prerequisite: MATH 125 or 131.
iliATH 295. 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) II (1987 and alternate years). History through calculus. Prerequisite or corequisite: MATH 332.

MATH 313. Elementary Mathematical Logic (3) I. 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) I, II.
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.
MATH 332. Elementary Linear Algebra (3) I, II, III. Systems of linear equations, vectors, matrices, determinants, linear tranformations, vector spaces and applications. Techniques and some proofs. Prerequisite: MATH 232.
MATH 337. Differential Equations (3) I. Introduction to ordinary differential equations: general equations of low order, higher order inear equations with constant coefficients, feries solutions, qualitative theory, and systems of differential equations. Prerequisite: MATH 233.

MATH 339. Fundamental Concepts of Modern Algebra (3) I, II, III. Elementary topics from rings, fields, groups: divisibility properties of integers; integral domains, construction of the rational, real and complex number systems, polynomial rings. Prerequisite: MATH 332 or consent of instructor.
MATH 350. Numerical Calculus (3). Basic numerical algorithms for computer use, polynomial interpolation, quadrature, solution of nonlinear equations and linear systems. Not open to students with credit for CS 350. Prerequisites: CS 101, MATH 233 and MATH 332.
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). 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 332 or consent of instructor.
MATH 402. Modern Geometry (3) I, II. Axiomatic development of neutral and Euclidean geometry. Introduction to non-Euclidean geometry. Prerequisite: MATH 332 and either MATH 322 or MATH 339.
MATH 403. Modern Algebra I (3) I. Topics from groups, and rings; normal subgroups, homomorphisms, cyclic groups, permutation groups, Lagrange and Cayley's theorem, factor groups, abelian groups, direct products, integral domains, ideals and factor rings, ring isomorphisms, polynomial rings. Prerequisite: MATH 322 and 332 or consent of instructor.
MATH 404. Modern Algebra II (3) II. Continuation of topics from MATH 403; vector spaces, extensions of fields, finite fields. Prerequisite: MATH 403 or consent of instructor.
MATH 405. Projective Geometry (3). Algebraic techniques to study projective properties of geometric configurations and plane curves, principle of duality, projective transformations, cross ratios, intersection theory and classical theorems. Prerequisite: MATH 332 and either MATH 322 or MATH 339.
MATH 412. Mathematical Models (3). Introduction to the process of creating and applying mathematical models in such fields as physics, chemistry, economics, psychology, biology and medicine. Student projects will be required. Prerequisite: permission of instructor.
**MATH 414. Advanced Mathematics for Elementary Teachers (5) II. Consumer mathematics, non-Euclidean geometry, matrices and vectors, proof and axiomatic systems, number theory, and other selected topics. Prerequisite: grade of C or better in MATH 242 or 243.

MATH 421. Foundations of Mathematics I
(3) I. Logic; set theory (including informal discussion of infinite sets and cardinals); axiomatic method (including models, consistency and independence). Prerequisite: MATH 332 and either MATH 322 or MATH 339 or consent of instructor.

MATH 422. Foundations of Mathematics II (3). Topics in the foundations of mathematics. Prerequisite: MATH 421, 313 or consent of instructor.
MATH 426. Actuarial Mathematics I (3) I. Theory of interest, survival distributions and life tables, life insurance, life annuities, net premiums. Intended to prepare students for actuarial examinations. Prerequisite: MATH 441.

MATH 427. Actuarial Mathematics II (3) II. Net premium reserves; multiple life functions; multiple decrement models; valuation theory for pension plans; insurance models including expenses, nonforfeiture benefits and dividends. Prerequisite: MATH 426.
MATH 430. Advanced Calculus (3) I, II. Infinite sequences and series, uniform convergence, improper integrals, partial derivatives, Jacobians, change of variables and optimization. Prerequisite: MATH 233 and 332, or consent of instructor.
MATH 432. Linear Algebra with Applications (3) II. 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. Vector Calculus (3) II (1990 and alternate years). Differential calculus of vector functions, inverse and implicit function theorems, line and surface integrals, theorems of Green, Gauss and Stokes. Prerequisites: MATH 233 and 332.
MATH 437. Qualitative Theory of Differential Equations (3). Existence theorems 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). 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.
MATH 441. Probability and Statistics I (4) I, II. Probability spaces, discrete and continuous random variables and their distributions, expected value and Central Limit Theorem, sampling distributions, estimation of parameters and tests of hypotheses. Prerequisite or corequisite: MATH 233.
MATH 442. Probability and Statistics II (4) II. MATH 441 continued. Maximum likeihood estimation, Neyman-Pearson lemma, most powerful test, regression analysis, nonparametric statistics. Prerequisites: MATH 441 and 332.

MATH 445. Applied Probability (3) I (1990 and alternate years). Probabilly 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) I (1989 and alternate 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) I. 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) II. Study of numerical methods for the alebraic 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 programming experience. Not open to students with credit for CS 452.
MATH 461. Introduction to Complex Analysis (3) II (1989 and alternate years). Complex numbers, complex valued functions, differentiation of complex valued functions, analytic functions, power series, integration, contour integrals, residues and poies, conformal mapping, applications. Prerequisite: MATH 233 and 332 or consent of instructor.
MATH 465. Introduction to Real Analysis (3) I. Sets, functions and properties of real numbers, numerical sequences and series, limits, continuity, uniform continuity for real functions; differentiation and Riemann integration. Prerequisite: MATH 233.
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. Prerequisite: consent of instructor and chair of department.
MATH 469, Internship (1-3). Internship for majors in mathematics or statistics in the cooperative education program. Written report required. May be repeated with permisssion. Does not apply towards major or minor. Prerequisite: permission of department. Graded S/U.
MATH 495. 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.
*"For education credit only

## Medical Record Administration (MRA)

MRA 101. Introduction to Health Professions (1) I, II. Survey of health and human service professions and the function of health care personnel within these professions. Graded S/U.

MRA 301. Medical Terminology I (2) I, II. 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.
MRA 395. Workshop-Current Topics (1-3) I, II, III. May be repeated. Special topics or issues in the field of medical records, primarily of current or unique interest to students and/or practitioners. Prerequisite: permission of instructor.
MRA 403. Medical Record Science III (3) I. Medical staff functions and requirements, including peer review and hospital wide quality assurance programs. Analysis of record systems in a variety of health care settings. Prerequisites: MRA 401 and MRA 402; enrollment in MRA program and senior standing.
MRA 404. Medical Record Science IV (3) II. Planning, staffing, actuating and controlling a medical care information system by use of systems analysis techniques. Application of principles through management processes. Prerequisite: enrollment in MRA program and senior standing.

## MRA 405. Legal Aspects of Medical

Records (2) I. Medico-legal aspects of medical records. Analysis of the medical record as a legal document, confidentiality and release of medical information. Prerequisite: current enrollment in LEGS 425, enroliment in MRA program and senior standing.
MRA 407. Research Design and Methodology (2) I. Application of research techniques to study specific disease entities. Prerequisite: enroliment in MRA program and senior standing.
MRA 408. Computers in Health Care (3) I. Use of computers in health care; applications to clinical lab, radiology, diagnosis, accounting and administration. Emphasis on medical record applications and systems approach to implementation. Data security, current technology and future practice. Prerequisite: MIS 200, enrollment in MRA program and senior standing.
MRA 409. Management Skills Practice (2) II. Application and practice of knowledge gained specifically through MRA 404 and generally through ali previous MRA courses. Role-playing, case studies and management projects. Development of the art of problem-solving, communication and management style in preparation for 8 weeks of management affiliation. Prerequisite: enrollment in MRA program and senior standing.
MRA 410. Seminar-Trends in Medical Record Administration (2) II. Discussion of topics, trends, constraints affecting the profession. Supplemented by directed practice experience, articles and case studies. Prerequisites: enrollment in MRA program and senior standing.

MRA 470. Independent Study in MRA (1-3) I, II, III. May be repeated. For advanced student to design and work independently on a study or special project in area of interest. Prerequisite: faculty sponsor and permission of the program director.

MRA 488. MRA Laboratory II (2) I. Application of medical record theory to actual prac tice through a supervised learning experience in the medical record laboratory and assigned clincial setting(s); emphasis on acquiring procedural competencies. Prerequisites: MRA 486 and 487, and enrollment in MRA 403.
MRA 489. Directed Practicum II (6) II. Practical medical record experience under direct supervision designed to give the MRA student experience in managing a medical record department in a health care facility; exposure to the daily organization and management of a medical record department. Prerequisite: MRA 486, 487 and 488.

## Health Information Technology (MRT)

$\dagger$ MRT 100. Medical Record Science I (4) I. Historical development of hospitals and medical record profession. Basic functions of medical record department: filing, numbering systems, retention; forms design and control; standards for development of medical records, including the problem oriented medical record and computerized medical records; analysis of record deficiencies; records in skilled nursing, ambulatory, hospice and mental health care facilities. Three hour lecture and two hours of assigned lab. Prerequisite: permission of instructor.
$\dagger$ MRT 101. Medical Terminology (3) I. Vocabulary and terms used by medical personnel; prefixes, suffixes, word roots and their combining forms, usage, spelling and pronounciation; specialized terms within body systems and medical specialities. Two hours lecture and two hours of assigned lab.
$\dagger$ MRT 102. Medical Transcription (2) II. Skill in use of transcription equipment and expansion of medical terminology and typing accuracy and speed. Practice in typing medical, operative, clincial summary, laboratory, history, physical and admission reports. One hour lecture and five hours lab. Prerequisites: MRT 101 and typing proficiency as indicated with a grade of C or better in BUSE 111 or equivalency and CS 180.
†MRT 112. Medical Record Science II (3) II. Coding, classifying, and indexing data according to ICD-9-CM. Three hours lecture and two hours of assigned lab. Prerequisite: MRT 100.
$\dagger$ MRT 201. Medical Record Directed Practice (2) 1, 11 or III. 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. 16 hours per week of clinical instruction. Prerequisites: MRT 102 and 112. Corequisite: enrollment in MRT 211. Eight-week session.
$\dagger$ MRT 202. Medical Record Directed Practice II (2) I, II or III. Continued application of medical record theory to actual practice or more advanced, technical skills through in: struction of a professional medical recore practitioner. 16 hours per week of clinical instruction. Prerequisites: MRT 201 and 211. Corequisites: enrollment in MRT 204 and 212. Eight-week session.

MRT 204. Pathophysiology (4) II. Disorlered human functions and systems; lan--guage, causes and types of diseases; diseases of the body systems, each described in terms of its etiology, pathology, symptoms and treatment. Four hours lecture. Prerequisites: BIOL 104, 331 and 332.
†MRT 211. Medical Record Science III (4) I. Health, hospital statistics, quality assurance studies and utilization review with PRO and JCAH standards; hospital libraries, cancer registries, admitting procedures, principles and roles in management, and current topics in medical records. Three hours lecture and two hours assigned lab. Prerequisite: MRT 112.
$\dagger$ MRT 212. Medical Record Science IV (1) II. The medical record as legal document; confidential communications; consents, authorizations and releases; release of
information. Two hours lecture, ten weeks; one hour laboratory. Prerequisite: MRT 211.
$\dagger$ MRT 290. Topics in Medical Record Technology (1-3) I, II. Medical record technology projects, workshops and seminars dealing with current topics not covered in existing courses. Prerequisite: permission of instructor.
$\dagger$ MRT 291. Field Experience (3) I,'II, III. 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.

Yedical Technology (MEDT)
to hospation of these courses may vary slightly from hospital to hospital.
MEDT 201. Orientation to the Profession of Medicine/Medical Technology (1) I or II. Professional aspects of medical technology and the allied health field; introduction to laboratory procedures and topics concerning direct and indirect patient care; tour of hospital facilities; review of stress management, medical ethics, medical economics. Time: one (1) two-hour laboratory/discussion session per week.
MEDT 402. Orientation and Managernent (1) I or II or III. Orientation to the hospital departments and laboratory procedures. Laboratory supervision and management. Prerequisite: Admission to hospital-based medical technology program.

## MEDT 403. Applied Clinical Microbiology

(9) I or II or III according to sequence. Fourteen weeks of supervised practical experience in identification of bacteria, fungi and parasites in a hospital laboratory setting.*
MEDT 404. Clinical Serology (2) I or II or III according to sequence. Three weeks of supervised experience in clinical applications of cellular and humoral immunity as diagnostic procedures.
MEDT 405. Applied Clinical Hematology (5) I or II or III. Eight weeks of supervised practical experience in hematologic meth-. ods, coagulation and blood cell morphology hospital laboratory setting.*
DT 406. Applied Clinical Chemistry (11) Tor II or III according to sequence: Seventeen weeks of supervised practical experience in manual and automated methods in clinical chemistry, toxicology and endocrinology in a hospital setting."

MEDT 407. Blood Bank (5) I or II or III according to sequence. Seven weeks of supervised practical experience in analyzing the immune mechanism with emphasis on procurement of blood for transfusion in a hospital laboratory setting.*
MEDT 411. Diagnostic Immunology I (2) I or 11 or 111 according to sequence. Theory of clinical immunology related to humoral and cellular immunity in health and disease states. Two lectures. Prerequisites: BIOL 439 recommended and permission of instructor.
MEDT 412. Diagnostic Immunology I Laboratory (1) I or II or III according to sequence. Laboratory application and testing related to humoral and cellular immunity in disease states. One three-hour laboratory. Prerequisites: BIOL 439 and permission of instructor. Lab fee.
MEDT 413. Immunohematology I (4) I or II or III according to sequence. Theory of human blood groups, compatibility testing, detection and identification of antibodies, blood collection/storage, management of transfusion service. Four lectures. Prerequisites: BIOL 439 and permission of instructor.

MEDT 414. Immunohematology I Laboratory (2) I or II or III 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 If (3) I, II or III. MEDT 413 and MEDT 414 continued; emphasis on a clinical application. Prerequisites: MEDT 413 and 414 with a grade of C or better and permission of instructor. Lab fee.*
MEDT 416. Clinical Immunology II (2) I, II or III. 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 (2) I or II or III according to sequence. Origin, regulation, morphology and function of blood cells in health and disease. Congenital and acquired hematologic aberrations. Two lectures. Prerequisite: BIOL 332 or equivalent and permission of instructor.
MEDT 422. Hematology I (2) I or II or III 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 (1) I or II or III according to sequence. Mechanism of hemostasis in health and hemorrhagic and thrombotic disease. Blood cell morphology. One lecture and one two-hour laboratory. Prerequisite: MEDT 421 and 422. Lab fee.

MEDT 424. Hematology III (3) I or II or III. 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) II or III. Isolation-identification and detailed description of clinically important bacteria. Microbial etiology of disease; methods of prevention and control. Three lectures. Prerequisites: BIOL 313 or equivalent and permission of instructor.
MEDT 432. Clinical Microbiology I Laboratory (2) I or II or III. Diagnostic microbiology laboratory procedures. Methods of isolation and identification of clinically significant bacteria. Preréquisites: BIOL 313 or equivalent and permission of instructor Lab fee.
MEDT 433. Clinical Bacteriology II (4) I or II or III. MEDT 431 and 432 continued; emphasis on clinical application and identification of clinically significant bacteria. Fulltimée clinical instruction and practice. Prerequisites: BIOL 426, grade of C or better in MEDT. 431 and 432 and permission of instructor. Lab fee.*
MEDT 434. Clinical Parasitology (2) I or II or III according to sequence. Paraṣitic 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) I or II or III 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 441. Clinical Chemistry I (4) I or 11 or III according to sequence. Theoretical principles of analysis of chemical constituents of body fluids in normal and disease states. Prerequisites: CHEM 308-309, CHEM 201 and PHYS 201 recommended and permission of instructor.
MEDT 442. Clinical Chemistry I Laboratory (2). I or II or III according to sequence.. Methods, instrumentation and techniques of clinical chemistry through experiments, problems and demonstrations. Two threehour laboratories. Prerequisites: CHEM 308-309, CHEM 201 and PHYS 201 recommended and permissión of instructor. Lab fee.
MEDT 443. Clinical Chemistry 11 (5) I or II or Ill. Continuation of MEDT 441 and 442; emphasis on clinical application. Prerequisites: MEDT 441, 442 and 451 and permission of instructor. Lab fee:*
MEDT 451. Analysis of Body Fluids (2) I or II or III 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) | or II or III. Laboratory supervision and management; princlples of education and laboratory instruction; seminars or case histories on selected typed of clinical interest. Prerequisite: permission of instructor.

## MEDT 470. Research and Special Topics

 (1-3) I or II or III 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) I or II or ill. Research techniques, literature search, experimental design. Term paper required. For universitybased students during clinical training at clinical site. Prerequisites: senior standing and permission of instructor. Lab fee.

## Military Science (MILS)

MILS 101. 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 US Army. Extensive discussion of the role and responsibility of the military officer. Presentation of detailed information concerning career opportunities as an Army officer. No military obligation or prerequisites. Freshmen and sophomores only.
MILS 102. Leadership/Military Skills (2). Leadership focuses on interpersonal skills, professionai ethics and officership. Military skills include the understanding and application of basic rappelling techniques. No military obligation. Freshmen and sophomores only. Prerequisite: MILS 101
MILS 201, Survival (2). Discussion and application of knowledge and skills needed in basic human survival situations in wilderness environments. Topics include land navigation, first aid, map reading, survival kits, adverse weather conditions, finding shelter, water and food. No military obligation. Freshmen and sophomores only. Prerequisite: MILS 101 or permission of instructor.
MILS 202. Millitary Tactics (2). Army tactics, principles of engagement, written military orders and usage of military maps. Simulation exercises and war games will be utillzed in ciass highlighting military tactics. No military obligation. Freshmen and sophomores only. Prerequisite: MILS 201 or permission of instructor.
MILS 301. Protessionalism/Leadership (3). Professionalism and leadership required of the US Army Officer; application of leadership principles and styles through case studies and role-piaying exercises with emphasis on military situations. Participation in leadership labs, physical training program and field training exercises required. Prerequisite: department permission and completion of one of the following: ROTC basic course at BGSU; ROTC Basic Camp at Fort Knox, KY; prior active duty service; Army Reserve or Army National Guard basic training.

MILS 302. Small Unit Operations (3). Organization 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 permission.

## 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 US Army judicial system inciuding 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 tralning exercises, physical training, and leadership labs. Prerequisite: department permission.
MILS 470. Studies in Military Science (1-3) 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 100. Small Ensembles (1) I, II. 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: Early Music Ensemble, Balinese Gamelan Ensemble, Now Music Ensemble.
qMUCH 101. Exploring Music (2) I, II. Focus on three types of contexts important to appreciating music: the composer, the place and the time. Open to non-music majors oniy.
MUCH 110. Elements of Music (3) I, II, III. Musical literacy in scales, intervals and triads in two clefs, as demonstrated by singing, hearing, reading and writing. Open to non-majors, minors and music majors.
MUCH 112. Survey of Jazz Styles (2) II. Examines diverse styies of American jazz and its African roots; emphasis on individual musicians who pioneered various styles of jazz. Open to non-music majors only.
MUCH 116. Fundamentals of Composition (2) I, II. Basic compositional techniques for students not yet admitted to baccalaureate program in music composition. May be repeated. Cannot be substituted for MUCH 316. Prerequisite: Passing grade on freshman placement exam or consent of instructor.

IMUCH 125. Music of Worid Cultures (3) 1 , II. Musical systems of major non-Western art musics: Africa, Near East, Pacific and Asia. Theoretical, analytical and cultural concepts related to music. Open to non-majors only.
MUCH 131. Western Art Music I (4) II. Music of Baroque and Rococco periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: Passing grade on freshman placement exam or MUCH 110.
MUCH 132. Western Art Music II (4) I. Music of Classical and Romantic periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 131.
MUCH 141. Aural Skills I (2) I, II, III. Basic skills in sightsinging; rhythmic, meiodic and harmonic dictation of diatonic and triadic materials. Prerequisite: Passing grade on freshman placement exam or MUCH 110.
MUCH 142. Aural Skills II (2) I, II, III. MUCH 141 continued. Prerequisite: MUCH 141.
MUCH 211. Jazz Improvisation and Repertoire I (2) I alternate years. Techniques of jazz improvisation and related repertoire, application of basic scales, arpeggios, melodic construction to blues and standard pop tunes. Prerequisite: MUCH 131 or consent of instructor.
MUCH 212. Jazz Improvisation and Repertoire II (2) II aiternate years. Advanced techniques of jazz improvisation and related repertoire; application of modes, altered scales, chord extensions, chromatic harmo: ny to jazz compositions. Prerequisite: MUCH 211.
MUCH 213. Jazz Piano Fundamentals (3) I alternate years. Analysis of jazz piano accompaniment styles; techniques of left-hand voicing and rhythmic accompaniment; scale repertoire; piano arranging from lead sheets. Prerequisites: MUED 151 and passing grade on freshman placement exam.
qMUCH 221. Masterpieces of Music (2) I, II. Music of important composers from various periods; directed listening of selected works. Open to non-music majors only.
MUCH 231. Western Art Music III (3) II. Music of 20th century viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 132, MUCH 142.
MUCH 232. Western Art Music IV (2) I, II. Music of the Medieval and Renaissance periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 141.
§MUCH 233. Music in African Culture (2) II alternate years. The study of music in various groups of sub-Sahara Africa with emphasis of its relation to individual cultures, its structure, and performance. Prerequisite: Passing grade on freshman placement exam or MUCH 110.
\#MUCH 234. Music in Japanese Culture (2) Il alternate years. The study of music in Japanese religious ritual, historical court ${ }^{\text {. }}$ music, and music for theater and concerts? with emphasis on its socio-historical context. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

MUCH 235. Music in indonesian Culture (2) 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: Passing grade on freshman placement exam or MUCH 110.
MUCH 236. Introduction to Jazz and Commercial Music (2) I. Analysis of theoretical and historical evolution of American popular music, focusing on Broadway musical theater, rock'n roll and contemporary jazz-rock. Prerequisite: Passing grade on freshman placement exam.
MUCH 237. Jazz (3) II. 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. Prerequisite: MUCH 131 or consent of instructor.
MUCH 241. Aural Skills III (2) I, II, III. Intermediate skills in sightsinging; rhythmic, melodic and harmonic dictation of chromatic material including seventh chords. Prerequisite: MUCH 142.
MUCH 242. Aural Skills IV (2) I, II. MUCH 241 continued. Prerequisite: MUCH 241.
MUCH 300. Small Ensembles (1) I, II. 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: Early Music Ensemble, Balinese Gamelan Ensemble, New Music

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NOCH 308. Keyboard Harmony I (2) I alternate years. Use of keyboard skills in score reading, transposition, extemporization and accompanying.
MUCH 309. Keyboard Harmony II (2) II alternate years. Continuation of keyboard skills developed in MUCH 308; practical aspects of accompanying. Prerequisite:
MUCH 308.
MUCH 311. Jazz Arranging and Analysis I (3) I 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. Jazz Arranging and Analysis il (3) II 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) I. 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 316. Composition (3) I, II, III. Original mposition in vocal and instrumental ms. May be repeated to 12 hours. Presquisite: MUCH 231 and 242 . Open only to composition majors.

MUCH 318. Symphonic Literature (2) | 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) I, II. Scoring for band instruments, from small ensembles to concert band and marching band. Prerequisite: MUCH 231.
MUCH 325. Choral Arranging (2) II. 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 H341. Aural Skills V (2) II. Advanced skills in sightsinging; rhythmic, melodic and harmonic dictation of chromatic and atonal material. Prerequisite: MUCH 242.
MUCH 401. History and Literature of Jazz
(2) I. Jazz from African influences through present developments; personalities involved in stylistic change.
MUCH 403. Counterpoint I (2) I alternate years. 16 th-century counterpoint. Prerequisites: MUCH 231 and 232.
MUCH 404. Counterpoint II (2) II alternate years. 18th-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) II alternate years. Performance practice in music, improvisation, ornamentation, accompaniment, instrumentation, rhythm and tempo. Prerequisite: MUCH' 231.
MUCH 408. Chamber Music Literature (2) II alternate years. Selected major chamber works of various periods. Reading on all forms and media. Prerequisite: MUCH 231.
MUCH 410. Contemporary Music Pro-Seminar (2) I, II. Musical styles and techniques of 20 th 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. Jazz Pedagogy (2) II alternate years. Prepares student to teach fundamentals of jazz improvisation, arranging, jazz ensemble techniques. Prerequisite: MUCH 312.

MUCH 412. Opera Literature (2) I alternate' years. Styles, interpretation, traditional performances of various schools. Prerequisite: MUCH 231.
MUCH 420. Problems and Techniques of Ethnomusiciology (2) II on demand. Topics and techniques in ethnomusiciology. Open to students interested in all music as aspects of culture.
MUCH 424. Electronic Music I (3) I. Basic language and literature of electronic music. Problems of live electronic music. One noncredit hour per week in listening laboratory.

MUCH 425. Electronic Music II (3) II. Commercial equipment reviewed. Students realize tapes in electronic music studio. Prerequisite: MUCH 424.
MUCH 427. Computer Music \& Multi-Media
(3) I. Lecture and applied composition using midi-computer audio hardware and computer video-graphic software to generate multimedia works.
MUCH 431. Aesthetics of Black Music (3)
II. West African and Afro-American concepts of music; modifying effects America has had from slavery to present.
MUCH 436. Audio Recording Techniques
(2) I, II. Concert and studio multi-track 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) I, II. Advanced studio multi-track techniques and stereo concert hall recording. Emphasis placed on applied recording techniques, indepth understanding of peripheral hardware and microphone choice and placement. Prerequisite: MUCH 436.
MUCH 438. Commercial Music Industry Practices (2) II. Alternate years. Computer music and MIDI applications; studio recording for the professional musician; technology and its role in professional music.
MUCH 470. Reading and Research (2-4) I, II. 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) II. Prerequisite: MUED 145. (Elective).
MUED 130. Trumpet-French Horn Class (1) I, II.
MUED 136. Trombone-Euphonium-Tuba Class (1) I, II.
MUED 140. Clarinet-Saxophone Class (1) I, II.

MUED 145. Flute-Percussion Class (1) I, II.
MUED 146. Oboe-Bassoon Class (1) I, II.
MUED 147. Bassoon Reed Class (1) II. (Elective).
MUED 150. Class Piano (1) I, II. 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) I, II. 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) I, II. 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 1. Lab fee.

- MUED 156. Beginning Piano for the Nonmusic Major I (2) I, II. 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) I, II. MUED 156 continued. Class piano 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) I, II. Beginning study of voice production, breathing, posture and diction through vocalises and songs in English. Open to non-majors.
MUED 177. Voice Class (1) I, II. MUED 170 continued. Prerequisite: MUED 170. Open to non-majors.
MUED 180. String Class (2) I, II.
MUED 190. Troubadour Harp Class (1) I, II. (Elective).
MUED 195. Guitar Class (1) I, II. (MUED majors and minors only.)
MUED 240. Introductory Music Field Experience (3) I, II. Introduction to the music education profession and a wide variety of teaching situations at all levels. Prerequisite: sophomore standing in music. $\mathrm{C}=10$ hours; $F=32-40$ hours. Required of all sophomores.
MUED 248. Music Teaching Skills for the Classroom Teacher (3) $I, I I$. 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.
MUED 250. Class Piano: Instrumental Harmonization and Score Reading I (2) 1, II. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and sightreading 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) I. Class piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, pop/jazz chords, and sightreading of piano and instrumental scores. Prerequisite: Piano Proficiency 1. Grade of C or better required for admittance into accompanying course.
MUED 252. Class Piano: Choral Harmonization and Score Reading I (2) I, II. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and sightreading 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) I. Class Piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, pop/jazz chords, and sightreading of choral scores. Prerequisite: Piano Proficlency I. Grade of C or better required for admittance into accompanying course.
mued 254. Class Piano: Classroom Harmonization, Transposition and Improvisation I (2) I. 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 for admittance into accompanying course.
MUED 255. Class Piano: Classroom Harmonization, Transposition and Improvisation I (1) I. Class piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, accompaniment transposition and improvisation. Prerequisite: Piano Proficiency l. Grade of C or better required for admittance into accompanying course.
MUED 256. Class Piano: Accompanying as a Teaching Tool I (1) I, II. 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) II. Class piano course for music education student with advanced keyboard facility; provides work in accompanying skills. Prerequisite: Piano Proficiency II. Not for keyboard emphasis majors. Grade of C or better required for music education majors for graduation.
mued 340. Junior Methods Project in Music (7) I [Choral, String, Band (University Lab Schools) options only]; II (Band, classroom options only). Concentrated study of organization, administration and teaching of music in grades K-12; emphasizes correlation of methods seminars with clinical and field activities. $\mathrm{C}=20$ hours. Taken with conducting, MUED 341, applied study, ensemble and an evening section of either EDFI 302 or EDAS 409. Prerequisite MUED 240 and permission of chair.
MUED 341. Junior Methods Project in Music Field Experience (2) I [Choral, string, band (University Lab Schools) options only]; II (band, classroom options only). Field component of MUED 340. Students are assigned to the University laboratory schools and/or area schools within a 30 -mile radius. Includes observation and teaching. $\mathrm{F}=$ minimum 48 hours. Must be taken with MUED 340. Prerequisites: MUED 240 and permission of chair. Graded S/U.
MUED 359. Examination and Performance of Choral Repertoire (2) I. Material suitable for use in secondary schools; related performance problems and their solutions. $\mathrm{C}=5$ hours.

## MUED 360. Musical Theatre Production

Survey (2) II. On demand. Overview of considerations necessary in production of music theatre at public school level.

MUED 395. Workshop on Current Topics (1-mes 3) On demand. Intensive educational expe ence on selected topics related to skills dsvelopment, content update or materials development. Typically, an all-day or similar concentrated time format used. Requirements usually met within time format. May be repeated on approval of adviser.
MUED 402. Beginning Wind and Percussion Instrument Repair (1) II. Basic practices and techniques of instrument repair. Lab fee.
MUED 450. Adult Group Piano Teaching (2) II. A survey of materials, supervised teaching and program development appropriate for adult level class. Open to students with a strong plano 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) I. 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. $\mathrm{C}=10$ hours.
MUED 458. Marching Band Techniques (2) 1. Techniques in planning, charting and rehearsing marching band shows and administering public school marching bands. Prerequisite: junior standing.
MUED 470. Reading in Music Education (13) I, II. Special topics in music education. Admittance by consent of instructor.
MUED 491. Teaching Practicum (1-2) I, II. 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) I, II. 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.

## Music, General (MUS)

MUS 099. Recital Attendance (0) I, II. Required of all music majors for six semesters. Successful completion of course requires attendance at minimum of 15 oncampus music performances. Graded $\mathrm{S} / \mathrm{U}$.
MUS 190. Beginning Guitar (2) I, II. Introduction to the guitar, fundamentals of technique and music notation reading. Open to non-music majors only.
MUS 191. Intermediate Guitar (2) I, II. MUS 190 continued. Open to non-music majors only. Prerequisites: MUS 190 or previous experience and consent of instructor.

## Music Performance Studies MUSP)

MUSP 100. Small Ensembles (1) I, II. 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 information 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 ad-
viser. The following small ensembles are offered:
MUSP A100. Music Theater Productions
MUSP B100. Guitar
MUSP C100. Percussion
MUSP D100. Brass Choir 1
MUSP F100. Brass Cholr II
MUSP 1100. Euphonium-Tuba
MUSP J100. Brass
MUSP K100. Jazz Lab I
MUSP L100. Jazz Lab II
MUSP M100. String
MUSP N100. Trombone Choir
MUSP 0100. Woodwind
MUSP P100. Horn
MUSP Q100. Harp
MUSP R100. Piano Accompaniment Practicum
MUSP S100. Mixed Chamber
MUSP V100. Saxophone
MUSP X100. Trumpet Guild
4SP Y100. Varsity Quartet
USP Z100. Jazz
(See also MUCH 100.)
MUSP 160. Sight Reading I (1) I. Devēlopment of visual comprehension of intervallic patterns and basic rhythmic patterns for the keyboard player. Prerequisite: consent of instructor.
MUSP 195. Pedal Harp Class (1) I, II. Prerequisite: one semester of Troubadour Harp (MUED 190) or consent of instructor. Fee: \$22.50.
MUSP 201. Guitar Lab (1) I, II. 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) I. Alternate years. Literature from early keyboard music through Classical. Prerequisite: consent of instructor.
MUSP 211. Piano Repertoire II (3) II. Alternate years. Literature from Romantic era to present. Prerequisite: consent of instructor.
MUSP 214. Singer's Diction (2) I. International application of the International Phonetic Alphabet (IPA) to selected English, French, Geirman and Italian song texts.
MUSP 215. Organ Repertoire I (2) I. Alter-- nate years. Literature from 1325 to the present, excluding the music of J.S. Bach. Frequisite: consent of instructor.
IUSP 216. Organ Repertoire II (2) II. Alter-nate years. Organ music of J.S. Bach. Prerequisite: consent of instructor.

MUSP 221, 231-235, 241-245, 261-263, 271-272, 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; two through four credit hours entitles students to weekly one-hour lessons, 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 ( $1,2,3,4$ ) I, II, III.
MUSP 231. Applied Trumpet ( $1,2,3,4$ ) I, II, III.

MUSP 232. Applied French Horn ( $1,2,3,4$ ) I, II, III.
MUSP 233. Applied Trombone ( $1,2,3,4$ ) I, II, III.

MUSP 234. Applied Euphonium $(1,2,3,4)$ ! , II, III.
MUSP 235. Applied Tuba $(1,2,3,4)$ I, II, III.
MUSP 241. Applied Flute ( $1,2,3,4$ ) I, II, III.
MUSP 242. Applied Oboe $(1,2,3,4) I, I I$, III. MUSP 243. Applied Clarinet $(1,2,3,4) I$ II, III.

MUSP 244. Applied Saxophone $(1,2,3,4)$ I, II, III.
MUSP 245. Applied Bassoon $(1,2,3,4)$ I, II, III.

MUSP 261. Applied Piano $(1,2,3,4) I$ III, III. (Permission of instructor required for 2 or more credit hours)
MUSP 262. Applied Harpsichord ( $1,2,3,4$ ) I, II, III.
MUSP 263. Applied Organ $(1,2,3,4) I$ III, III. MUSP 271. Para Voice (2) I, II. No audition required. Fee: $\$ 45$.
MUSP 272. Applied Voice $(1,2,3,4)$ I, II, III.
MUSP 281. Applied Violin $(1,2,3,4)$ I, II, III.
MUSP 282. Applied Viola $(1,2,3,4)$ I, II, III.
MUSP 283. Applied Cello $(1,2,3,4)$ I, II, III.
MUSP 284. Applied Double Bass ( $1,2,3,4$ ) I, II, III.
MUSP 285. Applied Harp ( $1,2,3,4$ ) I, II, III.
MUSP 286. Applied Guitar $(1,2,3,4)$ I, II, III.

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 varying, 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 chair of performance studies 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 238-239, 277-279, 288-289. Large Ensembles (1-2) I or II. 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 A238. Fall Concert Band (1) I.
MUSP A238. Symphonic Band (2) II.
MUSP B238. Fall Wind Ensemble (1) I.
MUSP B238. Concert Band (1) II.
MUSP C238. University Band (1) II.
MUSP F238. Athletic Band (1) II.
MUSP 239. Marching Band (2) I.
MUSP 277. A Cappella Choir (1) I, II:
MUSP 278. Collegiate Chorale (2) I, II.
MUSP A279. University Women's Chorus (1) I, II.

MUSP B279. University Men's Chorus (1) I, 11.

MUSP 288. Chamber Orchestra (1) On demand.
MUSP 289. Philharmonia (2) I, II.
MUSP 264. Accompanying Techniques I (1) I, II. 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 265. Piano Four-Hand Class (1) I, II.
May be repeated. Appropriate four-hand literature. Prerequisite: MUSP 160 or consent of instructor:
MUSP 275. Introduction to Opera Theater
(2) I. Basic terminology and practices of opera theater.

MUSP 300. Small Ensembles (1) I, II. 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 A300. Music Theater Productions
MUSP B300. Guitar
MUSP C300. Percussion
MUSP D300. Brass Choir 1
MUSP F300. Brass Choir II
MUSP 1300. Euphonium-Tuba
MUSP J300. Brass
MUSP K300. Jazz Lab I
MUSP L300. Jazz Lab II
MUSP M300. String
MUSP N300. Trombone Choir
MUSP O300. Woodwind
MUSP P300. Horn
MUSP Q300. Harp
MUSP R300. Piano Accompaniment
Practicum
MUSP S300. Mixed Chamber
MUSP V300. Saxophone
MUSP X300. Trumpet Guild
MUSR Y300. Varsity Quartet
MUSP Z300. Jazz
See also MUCH 300.
MUSP 305. Conducting I (2) I. Fundamental beat and cluing techniques; option of either instrumental or vocal emphasis.
MUSP 306. Conducting II (2) II. Advanced study and analysis of baton techniques, score reading and rehearsal procedures; option of either instrumental or vocal emphasis.
MUSP 310. Vocal Repertoire for the Young Singer (1) i. 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) I. 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) II. Alternate years. 19th and 20 th century French, Spanish and German arts song literature. Prerequisite: consent of instructor.
MUSP 360. Sight Reading II (1) II. Rapid comprehension of complex intervallic and thythmic patterns; special attention to ensemble precision. Prerequisite: MUSP 160 or consent of instructor.
MUSP 361. Style and Interpretation (1) I, II. 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) II. MUSP 264 continued, using more advanced literature. Prerequisite: MUSP 264 or consent of instructor.
MUSP 367. Piano Pedagogy I (3) I. Methods, materials and teaching techniques for the beginning pre-college student. Prerequisite: consent of instructor.
MUSP 368. Piano Pedagogy II (3) II alternate years. Methods, materials and teaching techniques for the intermediate precollege student. Prerequisite: consent of instructor.
MUSP 370. Vocal Pedagogy (3) I. Basic concepts of vocal pedagogy; methods, materials and terminology. Prerequisite: consent of instructor.
MUSP 378. Opera Theater (2) I, II. 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.
MUSP 396. Service Playing I (2) I. Alternate years. Hymn playing, transposition, modulation, improvisation and accompanying at the organ. Prerequisite: consent of instructor.
MUSP 397. Service Playing II (2) II. Alternate years. MUSP 396 continued. Prerequisite: MUSP 396 or consent of instructor.
MUSP 410. Harpsichord Repertoire I (3) I. Alternate years. 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) II. Alternate years. Solo harpsichord literature from 1700 to the present, emphasis on performance. Prerequisite: MUSP 410 or consent of instructor.
MUSP 415. Organ Construction (2) II. Alternate years. History of the design and construction of the organ. Prerequisite: consent of instructor.
MUSP 416. Church Music (2) II. On demand. Music of the major Western churches; plainsong, hymnology, liturgies.

## Prerequisite: consent of instructor.

MUSP 421, 431-435, 441-445, 461-463, 471-472, 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, two through four credit hours entitles students to weekly one-hour lessons, with three and four hours 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 $(1,2,3,4)$ I, II, III.
MUSP 431. Applied Trumpet $(1,2,3,4)$ I, II, III.

MUSP 432. Applied French Horn $(1,2,3,4)$ I, II, III.
MUSP 433. Applied Trombone ( $1,2,3,4$ ) I, II, III.

MUSP 434. Applied Euphonium $(1,2,3,4) I_{i} \ldots$ II, III.
MUSP 435. Applied Tuba $(1,2,3,4)$ I, II, III. MUSP 441. Applied Flute $(1,2,3,4)$ i, II, III. MUSP 442. Applied Oboe ( $1,2,3,4$ ) I, II, III. MUSP 443. Applied Clarinet ( $1,2,3,4$ ) I, II, III.

MUSP 444. Applied Saxophone $(1,2,3,4)$ 1; II, III.
MUSP 445. Applied Bassoon $(1,2,3,4)$ I, II, III.

MUSP 461. Applied Piano $(1,2,3,4)$ I, II, III. (Permission of instructor required for 2 or more credit hours.)
MUSP 462. Applied Harpsichord $(1,2,3,4)$ I, 11.

MUSP 463. Applied Organ $(1,2,3,4)$ I, II, III. MUSP 471. Para-Voice (2) I, II. No audition required. Fee: $\$ 45$.
MUSP 472. Applied Voice $(1,2,3,4)$ I, II, III.
MUSP 481. Applied Violin $(1,2,3,4)$ I, II, III. MUSP 482. Applied Viola $(1,2,3,4) \mathrm{I}, \mathrm{II}, \mathrm{III}$. MUSP 483. Applied Cello $(1,2,3,4)$ I, II, III. MUSP 484. Applied Double Bass ( $1,2,3,4$ ) I, II, III.
MUSP 485. Applied Harp ( $1,2,3,4$ ) 1 , II, III. MUSP 486. Applied Guitar $(1,2,3,4)$ I, II, iII.
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 varying requirements for non-music majors, music minors and music majors and minors in secondary performance media. See Area Coordinators for details. Failure 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 chair of performance studies 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 438-439, 477-479, 488-489. Large Ensembles (1-2) I or II. For juniors and seniors. 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 A438. Fall Concert Band (1) I. MUSP A438. Symphonic Band (2) II. MUSP B438. Fall Wind Ensemble (1) I. MUSP B438. Concert Band (1) II. MUSP C438. University Band (1) II. MUSP F438. Athletic Band (1) II.
MUSP 439. Marching Band (2) I.
MUSP 477. A Cappella Choir (1) I, II.

MUSP 478. Collegiate Chorale (1) I, II. IUSP A479. University Women's Chorus (1) I, II.

MUSP B479. University Men's Chorus (1) I, II.

MUSP 488. Chamber Orchestra (1) On demand.
MUSP 489. Philharmonia (2) I, II.
MUSP 453. Brass Pedagogy (2) I. Teaching techniques and materials for brass instruments. Prerequisite: consent of instructor.
MUSP 454. Woodwind Pedagogy (2) II.
Teaching techniques and materials for woodwind instruments. Prerequisite: consent of instructor.
MUSP 458. String Pedagogy (2) II. Upper and lower strings. Principles of teaching string instruments. Investigation of related literature and materials. Prerequisite: consent of instructor.
MUSP 459. Organ Pedagogy (2) II. Alternate years, on demand. Principles, techniques and literature applied to various levels of organ study. Prerequisite: consent of instructor.
MUSP 466. Piano Pedagogy Practicum (1) I, II. May be repeated. Laboratory in supervised piano teaching, both private and class. Prerequisite: MUSP 367 or consent of instructor.
MUSP 467. Piano Technology (1) I. Understanding of piano design, construction and tuning. Prerequisite: consent of instructor.

## MUSP 470. Readings, Research and Per-

 Fimance in Music (1-4) I, II, III. 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) I, II. May be repeated. Supervised teaching of both private and class voice. Includes participation in designated segments of MUED 240 and 340 . Prerequisite: MUSP 370 or consent of instructor.
MUSP 495. Senior Recital (2) I, II, III. May be repeated. For performance studies majors only. Required full recital for all clegree options. Repertoire requirements determined by respective areas/studios. Prerequisites: satisfactory completion of recital jury and consent of department chair.

## Nursing (NURS)

NURS 100. Orientation to Nursing (1) I. Assists freshrnen 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) I. Structure of body systems.
NURS 257. Human Physiology (3) II. Function of cardiovascular, respiratory, urinary, muscular, nervous, endocrine, gastrointestinal and reproductive systems. Prerequisite: NURS 255.

NURS 259. Microbiology and Infectious Disease Processes (3) II. Microbiology, immunology, pathologic responses to infection, principal infectious disease of man; structure and function of bacteria and viruses, antigen-antibody reactions, serology, growth and inhibition of miroorganisms, pathogenesis and disease. Prerequisite: NURS 257.

NURS 370. Pathophysiology: Physiologic Deficits of the Human Body (3) I. Study of common physiologic deficits of major human body systems with associated preventive and etiologic factors and clinical manifestations. Integration of human developmental concepts and health deviations occurring throughout the life cycle in examination of illness as a dynamic process. Prerequisites: CHEM 116, BIOL 331, 332, 314, 315.

## NURS 371. Introduction to Orem's Self-

 Care Deficit Theory of Nursing (4) I. Focuses on Orem's Self-Care Deficit Theory of Nursing as a basis for professional nursing practice. Emphasizes helping clients develop self-care practices which promote health. Successful completion of NURS 259 or BIOL 331, 332, 314, 315.NURS 372. Nursing Technologies I (2) I. A series of modular learning experiences in the college laboratory for developing beginning cognitive and psychomotor skills. Appplication in acute care setting. Successful completion of NURS 259 or BIOL 331, 332, 314, 315 and concurrent enrollment in NURS 371. Graded S/U. Lab fee.
NURS 373. Introduction to Nursing Agency (1) I. Focuses on personal self-care, professionalism and the development of nursing agency. Self-directed learning, accountability, values and therapeutic communications are explored. Graded S/U.
NURS 380. Health Care Science: Diagnosis and Treatment of Physiologic Deficits of the Human Body (3) I. Focuses on the study of the diagnosis, signs and symptoms, treatment modalities and prognosis of common health deviations of the human body. Prerequisite: successful completion of NURS 370.
NURS 381. Nursing Systems: Long Term Care for the Older Adult (4) II. Use of Orem's Self-Care Deficit Theory to design and produce nursing systems for and with the older adult. Focus is on holistic assessment and nursing strategies in, long term care settings. Prerequisites: successful completion of NURS 370, 371, 372 and 373.
NURS 382. Nursing Technologies II (1) I. A series of self-paced modular learning experiences in the college laboratory for developing intermediate cognitive and psychomotor skills. Application in all nursing systems with emphasis on adult clients. Successful completion of NURS 372 and concurrent enrollment in NURS 381 or 391. Graded S/U. Lab fee.
NURS 383. The Nursing Agency: Therapeutic Interpersonal Skills (1) I. The social and interpersonal skill elements of nursing agency are practiced in an experiential setting. Factors that facilitate or impede interpersonal functioning are explored.
Prerequisite: successful completion of NURS 373. Graded S/U.

NURS 384. Clinica! Nursing Ethics (1) I, II. Assists students in recognizing ethical situations as they occur in clinical nursing practice. Helps students learn to deal with ethical problems on the basis of reasoned ethical decision making. Prerequisite: successful completion of PHIL 102 or 342, 371, 373 and concurrent enrollment in a clinical course.
NURS 390. Pharmacology in Nursing Systems (3) II. Focuses on pharmacologic classification, administration and effectiveness of selected drugs. Emphasizes the role of nursing agency in the relationship of drug administration and legal responsibility. Prerequisites: successful completion of NURS 370 and 380 :
NURS 391. Nursing Systems: Care of the Hospitalized Adult (4) II. Focuses on application of Orem's Self-Care Deficit Theory in clinical decision-making with adult clients in the acute care setting. Prerequisites: successful completion of NURS 370, 371, 372, 373.

NURS 392. Nursing Technologies III (1) I. A series of self-paced modular learning experiences in the college laboratory for developing advanced cognitive and psychomotor skills. Application in all nursing systems with emphasis on adult clients. Prerequisites: successful completion of NURS 382 and concurrent enrollment in NURS 381 or 391. Graded S/U. Lab fee.

NURS 393. Nursing Agency: Professional Relationships (1) II. The theory of nursing agency and the concepts of group process, assertiveness, sex roles, and human sexuality are explored. Concepts are applied to student's ability to exercise nursing agency in the processes of collaboration and sexual assessment. Prerequisite: successful completion of NURS 383. Graded S/U.
NURS 394. Nursing in the Health Care Delivery System (1) II. Focuses on nursing agency and nursing practice within the context of the United States health care system. Prerequisite: successful completion of NURS 373.
NURS 405. Oncologic Nursing Elective (3) I. 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: successful completion of junior level or RN status.
NURS 406. Care of Critically III Adult (2) I, II. An elective thepry course designed to enhance the student's knowledge of the critically ill adult and requirements for complex, holistic nursing care. Prerequisite: completion of junior level nursing courses.
NURS 407. Emergency Nursing Elective: Concepts of Practice (2) II. Designed to study nursing systems related to episodic, primary and acute care in the emergency care setting. Prerequisite: completion of junior level nursing courses.
NURS 408. Intraoperative Nursing Elective (2) I, II. 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.

NURS 409. Critical Care Clinical (2) II. Application of theory from NURS 406, Care of the Critically III Adult, in a critical care clinical setting. The student will have weekly contact with critically ill clients and will be responsible for identifying the clients' nursing needs. The student will examine the stressors for the nurse, the client and his/ her family in the critical care environment Prerequisites: NURS 406 and junior level nursing courses.
NURS 410. Computer Trends in Nursing and Health Care (2) II. Focuses on various trends and uses of computers in nursing and health care including hospital information systems, health care research and computer-assisted instruction, and related legal-ethical issues. No experience with computers required.
NURS 416. Decision Making in Self Care (1). Explores self-care as deliberate action. The purpose is to assist clients in decisionmaking and/or goal directed behavior which will sustain, protect and promote human functioning. Assists students to teach clients how to make sound judgments for self-care. Offered to health-related professlons, social workers, teachers and counselors. Prerequisite: consent of instructor.
nUAS 420. Holistic Self Care Management (2). Focuses on creative, innovative nursing strategies to assist clients to increase their self-care such as therapeutic touch, relaxation techniques, imagery, hypnosis, biofeedback and others. Emphasizes the holistic person-centered perspective. Encourages creativity in providing individualized nursing care. Prerequisite: admission to nursing program or consent of instructor.
NURS 470. Independent Study in Nursing (1-3) 1, i1, ili. Research or project designed with guidance of a faculty member. Open to senior students with consent of a faculty member. May be repeated.
NURS 471. Nursing Systems: Childbearing Families (4) I, II. The student has opportunities to gain experience in designing, implementing and evaluating nursing systems, within a self-care framework for the childbearing family. Prerequisite: successful completion of all junior level courses. Lab fee.
NUFS 473. The Role of the Nurse as Scholar (1) I, II, III. Designed to promote participation in scholarly activities, such as critiquing research and applying established research findings to nursing practice. Appropriate for graduates of baccalaureate nursing programs. Prerequisites: successful completion of NURS 371 and either 381 or 391; or be an RN, and a basic statistics course.
NURS 474. Nursing Systems: Holistic Care for the Weli/ill Child. (3) I, HI. Provides opportunities for the student to develop the knowledge and skills essential to design nursing systems for the child/adolescent with altered health or developmental state. Prerequisite: successful completion of junior level courses.

NURS 481. Nursing Systems: Persons with Psychosocially Altered Health States (3) I, II. Focuses on social and interpersonal aspects of nursing agency. Theory is explored and applied in development of holistic nursIng systems for clients with psychosocially altered health states. Prerequsite: successful completion of junior level courses.
NURS 484. Nursing Systems: Community Health Nursing (4) it II, lil. Focuses on the design and implementation of nursing systems for individuals and multiperson units using Orem's Self-Care Deficit Theory of Nursing and principles of public health. Prerequisite: successful completion of junior level courses.

NURS 491. Practicum in Nursing: Transition to Professional Practice (6) II. Emphasizes the complexity of design and management of nursing systems for individuals, families and multi-persons units. Provides concentrated clinical practice with a specific clinical population. Prerequisites: successful completion of all junior level courses, and NURS 471, 473, 474, 481 and 484.

NURS 492. Concepts in Management (1) It. Designed as an independent study experience for exploration of the managment process in organizations. Focus on the adaptation of the new graduate from the student to the professional role. Prerequisites: successful completion of all junior level courses, and NURS 471, 473, 474, 481, 484.

NURS 493. Issues in Professional Role Development (1) II. Focuses on analysis of professional, legal, economic and political issues affecting nursing agency. Relationships of these issues will be explored from both a historical and current perspective. Prerequisite: successful completion of all junior level courses.
NURS 494. Nursing Research Design (1) I. Develops skills in analyzing research designs. Content focuses on sampling, data collection and statistical analysis. The rights and responsibilities of subjects and participants in research are stressed.
The following courses in the nursing major are completed by the R.N./B.S.N. students.
NURS 374. Introduction to Nursing Agency for RN students (2) I. Focuses on personal self-care and professional development of nursing agency. Self-directed learning, group dynamic collaboration, and assertiveness are explored. Prerequisite: admission to RN nursing major.
NURS 375. Clinical Decision Making: Development of Nursing Agency (2) I. Describes the domain of nursing practice.
Provides an overview of the major concepts of Orem's Self-Care Deficit Theory of Nursing. Emphasis is placed on clinical decisionmaking skills. Prerequisite: admission to RN major.
NURS 385. Clinical Decision-Making II (2) Winter quarter. Continuation of exploration of Orem's Theory. Examination of developmental and universal self-care requisites of air, activity and social interaction.

NURS 386. Physical Assessment I (1) I. Fo-mas cuses on the development of skills of heal:' history taking and physical assessment as part of the nursing process. Selected body systems are studied. Prerequisite: admission to RN major or consent of instructor. Graded S/U. Lab fee.

NURS 387. Nursing Agency: Therapeutic Communication (1) II. Social and interpersonal skills elements of nursing agency are practiced in an experiential setting. The RN student is assisted in assessment of and further development of his or her communication skills. Factors that faciliate or impede interpersonal functioning are explored. Prerequisite: successful completion of NURS 374. Graded S/U.

NURS 395. Nursing Systems: Social and Interpersonal Elements (3) II. Focuses on social and interpersonal aspects of nursing agency. Theory is explored and applied in development of holistic nursing systems for clients with psychosocially altered health states. Prerequisite: successful completion of NURS 387, 385.
NURS 396. Physical Assessment II (2) I. Focuses on further developing physical assessment skills cuiminating in the total physical exam of the adult. Prerequisite: successful completion of NURS 386 or consent of instructor. Graded S/U. Lab fee.
NURS 475. Nursing Systems: Holistic Care for the Older Adult (3) I. Focuses on the use of Oren's Self-Care Deficit Theory in the development of critical thinking skills in the application of scientific knowledge to clinical problems common to older adults. Prerequisite: successful completion of NURS 387, 385.
NURS 485. Nursing Agency: Developing Leadership and Management Abilities (3) I. Focuses on the development of the leadership/management component of nursing agency. Students will analyze their present leadership/management abili:'9s, then incorporate theories of leadership/management into the professional role. Prerequisite: successful completion of NURS 374, 375.

## Operations Research (OR)

OR 380. Introduction to Operations Research (3) I, II, III. Introduces various quantitative approaches for modeling and solving business probelms. Topics include linear programming models and solution methods, problem formulation via integer and goal programming, decision analysis under uncertainty, and simulation. Prerequisite: MIS 200 and STAT 211.
OR 480. Linear and Integer Programming (3). Modeling industrial and public administration problems via linear, goal and integer programming; sensitivity analysis, dual, parametric programming; cutting-plane and branch and bound method; Balas additive theorem; current topics in integer programming. Prerequisite: OR 380 or CS 440.
OR 482. Computer Simulation of Stochastic Systems (3). Techniques of setting up stochastic models for inventory, productio queuing, scheduling, economic systems; it. plementing these models using computer simulation languages (e.g. GPSS). Prerequisites: STAT 212 or MATH 442, and at least one computer programming course.

orR 485. Introduction to Stochastic Models Problems of incorporating risk into decin models; queuing theory; stochastic inventory models; Markov chains, stochastic mathematical programming. Prerequistie: OR 380 or CS 440 , STAT 315 recommended.
OR 487. Network Analysis (3). Network techniques for modeling and analysis of industrial and management problems: project management and resource allocation with PERT/CPM; transportation, transshipment, asisignment, shortest path and minimal spanning tree models; maximal flow problems in single and multicommodity networks; out-of-kilter algorithm; advanced topics in network analysis. Prerequisite: OR 380 or CS 440.
OR 488. Inventory Models (3). Theory and techniques of constructing and analyzing mathematical models of inventory systems; models under stochastic conditions. Prerequisite: OR 380 or CS 440, STAT 315 recommended.
OR 489. Applied Nonlinear and Dynamic
Programming (3). Quadratic and separable programming; gradient projection; penalty function and search methods. Dynamic programming with discrete and continuous variables, and its relationship to linear programming; geometric programming; applications in industry and public administration. Prerequisite: OR 380 or CS 440.
OR 491. Studies in Operations Research (1-3) On demand. Investigation of selected Fireas of contemporary problems. May be ffered individually and in classes, depending on student needs and nature of material.

## Philosophy (PHIL)

If PHIL 101. Introduction to Philosophy (3) I, II. Systematic study of enduring human concerns about God, morality, society, the self and knowledge.
I $\$$ PHIL 102. Introduction to Ethics (3) I, II. 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.
If PHIL. 103. Introduction to Logic (3) I, II. Uses of language including definitions and arguments, typical mistakes in reasoning, and methods of evaluating arguments.

- IPHIL 204. Aesthetics (3) I, II. 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) I, II. Self-development ard criteria for evaluating life plans. Concepts of self-esteem and social responsibility applied to personal and counseling situations.
IPHIL 211. History of Ancient Philosophy (3) 1. Progress of Greek philosophy from its earliest origins in Greece through the Presocratics, Plato and Aristotle, concluding ith main themes of Hellenistic, Roman and ledieval philosophy. PHIL 211 can function as an excellent introduction to philosophy.
f $\$$ PHIL 212. History of Modern Philosophy
(3) II. Modern philosophy from its beginnings in the Renaissance through the rationalists, empiricists and Kant. Attention to emergence of skepticism and rise of modern science as important influences on the development of modern philosophy. PHIL 212 can function as an excellent introduction to philosophy.
PHIL 216. Introduction to the Philosophy of Mind (3) I or II. 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).
PHIL 217. World Religions (3) I or II. Fundamental tenets of major world religions-Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam, with the cultural backgrounds of lands of their developments.
PHIL 218. Legal Reasoning (3) I or II. 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.
ПPHIL 230. Scientific Reasoning (3) I or II. 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 240. Topics in Philosophy (3) I, II. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.
PHIL 245. Philosophy of Feminism (3) I or II. 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) I or II. 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) I Alternate years. Offered in 1982-83. Major philosophical positions of Middle Ages; St. Augustine through Renaissance philosophers.
PHIL 312. Modern Political Philosophy (3) I or II. A survey of some of the main political thinkers and works of the modern world from Hobbes to Marx.
PHIL 315. American Thought (3) । or II. 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) I or II. A study of the contribution of psychology to cognitive science and the philosophy of mind. Topics include the supposed independence of the study of the mind from the study of neurophysiology (of the brain), the nature of mental representation, including imagery, psychological explanation and cognitive architecture.
-PHIL 317. Philosophy of Religion (3) | or II. Nature of religion; gods and/or God; faith, revelation and religious belief; evil and righteousness; meaning of life. Readings from variety of sources, largely contemporary.
PHIL 318. Philosophy of Law (3) I, II. 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.
-PHIL 3.19. Philosophy of Death and Dying (3) I, II. 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.
-PHIL 320. Business Ethics (3) I, II. 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) I or II. Traditional schools such as Nyaya, Sankhya-Yoga, Buddhism, Vendanta, Confucianism and Taoism; epistemology, formal inference, causality, metaphysics, mind-body relationships.
PHIL 322. Thought Across Cultures (3) 1 or II. Philosophical dimension of the structure and content of "culture," including examination of the presuppositions of major world cultures, and a philosophical examination of the relationships between cultural perceptions and the purported evidence for them.
PHIL 325. Communism, Capitalism and Democracy (3) I or II. Freedom, alienation, human nature, the state, etc. as they function in communist, capitalist and democratic ideology.
PHIL 327. Philosophy of Punishment (3) I, II. Justification of capital punishment; acceptability of imprisonment as punishment; desirability of treating crminals as mentally ill rather than punishing them; related issues of different theories of punishment.
PHIL 330. Theory of Knowledge (3) I or II. Theories of knowledge, truth, belief and evidence.
PHIL 331. Existentialism (3) I or II. 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.
-PHIL 332. Environmental Ethics (3) I or II. Framework to assess possible responses to environmental problems in light of human rights, standards of justice, and harm and benefit accruing from alternative solutions.

PHiL 334. Philosophy in Literature (3) I or 11. Death, perception of self, conflict of values occurring in novels, plays and poetry from various clutures. Content may vary from instructor to instructor, and from semester to semester. May be taken only once for credit.

PHIL 335. Philosophy of Film (3) I or II. Aesthetic theories concerning definition of film as distinctive art form; criteria for evaluation of films. Popular, documentary, art and experimental films shown in class.
PHIL 340. Problems in Philosophy (3) I, II. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.
©pHiL 342. Medical Ethics (3) I, II 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 3A4. Computers and Philosophy (3) $I$, II. Philosophical dimensions of the impact of computers on society with emphasis on the issues of ethics and artificial intelligence. Prerequisite: CS 101, its equivalent or permission of the instructor.

PHIL 345, Reason and Decision (3) | or II. A survey of decision theory covering basic issues in utility theory, decision making under risk or uncertainty, game theory and social choice theory.
Pril 395. Workshlp on Current Topics (1-4) I, II On demand. Intensive educational experience on selected topics. Typically, an allday or similar concentrated time format is used. Fequirements are usually completed within this expanded time format. May be repeated If topics differ and adviser approves.
PHIL 406. Philosophy of Language (3) I AIternate years: offered 1982-83. Historical and contemporary theories of meaning; their use in resolving traditional philosophicâl controversies and in providing foundation for contemporary analytic philosophy; various interdisciplinary connections.
PHIL 411. Contemporary Analytic Philosophy (3) I or II. 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, David-
s son and Kripke. Prerequisite: Six hours of philosophy including PHIL 212 or 312.
PHIL 412. Contemporary Continental Philosophy (3) ! or II. Major twentieth century movements in France and Germany, beginning with the phenomenology of Husserl, proceeding through Sartre and Heldegger 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 inciuding PHIL 212 or 312.

PHIL 414. Metaphysics (4) I or II; Alternate years. Survey of traditional metaphyclsal issues and concepts combined with indepth treatment of some metaphysical problem(s). Prerequisite: Two philosophy courses from PHIL $316,317,330,344,345,406,431$, 433.

PHIL 415. Topics in American Philosophy (3) I or II. 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) I or II. In depth examination of modern challenges to religious faith and religious responses. Topics such as evolution, societal secularization, the automomy 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) I or II. 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. Prerequisite: PHIL 318 and one of PHIL 102, 320, 325, 332, 342, 425. May be repeated with different topics.
PHIL 425. Moral and Social Philosophy (4) I or II. An indepth treatment of some
themes(s) in social philosophy combined with a survey of traditional ethical theories as a background to social philosophy. Prerequisite: PHIL 102 and PHIL 318 or 320 or 325 or 332 or 342.
PHIL 431. Topics in Philosophy of Science (3) I or II. Content varies from year to year. Topics include: nature of scientific explanation, causality, contemporary empiricism, philosophy of biology, methods, presuppositions, concepts of behavioral sciences. May be repeated for credit. Prerequisite: three hours in PHIL and/or course work in sciences or consent of instructor.
PHIL 433. Philosophy and Physics of Space and Time (3) II. 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. Crossdiscipinary; cross-listed in PHYS.
PHIL 442. Philosophy of Health (3) I or II. 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. Prerequisite: PHIL 342 and 412. May be repeated with different topics.

PHIL 445. Topics in the Philosophy of Bustness and Economics (3) I or II. In depth. examination of such concepts as profit ${ }^{21}$ the profit motive, egoism in economic activity, the moral limits of markets and market behavior and ethical problems arising in non-profit organizations and socialist economies, as well as truth in advertising, coverups and whistleblowing. Prerequisite: PHIL 312 and 345. May be repeated with different topics.
PHIL 470. Readings and Research (1-3) I, II. Supervised independent work in selected areas. Prerequisite: twelve hours of PHIL and consent of chair of department. May be repeated to six hours.
PHIL 480. Seminar in Philosophy (3) I, II. Indepth 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)

- PEG 100. General Physical Education (1) I, II, III. Each freshman must fulfill the University requirement of two units from diverse physical activities. Most activities are coeducational. Two hours per week. Graded S/ $U$.
© PEG 200. General Physical Education (1) 1, II, III. Elective program in diverse activities. Open to any student who has completed the University required two hours in PEG 100. Two hours per week.


## Physical Education, Professional (PEP)

PEP 110, 112, 116, 121, 123, 124. Required Professional Activities. A required program of skill and knowledge development within each activity including identification/analysis/observation of elements of movement. Two laboratories. C/F hrs.: 10 each.
PEP 110. Gymnastics-Men (2) I, II.
PEP 112. Gymnastics-Women (2) I, II.
PEP 116. Soccer (2) I.
PEP 121. Tennis (2) I.
PEP 123. Track and Field (2) I.
PEP 124. Volleyball (2) I, II.
PEP 137. Educational Dance (1) I, II. Movement approach for dance where 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 PEP 138.
PEP 138. Educational Gymnastics (1) I, II. Movement approach to gymnastics where 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 PEP 137.
PEP 164. Introduction to Movement Analysis (2) I, II. Introductory study and analysis of human motion through application of br sic mechanical concepts and use of a movement framework. One lecture, one la oratory. Prerequisite: none. One activity course must be taken concurrently with this course.

IP 201-205, 207-209, 213, 214, 217-219, 6-228. Elective Professional Activities. Elective courses of skill and knowledge development basic to participation and understanding of the activity. One laboratory.
PEP 201. Archery (1) I. Alternate years.
PEP 202. Badminton (1) I, II.
PEP 203. Basketball (1) I, II.
PEP 204. Bowling (1) II.
PEP 205. Diving (1) I. Alternate years.
PEP 207. Fencing (1) II. Alternate years.
PEP 208. Field Hockey (1) I. Alternate
years.
PEP 209. Golf (1) I.
PEP 213. Lacrosse (1) II. Alternate years.
PEP 214. Rebound Tumbling (1) II. Alternate years.
PEP 217. Softball (1) I.
PEP 218. Swimming (1)।
PEP 219, Synchronized Swimming (1) I.
PEP 226. Wrestling (1) II. Alternate years.
PEP 222. Advanced 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.

PEP 225. Advanced Litesaving (1) I, II. 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. Prerequif: eligibility testing conducted first week course.
PEP 230. Structural Kinesiology (3) I; II.
The study of movement based on functional anatomy. Two lectures; one laboratory. Prerequisite: PEP 164
PEP 233. Laboratory Experiences with Children (2) II alternate years. Opportunities to engage in field experiences with urban children in closely supervised school situation and in on-campus settings focused on developing, analyzing and improving teacher behavior. May be repeated to four hours. C/F hrs.: 45.
PEP 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.
PEP 238. Teaching Educational Gymnastics to Children (2) I, alternate years. Movement approach to gymnastics for children with emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: PEP 138 or permission of instructor. C/F hrs.: 21.
PEP 241. Eclucational Games Teaching to Children (2) I, II. Movement approach to games/sports with special emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: PE:P 137 or 138 or permission of instructor. C/F hrs.: 40.

2,247. Practical Experience (3) I. Super1 sed field experience with groups between ages of $11-18$. Not open to first- or secondsemester freshmen. Two lectures, one laboratory. Prerequisites: PEP 164 and 2 PEP Activity Courses. Recommended: PEP 137 and PEP 138. C/F hrs:: 50.

PEP 256. Concepts of Physical Education (2) I, II. Introduction to the profession of physical education; objectives of physical education, elementary school and secondary school physical education, competitive athletics, adapted physical education, and career opportunities. Open only to major or minor students in physical education or by consent of instructor.
PEP 303. Biomechanics (2) I, II. 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: PEP 164 and 230 .
PEP 306. Sports Officiating: (Sub-Title) (1) I II. Lecture and laboratory experience in the rules and mechanics of officiating; prepares for OHSAA examination. May be repeated. Two lab hours per week.
PEP 306A - Basketball (1) II. (odd years) PEP 306B - Football (1). (even years) PEP 306C - Baseball/Softball (1) I. (odd years)
PEP 306D - Track/Field (1) II. (even years) PEP 306E - Volleyball (1) I.
PEP 306F - Soccer (1) On demand. PEP 306G - Wrestling (1) On demand. PEP 306H - Swimming/Diving (1) On demand.
PEP 322. Red Cross Water Safety Instructor's Course (2) I, II. 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.)
PEP 328. Principles, Ethics and Problems of Coaching (3) I, II. Non-technical, "off-thefield" aspects of athletic coaching educational implications; coaching ethics; public relations; equipment; financing; liability; coach-athlete rapport.
PEP 329. Coaching Football (3) I. Development of personal skills and understandings in football; team administration, organization, philosophy, theory, fundamentals, strat egy, methods and responsibilities of coaching football. Two lectures, two lab hours per week. Prerequisite: sophomore standing.
PEP 330. Coaching Track/Field (2) II. (odd years). Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching track and field. One lecture, two lab hours per week. Prerequisite: PEP 123 - Track/Field.
PEP 331. Coaching Basketball (2) I. Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching basketball. One lecture, two lab hours per week. Prerequisite: PEP 203 Basketball.
PEP 332. Teaching-Learning Processes (3) I, II. 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: PEP 137, PEP 138, PEP 241 and/or permission of instructor. C/F hrs.: 60.

PEP 333. Coaching Volleyball (2) II (odd years). Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching volleyball. One lecture, two lab hours per week. Prerequisite: PEP 124 - Volleyball.
PEP 334. Coaching Softball (2) II. (even years). Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching softball. One lecture, two lab hours per week. Prerequisite: PE.P 217 - Softball.
PEP 335. Coaching Baseball (3) I. Development of personal skills and understandings in baseball; administration, organization, philosophy, theory, strategy, methods, drills, field preparation and responsibilities of coaching. Two lectures, two lab hours per week. Prerequisite: sophomore standing.
PEP 336. Coaching Swimming/Diving (3) II (even years). Administration, organization, philosophy, theory, strategy, methods and responsibilities of coaching swimming and diving. One lecture, two lab hours per week. Prerequisite: PEP 218 - Swimming.
PEP 337. Teaching Education Dance (2) I, alternate years. Movement approach to children's dance with special emphasis on program content, methodology and
progression. One lecture, one laboratory. Prerequisite: PEP 137 or permission of instructor.
PEP 340. Motor Development (3) II. Physical growth and perceptual-motor development of human beings including observation of children and assessment of perceptual and motor characteristics. C/F hrs.: 30.

PEP 342. Physical Education in the Elementary School (3) I, II, III. Movement approach to physical education in the elementary schools including the examination of movement as the content of physical education, study of motor development concepts as well as the development of appropriate teaching materials. Suggested prerequisites: PEP 137, 138.
PEP 350. Motor Learning (3) I, II. Perception, learning, motivation and other psychological factors involved in motor learning and performance. Two lectures, one laboratory. Prerequisite: EDFI 302. C/F hrs.: 40.
PEP 356. Philosophical and Cultural Bases of Physical Education (3) II. Study of philosophy and culture pertinent to the shaping of physical education as a discipline.
PEP 360. Exercise Physiology (3) I, II. 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.
PEP 362. Teaching Motor Activity in Secondary Schools (3) I. Principles, objectives, lesson planning, instructional materials, teaching methods, curriculum and field experience in physical education in the secondary schools. Two lectures, two laboratories. Prerequisites: PEP 350, EDFI 302 and admission to PEP. Major Plans II or III. C/F hrs.: 60.

PEP 387. Practicum (1-5) 1, II, III. Field experience under supervision of PEP 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 PEP division faculty.
Pep 392. Practicum in Secondary School Physica! Education (2) I. Field experience in physical education in the public school. Weekly assignment includes being in a public school two hall days and attending regum lar seminars. Arrange. Prerequisites: PEP
362, HED 313 and junior standing. C/F hrs.: 90.
pep 395. Workshop on Current Topics (1-3) 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 PEP division faculty and chair:
PEP 402. Assessment and Evaluation of Wotor Activity (3) I, II, III on demand. 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.
PEP A12. Organization and Administration of Physical Education and Interscholastic Athetics (3) I, II, alternate summers. Organization and administration of the total physical education program including
instuctions, intramurals, extramurals and interscholastic athletics. Prerequisite: senior standing.
picp 428. The :Hovement Approach to Taaching Physical Education to Children (5) 11. Selection, design and application of learning experiences appropriate for elementary school child based on movement concepts. PEP 387 may be taken concurrenty. Two lectures, three laboratories. Prerequisite: PEP 332. Recommended: PEP 233, PEP 238, PEP 241, PEP 337 or approval of instructor. C/F hrs.: 100.
pep 433. Adapted Physical Education (3) I, 11, 11. Principles, objectives and history of adapted physical education with an overview of disabilities. C/F hrs.: 35.
Pep 435. Movement Anaiysis in Adapted Physical Education (3) II, alternate years. Advanced concepts of adapted physical education related to neuromuscular and neuromuscular dysfunction, proficiency in assessment techniques and administrative concerns. Required prerequisite: PEP 433, strongly recommended PEP 402. C/F hrs.: 20.
pep 48. Seminat in Elementary School Physical Education (2) II, alternate years. Identification and examination of selected curricular problems and issues in elementary school physical education. Prerequisite: PEP 428 or permission of instructor. C/F hrs.: 30.

PEP 470. independent Study in Physical Education (1-3) I, II, III. 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.
PEP 487. Practicum (1-5) I, II, III. Under supervision of PEP division of School of Health, Physical Education and Recreation. Pettioning and approval required of each student before registration. Credit hours for each experience approved separately by program area. Prerequisite: approval of PEP division faculty.
PEP 492. Student Teaching (1-10) I, il. Classroom physical education teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergar-ten-primary certification. Fee: $\$ 5$ per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated.
PEP 497. Student Teaching (1-10) I, II. Classroom physical education 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.

## Physical Therapy (PHYT)

PHYT 301. Human Gross Anatomy I (3) I. An integrated study of normal and variations of normal human biologic stucture of the musculoskeletal, nervous, circulatory systems and epithelia and connective tissues of the trunk and extremities as correlated to function. Laboratory sessions to include cadaver dissection and prosected materials. Two hours of lecture, two twohour laboratories.
PHYT 302. Human Gross Anatomy II (2) II. An integrated study of normal and variations of normal human biologic structure of the thorax and its contents as correlated to function. Laboratory sessions to include cadaver dissection and prosected materials. Two hours of lecture, one two-hour laboratory.
PHYT 304. Principles of Massage (2) I. History, theory, rationale, physiological effects and appropriate application of massage. One hour lecture, one two-hour laboratory.
PHYT 305. Human Neuroanaiomy (2) I. An integrated study of normal and variations of normal human biologic structure of the central and peripheral nervous systems as correlated with neurophysiological functions. Laboratory sessions to include cadaver dissectlon and prosected materials. One hour of lecture, one two-hour laboratory.
PHYT 306. Neurophysiology (2) II. Principles of neurophysiological and neuropathological motor and sensory function and related assessment skills and an understanding of the pain phenomena. Two hours of lecture.
PHYT 309. Functional Anatomy (3) II. Normal and abnormal static and dynamic human posture through the examination of internal and external forces acting on the body. Two hours of lecture, one two-hour laboratory.

PHYT 311. Pathology and Pharmacology i (2) 1. Pathogenesis and clinical sequelas of diseases and disorders of the musculoskeletal and nervous systems and pharmacological agents frequently used to treat sucin conditions. Two hours of lecture.
PHYT 312. Pathology and Pharmacology II (2) II. Pathogenesis and clinical sequelae of diseases and disorders of the cellular, cardiovascular, respiratory, metabolic and gastrointestinal systems. Two hours of lecture.
PHYT 321. Physical Therapy Procedures (2) I. Physiological principles and appropriate technique of application of thermal and compression agents used in treating clients. Two hours of lecture, two three-hour laboratories. To be offered the first six weeks of the semester.
PHYT 322. Physical Therapy Procedures Il (2) I. Physiological and bioelectrical principles and appropriate technlque of application of high frequency and radiation modalities and traction used in treating clients. Three hours of lecture, two two-hour laboratories. To be offered the last nine weeks of the semester.
PHYT 326. Applied Medical Sciences (2) II. Clinical course and treatment of medical, surgical and psychiatric disorders with emphasis on conditions frequently treated in physical therapy. An introduction of basic learning theory as related to clinical practice. One two-hour lecture.
PHYT 331. Therapeutic Exercise 1 (2) I. History and theory of therapeutic exercise. $A$ introduction to the types of exercises and muscle contractions and principles of body mechanics in client movement activities and the physiological positioning of patients. Two hours of lecture, one two-hour laboratory.
PHYT 332. Therapeutic Exercise il (2) II. Emphasis on assessment procedures to include the manual muscle test, functional evaluation, goniometry and other assessment skills. One hour lecture, one two-hour laboratory.
PHYT 381. Clinical Practicum I (2) II. Observation and orientation to physical therapy departments including patient care, treatment procedures, and patient/therapist relationships. Tues, and Thurs, afternoons, arranged. Graded S/U.
PHYT 401. Human Growth and Development (3) 1. Eight stages of human life with emphasis on neonatal and early childhood development and the aging process. The course includes developmental assessment and an understanding of the interrelationship of physical, perceptual, motor, social and cultural factors. One hour lecture and one two-hour laboratory.
PHYT 402. Electrophysiological Assessment and Treatment (2) II. Theory and application of electrical currents in assessment and treatment of patients. One hour of lecture, one two-hour laboratory.

4YT 403. Evaluation Principles and Techfues Applied (2) II. Case study approach to the total evaluation and treatment planning of the patient to include: goal setting, diagnosis, prognosis, physical/mental status, effective and appropriate treatment methods, periodic review and accurate documentation for that patient. One one-hour case presentation, and one one-hour faculty/student discussion.
PHYT 404. Sports Trauma (2) I. Incidence, biomechanical and pathomechanical analysis and method of determining severity of sports injuries to the torso and extremities and the appropriate application of bandaging and adhesive strapping. One hour of lecture, one two-hour laboratory.
PHYT 406. Physical Trends and Management (2) I, II. The development and organization of the professional association and its relation with other health care participants in the operation of a physical therapy service. Three hours of lecture.
PHYT 410. Research Methods (2) I. Scientific method of problem solving including formulation of a hypothesis, research design, methods of data collection, literature search and the critical analysis of professional literature. Two hours of lecture.
PHYT 411. Prosthetics and Orthotics (2) II. Orientation to management of the amputee and principles of functional bracing. Two hours of lecture.
PHYT 412. Orthopaedic Physical Therapy Philosophy, theory and principles of essment of joint dysfunction, fracture management and mobilization of the periph eral joints. Review of normal and abnormal structure and function of the vertebral column and the sacroiliac joints. One hour lecture, one two-hour laboratory.
PHYT 421. Cardiopulmonary Physical Therapy (3) II. Principles of evaluation and the application of therapeutic principles to pathological disorders of the cardiopulmonary systems. Two hours of lecture, one twohour laboratory.
PHYT 422. Rehabilitation Techniques (3) II. Theories, philosophies and principles of rehabilitation for the chronically disabled. One hour of lecture, one two-hour laboratory.
PHYT 431. Therapeutic Exercise III '(4) I. History, development and neurophysiological application of therapeutic exercise to clients with neuromuscular disorders: Two hours of lecture, two two-hour laboratories.
PHYT. 470. Independent Study (2) II. In depth study of clinically related problerns or topic of interest. Consent of faculty required.
PHYT 481. Clinical, Practicum II (2) I. Observation and orientation of physical therapy departments including patient care, treatment procedures, and patient/therapist relationships. Mon., Wed., Fri. afternoons, arranged. Graded S/U.
PHYT 482. Clinical Practicum III (2) II. Obvation and orientation of physical therdepartments including patient care, wratment procedures, and patient/therapist relationships. Mon., Wed., Fri. mornings, arranged. Graded S/U.

PHYT 489. Clinical Internship (10) III. Observation and orientation of physical therapy departments including patient care, treatment procedures, and patient/therapist relationships. Two rotations; one of six weeks and one of five weeks duration, 40 hours/week, arranged. Graded S/U.

## Physics (PHYS)

PHYS 100. Basic Physics (3) II, III. For nonscience student; major principles and concepts; application to other fields. Not acceptable toward physics major or minor.
IPHYS 101. Physics for Society (3) II. Relation of physics to areas of natural science, cultural development and society. Two lec-ture-recitations and one two-hour laboratory. For nonscience students; not acceptable toward physics major or minor. Lab fee.

PHYS 104. Physics for Elementary Teachers (2) I, III. Introduction to laws of motion, heat flow, electricity and microscopic structure of matter; concepts used in the statement of these laws and their applications. Not acceptable toward physics major or minor.
PHYS 105. Physics and Sports (2) II. Alternate years. Basic physical principles, using athletic activities as examples. Not acceptable toward physics major or minor.
PHYS 106. Physics of Photography (2) I. Alternate years. Elementary physics applied to the photographic process. Intended to help photographers better understand their equipment. Topics include: elementary optics of lens systems, macrophotography, exposure control, black and white film, and color theory. Not acceptable toward physics major or minor.
It**PHYS 201. College Physics I (5) I, II, III. First term of an introductory physics sequence intended for students without calculus. Motion, forces, energy, electricity, magnetism and electrical measurements. Four lecture-recitations and one two-hour laboratory. Prerequisites: algebra and trigonometry. Lab fee.
In**PHYS 202. College Physics II (5) I, II, 'III. PHYS 201 continued. Fluids; heat; wave motion, sound; optics; atomic and nuclear physics. Four lecture-recitations and one two-hour laboratory. Prerequisite: PHYS 201. Lab fee.

I! *PHYS 211. University Physics I' (5) I. Introductory calculus-based physics sequence for science and engineering majors. Kinematics in one, two and three dimensions; Newtonian mechanics; gravitation; heat and thermodynamics. Four lecture-recitations and one two-hour laboratory. Corequisite: MATH 131. Lab fee.
П\$*PHYS 212. University Physics II (5) II. PHYS 211 continued. Wave motion, sound, optics, electricity and magnetism. Four lec-ture-recitations and one two-hour laboratory. Prerequisite: PHYS 211. Corequisite: MATH 232. Lab fee.
-PHYS 301. Modern Physics (3) I. Topics from relativity; quantum physics; nuclear, atomic and molecular physics. Three lec-ture-recitations. Prerequisites: one year of calculus and PHYS 201; or PHYS 212. Student must also register for PHYS 313.

PHYS 303. Electronics.(3) II. Discussion and laboratory practice in networks, transistors, integrated circuits and associated cir: cuitry. Two lecture-recitations and one three-hour laboratory. Prerequisite: PHYS 201 or PHYS 212. Lab fee.
PHYS 305. Wave laboratory (1) II. Introduction to advanced experimental techniques and data analysis; laboratory investigation of wave phenomena. One three-hour laboratory. Prerequisites: PHYS 212; or PHYS 202 and one year of calculus. Lab fee.
PHYS 306. Thermodynamics and Statistical Physics (3) I. Alternate years. Thermodynamic laws, entropy, specific heat, kinetic theory; classical and quantum statistics. Three lecture-recitations. Prerequisites: one year of calculus and PHYS 202; or PHYS 212.

PHYS 307. Mechanics and Wave Motion (3) II. 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 212; or PHYS 202 and one year of calculus.
PHYS 309. Atomic and Nuclear Physics (3) I, 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 lec-ture-recitations. Prerequisite: PHYS 301.

## PHYS 313. Modern Physics Laboratory (1)

 I. Laboratory work designed to accompany material presented in PHYS 301. One threehour laboratory. Prerequisite: PHYS 202 or PHYS 212. Lab fee.*PHYS 211, 212, 301 for science students with calculus.
*PHYS 201 and 202 for students without calculus.

PHYS 321. Recent Progress in Astronomy (2) I. Alternate years. Pulsar dynamics, gravitational collapse and black holes, galaxies, large-scale structure in the universe, active galaxies and quasars, cosmology.
Two lecture-recitations. Prerequisites: PHYS
212; or PHYS 202 and one semester of calculus. Not open to students with credit for ASTR 321.
PHYS 350. Musical Acoustics (3) II alternate years. Nature of vibration; sound waves, sources of musical sounds-strings, air columns, percussion, voice, noise; acoustics of rooms; recording, reproduction and synthesis of sound. Not open to student majoring in physical sciences.
PHYS 400. Selected Topics in Physics (1-3) On demand. Selected topics not included in existing courses. Scheduling of course may be initiated by department staff or by students. May be repeated as different subjects are offered. Prerequisite: consent of instructor.
PHYS 401. Methods of Theoretical Physics I (3) I. Systems with more than one variable quantity; basic field theory; systems governed by rate equations; Fourier analysis; special functions arising from physical systems. Three lecture-recitations. Prerequisites: PHYS 212; or PHYS 202 and one year of calculus.

PHYS 402. Methods of Theoretical Physics II (3) II. Alternate years. Computational physics with applications of: Laplace's equation, wave and diffusion equations. Complex variable analysis, Eigenvalue problems. Three lecture-recitation. Prerequisite: PHYS 401.
PHYS 403. Stellar Structure and Evolution (3) II. 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 406. Modern Optics (4) II. Principles of physical optics and modern spectroscopy; photodetectors; lasers and electro-optics. Three lecture-recitations and one three-hour laboratory. Prerequisite: PHYS 307.

PHYS 410. Solid State Physics (3) II. Alternate years. Continuum and atomic theories of sollds, lattice vibrations, specific heat of solids, electron theory of metals and semiconductors. Superconductivity. Three lec-tare-recitations. Prerequisite: PHYS 307.

PHYS 411. Physics of Materials (3) II. On demand. Structure and physical properties of ceramics, composites and metallurgically important alloys. Principles and methods of modern materials analysis. Three lecturerecitations. Prerequisite: PHYS 307.

PHYS 412. Infrared Molecular Spectra (2) II. On demand. Origin of spectra of simple molecules. Prerequisite: PHYS 301 or course in physical chemistry.
PiYS 416. Classical Mechanics (3) 1. Newtonian particle mechanics in one-, two-, and three-dimensions; non-inretial 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) II. Alternate years. Duality of matter and radiation, state functions and interpretation.
Heisenberg uncertainty principle, wave equations and principles of wave mechanics, elementary applications of Schroedinger's equation, operator methods and approximation techniques. Prerequisite: PHYS 401.
PHYS 418. Electricity and Magnetism I (3) 1. Electric and magnetic fields; Maxwell's theory of electromagnetic field with applications in propagation, absorption, reflection, transmission of radiation. Prerequisites: PHYS 401 and MATH 233.
PHYS 419. Electricity and Magnetism II (3) II. Alternate years. PHYS 418 continued with applications to guided waves and physical optics. Relativity. Prerequisite: PHYS 418.
PHYS 427. Signal Processing (3) II. Introduction to techniques of signal processing; data acquisition and reduction, spectral analysis of continuous signals, sampling, allasing and discrete Fourier transform. Convolution, correlation and filtering. Prerequisite: PHYS 401 or equivalent.

PHYS 428. Microcomputer Interfacing (3) 1. Medium and large scale integrated circuits such as peripheral interface adapters. Integrated circuits such as UARTS, 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 201, or permission of instructor. Lab fee.
PHYS 429. Selected Topics in Microelectronics (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 428 and PHYS 303.

## PHYS 433. Philosophy and Physics of

 Space and Time (3) II. Physical theories of space and time from philosophical, scientific and historical points of view. Topics include Zeno's paradoxes, Green's concepts of space and time, classical Newtonian world view, general ideas of modern theory of relativity and cosmology. Cross-listed in PHIL.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. Prerequisite: consent of instructor.

PHYS 490. Special Problems in Physics (13) On demand. Readings and research on recently developing topics chosen to fit needs of students.

## Political Science (POLS)

n POLS 201. American Government:
Processes and Structure (3) I, II. Constitutional basis and development, political processes (parties, nominations and elections, interest groups, public opinion), federalism and institutions of national government.
-POLS 221. Introduction to Public Administration (3) I, II. American administrative system: emphasis on adminstrative structures and processes; relationship between elected offices and bureaucracy, notion of civil service, modes of managing adminstrative system.
§POLS 250. Human Nature and Politics (3) On demand. Contemporary and historical perspectives of what man is and can be in relationship to systematic thought about politics. Fundamentals of critical thought and analysis of political controversies. Designed for general students and for those considering political theory as a field.
ПPOLS 271. Introduction to Comparative Government (3) I. 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.

POLS 272. Introduction to International Relations (3) 1. 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) 1, II. Concepts and theories used by 9 . litical scientists; traditional- and behavioraipolitical 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.

POLS 301. Modern Political Ideologies. (3) I, II. Nature of political power, freedom, authority and terrorism as seen in ideologies of democracy, capitalism, liberalism, conservatism, communism, anarchism, socialism and fascism.
POLS 302. American Domestic Policy Process (3) I, II. Public pollicy agenda setting, formulation, adoption, implementation and evaluation. Selected contemporary pollicy areas and issues.
POLS 304. American Political Thought (3) II. As reflected in colonial, Federalist, Civil War and late 19th century political thought.
POLS 330. Urban Management (3) 1. Urban problems, local government structure and administrative mechanisms, national/state urban policies, service delivery, performance measures, alternatives for improving city/county management and urban conditions. Prerequisite: POLS 221 or permission of instructor.
-POLS 331. State and Local Government (3) I, II. Influence of culture and socioeconomic factors on state-local politics; state constitutions, municipal corporations and charters; political participation; institutions and processes; intergovernmental relations; pu. icy issues and outcomes in state/local government with special reference to Ohio.
POLS 333. Politics, Science and Public Policy (3) On demand. Impact of politics and science in making national science policy. Politics of science, science and its use in making public policy, role of science and technology in American and other industrial countries.

POLS 334. Health and Medical Policy (3) On demand. Policies, issues, process involved in formulation and implementation of health care. Politics of dellvery of health care, insurance programs, medical funding, human experimentation.
POLS 335. Energy Politics (3) I alternate years. Energy-related problems at the global, national and local levels for policymakers and citizens concerned about supply, price, efficiency, security and resource wars.
POLS 336. Environmental Politics and Pollcies (3) II. Examination of the environmental policy process primarily in the U.S. including agenda setting, formulation, adoption, implementation and evaluation. Study of political interests, governmental institutions and actors involved in environmental policy making. Focus on key environmental issues and policies.
POLS 337. Global Food Politics (3) II alternate years. How domestic and international political processes affect food production $=$ and consumption through governmental if islation, agency regulation and internationi. agreement in an interdependent world.

POLS 341. Public Opinion (3) I: Processes
f opinion formation and change, pollitical attitudes, belief systems, socialization and the operation of public opinion processes in democracy; models of linkages between public opinion and public policies.
POLS 342. Mass Media and Public Policy (3) II. Relationship between media and government in reporting public policy issues; secrecy in government, bias and distortion in news media.

POLS 345. Legislative Process (3) II. Legislative behavior and decision making; forces involved in formation of public policy; proposed reforms of Congress. Prerequisite: POLS 101 or POLS 201 or consent of instructor.
POLS 346. Presidency and Executive Process (3) I. Organization, functions and powers of office of president and vice president; roles and presidential leadership psychology.
-POLS 347. Judicial Process (3) I. American judiciary, particularly Supreme Court, as political institution; decision-making process and interaction of courts with rest of political system.
POLS 351. Western Éuropean Politics (3) II. 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-101, 271, or permission of instructor.
OLS 354. Governments of Soviet Union and Eastern Europe (3) I. Governmental structures and ideological forces controlling the political systems and socio-economic life within the Soviet Union and its satellite countries of Eastern Europe. Mission and expansion of Soviet influence beyond its borders.
POLS 355. Governments and Politics of Latin America (3) i. 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 is on selected nation-states.
POLS 361. Governments and Politics of Middle East (3) I. 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.
-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.
YOLS 372. Contemporary World Politics (3) I, il. Current global issues and problems such as the arms race, population control, disarmament and East-West, North-South rivalries are discussed and analyzed.

POLS 374. American Foreign Policy Process (3) I, II. 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 395. Workshop on Current Topics (14) On demand. Intensive educational experience on such selected topics as government public information work (agencies; departmients, executive and legislative office), and other state, local, national and international political affairs. May be repeated if topics differ, on approval of adviser.
POLS 400. Topics in Political Science (1-3) I, II. On demand. Subject matter varies. New, one-time courses being offered experimentally. See schedule for listing. Prerequisite: POLS 101 or POLS 201.

POLS 402. Western Political Thought I (3) I. Classics of political philosophy of ancient and medieval period. Major ideas and concepts of western political tradition from Plato through Middle Ages to Machiavelli.
POLS 403. Western Political Thought II (3) II. 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) I or II. Contemporary classics of political philosophy. Theories of justice and right of Rawls, Nozick, Hayek and Strauss; Berlin's pluralism; existentialism; and/or democratic theory.
POLS 405. Recent 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 416. Constitutional Law: Powers and Relationships (3) I. Supreme Court cases relating to U.S. governmental structure, powers and relationships.
-POLS 417. Constitutional Law: Procedural Rights (3) I. Due process, right to counsel, search and seizure, electronic surveillance, jury trial.
POLS 418. Constitutional Law: Substantive Rights (3) II. Freedom of speech, press and religion; equal protection of law, travel and privacy; right to vote.
POLS 419. Jurisprudence (3) II. Leading theories and theorists of law; Anglo-American thought and practice.
POLS 420. Administrative Law (3) I. 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.
POLS 421. Bureaucratic Politics (3) II. The role federal bureaucracy plays in public policy process. Policy development; social and political factors that Influence the administrative branch of government. Prerequisite: POLS 221 or permission of instructor.

POLS 422. Survey of Public Administration (3) I. Major topics and issues of the discipline including administrative structure and behavior, leadership, decision making, budgeting, personnel; inter-governmental relations and bureaucratic power and politics. May not be taken by students completing POLS 221.
POLS 423. Comparative Public Administration (3) II. 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 social, economic and political development.
POLS 424. Supreme Court and Contemporary Issues (3) II. Alternate years. Selected areas of current concern in constitutional law; substantive knowledge of relevant case law, scholarly legal journals which attempt to predict outcome of future constitutional litigation. Prerequisite: POLS 417 or POLS 418.

POLS 425. Constitutional Law Advocacy (3) II. Substantive knowlédge of one area in constitutional law; practical skills necessary for constitutional ajudication; techniques of legal research, writing appellate court briefs, and appellate court advocacy. Prerequisites: POLS 416 and POLS 417, or POLS 418 and permission of instructor.
POLS 430. Politics of Metropolitan Areas (3). III. Socio-economic and political factors affecting the governance of metropolitan areas with an emphasis on politico-administrative institutions, processes and the major policy issues and their consequences for the management of metropolitan affairs. Prerequisite: POLS 221 or permission of instructor.
POLS 431. Regúlatory Policy (3) II. Development of regulation as an instrument for correcting deficiencies of the economic market, role in achieving societal purposes, problems of regulatory practice. Prerequisite: POLS 221 or permission of the instructor.
POLS 434. Gender Politics in Cross-Cultural Perspective (3) I. 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) II: 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. Mass Media in Politics (3) I. Techniques of modern election campaigns, management: use of research and voter profiles in developing strategy, tactics of mass persuasion: professional public relations in television and the electronic media.

POLS 452. Political Violence and Revolution (3) II. 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 453. Soviet Behavior and Institutional Development (3) I. Approaches to study of Soviet Union that expiain political science as method of analysis; ideological and other approaches to Soviet behavior; pre-Soviet political influences; state and society in Marxism; post-revolutionary developments in Soviet politics; consolidation of power under communist leaders. Prerequisite: POLS 354.
POLS 454. Soviet Political System (3) II. Polltical and managerial structures and policles of Soviet Union that explain regime and institutionai character and tendencies; government and party power structures; ideological influences in social and economic policies; manipulation of decision-making structure; significance of Soviet external policies for major powers and emerging nations. Prerequisite: POLS 354.
POLS 458. Soviet Foreign Policy (3) II. Soviet foreign policy in post-war era; domestic and international determinants and consequences for Soviet-Western relations, socialist bloc and third worid.
POLS 459. Intergovernmental Relations (3) On demand. Vertical and horizontal relations among governments in the American federal 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 221 or permission of instructor.
POLS 460. Politics and Issues of World Development (3) II 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 101, POLS 271 or permission of instructor.
POLS 470. Individual Readings (1-3) I, II. 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) II. History, organization and function of international organizations within the context of world politics. Major emphasis on United Nations and issues facing it. Prerequisite: POLS 272, 372 or permission of instructor.

POLS 476. International Political Economy (3). Survey and analysis 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 491. Seminar for Intern (3). Required for students planning internships. Survey and analysis of literature deaiing with practice political experiences. Use of biographical material as sources.
-POLS 492. Field Study (1-3) I, II, III. For students working on political internship programs and political campaigns. May be repeated to six hours.
POLS 495. Honors Seminar in Contemporary Political Science (4) I, II. Political science as discipline and profession; forms 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.

## Popular Culture (POPC)

n $\uparrow$ POPC 160. Introduction to Popular CuIture (3) I, II, III. Basic theories of, approaches to and topics within popular culture; several selected topics and use of various theories and approaches.
I 4 POPC 165. Popular Culture and Media (3) I, II, III. Some of the ways in which mass media (TV, film, recording industry, print, radio) have affected modern American culture. Media relationships and interactions.
1 $\$$ POPC 220. Introduction to Folklore and Folklife (3) I, II, III. Study and coilecting of folklore; ballads, myths, tall tales, heroes, folk medicines, superstitions, proverbs and crafts.
POPC 231. Studies in Popular Cutture (1-3) I, II, III. Study of theme, era or issue in popular culture. Subject matter designated in class schedule. May be repeated once if topics differ.
POPC 240. History of Popular Culture (3) Alternate years. Relationship between society and its popular culture as it has changed over time.
-POPC 250. Introduction to Popular Film (3) I, II, III. 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 270. Introduction to Contemporary Popular Literature (3) Alternate years. Popuiar literary formulae, publishing industry, relationship between popular literature and reading public, functions of popular literature in society.
POPC 280. Introduction to Popular Music (3) I, II, III. 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) I, II, III. Relationship between popular television programming and American society; viewing of appropriate television.

POPC 320. Folktale and Legend (3) Alternate years. Intensive examination and co lecting 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 Materlal 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, Folkiore of the Great Lakes Region, etc.). Emphasis on the function of various types of foiklore within the group or region. May be repeated once if content clearly differs.
POPC 350. Advanced Studies in Poputar Film (3) Alternate years. In-depth 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 ere. films of Depression, films of post World if II, etc. May be repeated once if topics are different; viewing of appropriate films. Twohour 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. In-depth investigation into single aspect of popular music: specific popular music genres, specific musical themes, popular music industry, etc. May be repeated to eight hours if topics differ.
POPC 390. Elactric Media (3) Alternate years. Cultural media theory as related to aural and visual electric media, especially radio and television. Impact of these media on contemporary culture. Prerequisite: one course in mass media or permission of instructor.

- POPC 395. Workshop on Current Topics (13). On demand. Intensive educational experience on selected topics. Typically, an allday or similar concentrated time format. Re quirements usually completed within expanded time format. May be repeated if topics differ, on approval of adviser.
-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 meths of collection and anaiysis. May be repeated once if content clearly differs.

OPC 426. Popular Entertainments (3) Almate years. Cultural significance of popuentertainments, past and present; circuses, carnivals, parades, vaudeville, professional and amateur sports, camping, etc.

## POPC 460. Popular Culture Advanced

Studies (3) II. in-depth 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 (2) Alternate years. Interdepartmental seminar for seniors in POPC program. Selected topics approached from several points of view. Prerequisites: senior standing and major in POPC or in discipline represented in POPC program, junior standing with permission of dependent.
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. SENIOR SEMINAR IN POPULAR CULTURE, POPC 480, MAY BE SUBSTITUTED WHEN APPROPRIATE.
-POPC 490. Problems in Popular Culture (13). For advanced student. Independent study. Prerequisite: consent of director of POPC program to proposal approved by faculty member three weeks prior to end of emester; and 6 hours POPC courses. May repeated to eight hours.

## Psychology (PSYC)

I $\downarrow$ PSYC 201. General Psychology (4) I, II, III. Scientific approaches to the study of behavior of organisms. Application to personal and social behavior.
PSYC 231. Fesearch Methods in Psychology (4) I, II. Experimental and non-experimental techriques for investigating
psychological phenomena. For non-psychology majors. Three lecture hours; two laboratory hours. Prerequisite: PSYC 201
-PSYC 240. General Seminar (1-3) I, II. 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) I, II, III. 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. Prerequisite: PSYC 201 or consent of instructor.
PSYC 290. Introduction to Laboratory Methods in Psychology (4) I, II. Introduction to research methods used in laboratory and natural settings. Includes planning the research, collecting and interpreting the data and communicating the results in both oral and written forms. Three one-hour lectures and one two-hour laboratory. Prerequisites:

C 201 and 270.

PSYC 301. Brain Mechanisms of Behavior
(4) I, II. 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.

PSYC 302. Educational Psychology (3) I, II. (See EDFI 302) Concepts and factors affecting application of psychological principles to the educative process. No credit for both EDFI and PSYC 302. Prerequisite: PSYC 201.
-PSYC 303. Psychology of Child Development (3) I, II. Major concepts, theories and principles of child development. Coverage is from conception until adolescence. Prerequisite: PSYC 201.
PSYC 304. Adolescent Development (2) II. Major concepts, theories and principles of adolescent development. Prerequisite: PSYC 201.
-PSYC 305. Psychology of Personality Adjustment (2) I, II, III. Problems of personal adjustment. Related problems of theory and measurement of personality. Prerequisite: PSYC 201.
PSYC 306. Psychology of Gender (3) I. Psychological characteristics of women and men: personality, adjustment, identity formation, intellectual processes, sexuality; theories and data on gender development.
PSYC 307. Human Sexuality (3) I, II, III. Survey of the relationship of biological, psychological, cultural, and historical factors to typical and atypical sexual attitudes and behaviors.
PSYC 308. Introduction to Clinical Psychology (3) II. 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) II. Discussion of major theories of adult development; description of how biological, cognitive, personality and social-psychological processes interact to produce development; emphasis on seeing how these processes occur in adults' everyday lives. Prerequisite: PSYC 201.

- PSYC 311. Social Psychology (3) I, II, III. 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 312. Principles of Social Interaction (2) II. Theoretical issues and recent empirical findings: animal social behavior, pro-social behavior, aggression, group processes, social exchange processes and social psychology in changing world. Prerequisite: PSYC 201 or SOC 101.

PSYC 313. Research in Social Psychology (4) II. 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) I. 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) I, II. 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 Problems Solving (4) I, II. 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 324. American Sign Language of Deaf (3) I, II. Basic vocabulary and grammatical structure of the visual language system used by deaf persons in North America. Implications of deafness for language and communication, psycho-linguistic studies of Sign.
PSYC 328. Psychophysiology (4) I, II. Laboratory course in psychophysiology; relationship between psychological states and physiological responses in humans; conditioning of autonomic responses, orienting responses, psychosomatic relationships and biofeedback, detection of deception. Four lecture hours, laboratory by arrangement. Prerequisites: PSYC 270 and 290.
PSYC 330. Psychobiology of Emotions and Motivation (4) II. 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) II. An historical instrodution to the sensory and cognitive processes that underlie our experience of objects, events, and their interrelationships. Emphasis is 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) I, II. 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 (4) II. 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. Assessment of Work Effectiveneas (3) 11. Emphasis on the design, measurement and evaluation of human and machine parformance and productivity. Assessment of factors related to training, efficioncy and safety. Prerequisites: PSYC 270 and one other course in PSYC, or consent of instructor.
PSYC 370 . Quantitative Methods II (3) I, II. Analysis of variance and other multivariate methods for analyzing behavioral measurements. Prerequisite: PSYC 270.
-PSYC 395. Workshop on Current Topics (15) On demand. Intensive educational experience on selecied topics. Typically an all-day or similar concentrated format. Requiremonts usually completed within time format. May be repeated on approval of adviser.
PSYC 401. History of Psychology (3) 1. Selected topics, reading of original sources. Psychopathology, animal psychology, behaviorism, cognitive psychology, personality theory, others. Prerequisite: PSYC 201 or consent of instructor.
psyc 403. Personality Theory (3) II. Scientific constructs in personality theory; contemporary theories with historical antecedents; assessment of relationship to general psychology. Prerequisite: elght hours in PSYC.
APSYC 405. Psychology of Abnormal Behavior (3) I, II, III. Data and concepts used in understanding, labeling and modifying deviant behavior. Prerequisite: PSYC 201.
PSYC 406. Behavior Pathology in Children (3) 11. Major behavioral disorders of childhood: description, etiological implications, treatment issues, approaches and problems, and related research. Prerequisite: PSYC 201 or consent of instructor.
psye 421. Psychology of Language (3) II. Theoretical and empirical issues in psycholinguistics, speech perception and language development. Prerequisite: PSYC 201 or consent of instructor.
PSYC 425. Community Mental Health (3) I, III. 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.
PSYC 431. Mental Health Worker Training (4) 1. One of two prerequisites for field placement as mental health worker, taken simultaneously with PSYC 432. Relationship enhancement and behavioral analysis and intervention skills. Fieid experiences. Prerequisites: PSYC 201 and consent of instructor.
psyc 432. Principles of Mental Health Work (4) I. Exposure to models and roles associated with delivery of mental health services. Participation with practicing clinical "team"; field experiences. Prerequisites: PSYC 201 and consent of instructor. Graded S/U.

PSYC 433. Mental Health Worker Practicum I (3) II. Students engage in those mental health activities they trained for during previous semester. Includes placement in one of a variety of mental health settings. Prerequisites: PSYC 431 and 432 and consent of instructor.
PSYC 434. Mental Health Worker Practicum II (4) II. Field experience for mental health worker. Student increases experience with broad range of mental health problems working in community mental health setting. Case study presentation. Prerequisites: PSYC 431 and 432 and consent of instructor. Graded S/U.
PSYC 437. Field Study: Deafness and ASL (1) I. 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: PSYC 324 or equivalent and consent of instructor.
-PSYC 440. General Seminar (1-4) I, II, III. 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) I. Methods of selection and assessment in industrial and other organizations. Includes recruitment, hiring, promotion, etc. Compliance with fair employment and equal employment opportunity regulations. Prerequisite: PSYC 201.
PSYC 454. Interviewing (3) II. Laboratory exercises in administering and responding to interviews differing in structure, behavior, decisions and interrelationships within interviews, validity and reduction of bias. Prerequisite: PSYC 201.
PSYC 455. Stress Factors of Work (3) I. 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 dualcareer families.
PSYC 460. Introduction to Psychological Testing (3) I, II. 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 equivaient.
PSYC 490. Special Problems in Psychology (1-3) I, II, III. 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 495. Senior Honors Seminar (3) I. 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) II. wown Seminar in general psychology for senio: major. Student required to plan and carry out research project under direction of faculty member. Prerequisite: senior major, approval by department undergraduate committee.

## Radio-Television-Film (RTVF)

RTVF 103. Introduction to Mass Communications (3) 1, 11, 111. Survey of broadeasting 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 103 and RTVF 103. Open to non-majors.
RTVF 250. Radio and Television Productiont for non-RTVF Majors (3). 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 RTVF mejors.
RTVF 255. Introduction to Broadceasting (3) II. Survey of components of broadcasting system in America, including technical bases, economics, programming and regulation. No prerequisites. Intended for majors.
\#RTVF 261. Understanding Novies (3) I, II, III. Film as art. Essentiai elements of fiim; editing, camera worik, sound and composition explored in some classic motion pictures. Various approaches to looking at movies and writing about them.
-RTVF 262. Radio Writing, Announcing wh. Producing (4) I. Writing for broadcasting; style and basic principles and practices of announcing; theories and processes of audio production. Laboratory hours. Prerequisite: RTVF or JOUR students, major status; all other students, B or better in RTVF 255.
RTVF 263. Television Programming and
Production (4) II. Theories and practices involved in programming decisions; basic theories and tasks of video production, including scripting, organization and aesthetics. In-studio experience in equipment operation, program directing. Laboratory hours. Prerequisite: RTVF or JOUR students, major status; all other students; $B$ or better in RTVF 255.
RTVF 264.8 mm Film Making (3) I, II. Basic techniques of 8 mm motion picture photography. Understanding of lens, film and camera characteristics, lighting, camera operation and editing. Student furnishes camera and some materials.
RTVF 270. Topics in Minorities and Film (3) II. Portrayal and/or participation of minorities in film. Topic varies. No prerequisite.
RTVF 360. Procedures of Audience Miessurement (3) I, II. Overview of approaches to social research; survey methods, including sampling, measurement, interviewing, questionnaire design and presentation of results; content analysis; ratings; and interpretation of elementary descriptive statistics.

TVF 364. Producing and Directing for eievision (3) I. Theories and processes of producing and directing video programs, including scripting, visualization, personnel management and budgeting. Includes multicamera and single-camera productions, video editing techniques. Laboratory hours. Prerequisite: RTVF 263 or equivalent experience.
RTVF 365. Broadcast History (3) I. Current U.S. broadcasting with view of antecedents in regulations, economics, programs, audiences, stations, networks, technology and employment. Prerequisite: eight hours of RTVF.

RTVF 366. Processes and Effects of Mass Communication (3) I, II. Seminal models and studies; current approaches to effects; critical viewing strategies; structure and consequences of media institutions and organizations.
RTVF 368. Radio Workshop (1) I, II. 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: RTVF 262.
RTVF 395. Workshop on Current Topics (13) 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.
TVF 451. New Electronic Media (3) I, III. New existing and future media technologies affecting broadcast and other media industries are introduced including satellite TV, interactive TV, high definition TV, optical disk technologies, electronic text, fiber optics, etc. The course builds from an examination of existing media to include the new technologies. No prerequisites.
RTVF 455. Broadcast Station Operation (3)
I, II. Function, organizational structure and procedures involved in the operation of radio and television stations.
RTVF 460. Regulation of Broadcastirg (3) II. Roles of federal, state and local government in regulation of broadcasting. Analysis of Federal Communications Commission. Legal problems engendered by regulation.
RTVF 462. Radio Programming. (3) I. Modern radio program formats in the United States.
RTVF 463. Television Programming (3) I. Structure and appealing characteristics of television and cable programs.
RTVF 464. 16 mm Film Making (3) II. Concepts, theories and mechanics of film production; applications of cinema to television news, documentaries, informational presentations, and feature and art film production. Lectures and laboratory. Prerequisites: RTVF 264 or JOUR 306 or VCT 282; and permission of instructor.
RTVF 466. History and Criticism of Film (3) 41 Historical development of theatrical, doccumentary and avant-garde films. Function, content ancl style of film criticism.

RTVF 468. Television Workshop (3) I, II.
Production of dramatic and public affairs television programs. Writing, producing and directing emphasized. May be repeated once. Prerequisite: RTVF 364 or equivalent experience.
RTVF 469. Seminar: Contemporary Aspects of Broadcasting and Film (1-3) On demand. Investigation and analysis of area of radio, television and film. Various topics of current concern; public and instructional broadcasting, audience, CATV, political broadcasting, censorship and freedom in film, film movements and styles. May be repeated with permission of adviser to six hours.
RTVF 489. Internship in Radio-TelevisionFilm (1-6) I, il. Supervised field experience in electronic communication. Student must arrange for experience with approval of intern supervisor in advance of registration. May be repeated up to six hours. Limited to RTVF majors. Prerequisite: 2.5 overall GPA. Graded S/U.
RTVF 490. Problems in Radio-Television-
Film (1-3) I, II. For advanced student who wishes to do intensive study in radio, television or film independently, or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of department.

## Recreation (RED)

RED 178. Camp Leadership (2) II. Organized camp movement; uniqueness of the camping experience and setting; role of the counselor; programming and counseling principles.
RED 190. Recreation Leadership (3) I, II. Selecting, creating and conducting activities suitable for the wants and needs of various populations; leadership theories, styles and techniques; activity assessment; social activities pattern and recreation leadership kit.
RED 210. Major Concepts in Recreation (2) II. Philosophical concepts and historical foundations; exploration of economic, sociological and psychological aspects; leisure service delivery systems and professional leadership.
RED 260. Recreation and Physical Activity for Older Americans (2) I, II. Characteristics of older Americans; therapeutic benefits of activity; leisure services and settings; program planning; administrative concerns. Prerequisites: RED 190 and RED 210 or consent of instructor.
RED 294. Outdoor Leadership (3) II. Knowledge and leadership in outdoor living skills, backpacking, bicycle touring and canoe tripping. One weekend trip required.
RED 304. Outdoor Recreation (3) I. Outdoor recreation resource bases; governmental agencies and private organization management and operations; behavioral patterns in outdoor recreation pursuits; legal, economic and political impacts.
RED 323. Camp Administration (2) I. Role of camping in society; patterns of organization; programming guidelines, management aspects, personnel, and site and facilities.

RED 380. Concepts and Techniques in Outdoor Education (4) II. 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; fieldbased experiences.
RED 384. Organization and Administration of Leisure Services (3) I, II. 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: RED 190, 210 and 30 hours.
RED 385. Recreation Program Development (3) I. 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: RED 190, RED 210 and 30 hours.
RED 386. Internship Preparation (1) i, II. A comparative analysis of leisure services and their roles in society with focus on personal and professional development. Prerequisite: 60 hours.
RED 387. Practicum: Leadership/Programming (1-5) I, II, III. Application of leadership and program theory to field setting. Prerequisite: approval of adviser.
RED 395. Workshop on Current Topics (13). On demand. Intensive educational experience on selected topics related to enrichment of curricular content.
RED 470. Independent Study (1-3) I, II, III. An in-depth project of significance to the student. Credit allocation by project supervisor and approval by chair prior to registration. Prerequisite: by permission of instructor.
RED 482. Evaluation of Recreation Services (3) II. Methods, techniques and application of evaluation processes.
Prerequisites: RED 384, RED 385 and 2.5 GPA.
RED 483. Recreation Areas and Facilities
(3) I. Planning and design principles; acquisition, development, construction and maintenance of specific types of recreation areas and facilities. Prerequisites: RED 384, RED 385 and 2.5 GPA.
RED 484. Contemporary Issues in Recreation (2) I. Seminar in current issues. Prerequisite: 90 hours.
RED 487. Practicum: Supervision/Administration (1-5) I, II, III. Application of program, supervision and administration theory to a field setting; may be repeated. Prerequisites: RED 387, 2.5 GPA and approval of adviser.
RED 488. Internship (15) I, II, III. A concentrated professional experience for students preparing for a career in recreation. Prerequisites: grade point average of $2.5,90$ hours, RED 384, RED 385, RED 386, RED 387 and consent of adviser.

## Pespitatory Care Technology (RT)

$\dagger$ RTT 101. Basic Human Anatomy and Physiology for Respiratory Therapy (5) 1. A onesemester course developed especially for students in the Respiratory Care Technology program 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 transíer as biology credit. Three hours of lecture, two hours of lab, and one hour of recitation. Lab fee.
$\dagger$ †TT 102. Pharmacology for Respiratory Therapy (3) I. General pharmacologic principles, including drug dosage calculations and cispensing systems. Study of major cirug groups related to practice of respiratory care. Emphasis on aerosolized drugs administered by the therapist. Three hours of lecture.
tRT 120. Principles of Respiratory Therapy (3) II. Basic scientific principles of gases, hurnidity, aerosols and fluid flow as applied to respiratory care. Devices for measuring - oxygen tevels and regulating pressure and flow of therapeutic gases, as well as equipment for delivering humidity and medical aerosols. Sterilization and therapeutic application of respiratory care equipment. Two hours of lecture and three hours of lab. Prerequisites: RT 101 and CHEM 115 or permission of instructor. Lab fee.
†TT 130. Gespiratory Therapy Procedures 1 (4) III. Basic nursing care and patient as. sessinent, incentive spirometry, IPPB, chest physiotherapy, isolation technlques, manual rasuscitators, airway management, arterial sampling and analysis, quality control procedures, and non-invasive gas monitoring. Three hours of lecture and three hours of lab. Prerequisites: RT 120 and 200 or permission of instructor. Corequisite: RT 151. l.ab fee.
$\dagger$ PT 15t. Respiratory Therapy Clinical Applicetions I (2) ill. Introduction to the hospital environment. Directed clinical practice including basic nursing skills, patient assessment, charting, oxygen therapy, aerosol administration, incentive spirometry, IPPB, chest physiotherapy, CPR and equipment processing. Ten hours of field study. Prerequisite: Must meet program matriculation standards. Prerequisites: RT 120 and 200 and ENVT 110 or permission of instructor. Corequisite: RT 150.
TR1 152. Respiratory Therapy Procedures II (4) I. Miechanical ventilation, pulmonary function testing, hemodynamic and other physiologls monitoring, EKG interpretation, neonatai and pediatric respiratory care, and management of the respiratory care department. Three hours of lecture and three hours of lab. Prerequisites: RT 150 and 151 or permission of instructor. Corequisite: RT 150. tab fee.
+18T 200. Cardiopulmonary/Renal Anatomy and Physiology (3) II. Anatomy and physiotogy of respiratory, cardiovascular and renal systems are studied in depth. Topics include ventilatory mechanics and control, gas diffusion, transport, and exchange, ac-id-base balance, fluid and electrolyte balance, and blood gas interpretation. Two hours of lecturer and two hours of recitation. Prerequisite: RT 101 - - CHEM 115 or parmission of instrucior.
$\dagger$ RT 204. Pulmonary Pathophysiology (4) I. Study of disease terminology and basic pathophysiologic processes common to organ system disease. Common respiratory and related cardiovascular disorders are studied in depth with respect to etiology, pathophysiology, signs and symptoms, diagnosis, and treatment. Four hours of lecture. Includes radiologic assessment of the chest and pulmonary rehabilitation/home care. Prerequisites: RT 102 and 200 or permission of instructor.

## $\dagger$ RT 250. Respiratory Therapy Clinical Ap-

 plications II (4) I. Directed clinical practice at a local hospitals. Students will gain hands-on experience in managing artificial airways and mechanical ventilators, performing arterial punctures and analyzing samples, and interpreting and applying physiologic data. In the cardio-pulmonary laboratory, the student will perform various tests of pulmonary function. Twenty-four hours of field study per week. Prerequisites: RT 151, plus meet program matriculation standards. Corequisite: RT 152.$\dagger$ RT 251. Respiratory Therapy Clinical Specialties (4) II. Students will rotate to various hospitals to gain exposure to specialized equipment and techniques which may be unique to that institution, while continuing to practice advanced procedures learned the previous semester. Twenty-four hours of field study per week. Prerequisite: RT 250, plus meet program matriculation standards.

## Romance Languages (ROML)

MOML 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.
ROML 262. African Literature in Translation (3). Literary masterpieces from or about Africa, 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 students' choice, with advice and consent of instrucior. 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: FREN, SPAN or ITAL 202, 212, 500 or equivalent.

## Russian (RUSN)

Entering students who had Russian in high school should take the placement test during summer preregistration or prior to enrollment in a course.

RUSN 100. Introduction to Language Study: Russian (1). On demand. Lecturereading course in English introducing students to the cultural development of the Russian language.
\#RUSN 101. Elementary Language and Cuiture I (4) I. Cultural approach to beginning language study in the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.
IRUSN 102. Elementary Language and Cuhture II (4) II. RUSN 101 continued. Four class periods and laboratory practice each week. Prerequisite: RUSN 101, or by placement.
$\dagger$ RUSN 201. Intermediate Russian 1 (4) I. RUSN 101-102 continued. Development of the four skills. Four class periods and laboratory practice each week. Prerequisite: RUSN 102, or by placement.
$\dagger$ RUSN 202. Intermediate Russian il (4) II. RUSN 201 continued. Four class periods and laboratory practice each week. Prerequisite: RUSN 201, or by placement.
RUSN 215. Russian Culthure (3) I. Culture and civilization of the Russian people from their origins to the recent past. Lectures, audio-visual presentations and readings in English.
RUSN 216. The Soviet Union Today (3). See SOVT 216.
RUSN 303. Introduction to Scientific Russian (2) II. Reading and grammar designed for science-oriented students who wish to develop an effective reading knowledge of scientific Russian. Prerequisite: RUSN 202.
RUSN 311. Russian Literature: From Reginnings to Dostoeyvsky (3) I. Literary trends from 11th to mid-19th century; medieval and baroque periods, 18th censury classicism and sentimentalism, and the Goiden Age. Writers include Pushkin, Gogol, Goncharov, Lermontov and Turgenev. Lectures and readings in English.
RUSN 312. Russian Literature from Dostoevsky to Present (3) II. Social, political and cultural trends of pre- and post-revolutionary periods. Writers include Dostoeyvsky, Tolstoy, Chekhov, Gorki, Zoshchenko, Bulgakov, Pasternak and Solzhenitsyn. Lecture and readings in English.
RUSN 317. Composition and Conversation I (3) I. 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 Conversation il (3) II. RUSN 317 continued. Prerequisite: RUSN 317.
RUSN 319. Journalistic Russian (2) On demand. Practice in the language and syntax of contemporary Russian journalism; expository prose, newspapers, journals, monographs, magazines, etc. Prerequisite: RUSN 202.
RUSN 320. Readings in Russian Culture
(2). Russian for reading in the social sci-
ences and humanities. Prerequisito: RUSN 202.

USN 331. Workshop in Translation (1-3) 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 Soviet verse. Prerequisite: RUSN 202.

RUSN 402. Russian Novel (3) I. 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. Prerequisites: RUSN 311 and 312, or permission of instructor. Open to nonmajors who will read assigned works in translation.
RUSN 403. Russian Drama (3) II. Major works of Russian dramatic literature as exemplified by Polotski, Fonvizin, Griboyedov, Pushkin, Ostrovski, Turgenev, Tolstoy; emphasis on Chekhov and Moderns. Prerequisites: RUSN 311 and 312, or permission of instructor. Open to nonmajors who will read assigned works in translation.
RUSN 415. Cultural and Literary Aspects of Soviet Film (3) On demand. Soviet film both as visualization of Russian literature and as instrument of social and political persuasion through various esthetics-- ex-
pressionism, socialist realism, psychologica ralism.
RUUSN 417. Advanced Composition and Conversation (3) On demand. Development of increased facility in written composition and the spoken language. Grammatical structure and levels of style in writing and colloquial idiom in spoken dialogue. Prerequisite: RUSN 318.
RUSN 432. Russian Folklore (3) On demand. Survey of major genres of Russian folk literature and culture, and their influence on language and literature. Prerequisite: RUSN 102, or permission of instructor. 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 student requests. May be repeated to six hours. Prerequisite: RUSN 202.

RUSN 491. Studies in Russian (1-3) On demand. Independent reading for the aclvanced student. Prerequisite: arrangement with instructor and consent of department chair prior to registration.

## Social Science (SOSC)

†SOSC 101. Introduction to the Social Sciences (3) I, II. Fundamental concepts and methods in the social sciences.
†SOSC 289. Human Services Practicum (34) II. Supervised field experience in an approved agency combined with a seminar lesigned to integrate theory and practice. sapstone course to the human services curriculum; students must be near completion of the degree in human services and be in good standing academically. Prerequisite: SOWK 220 or consent of instructor.

## Social Work (SOWK)

-SOWK 110. Survey of Social Services (3) I, II. Social service programs; functions of social workers within these programs.
-SOWK 220. Observation and Interviewing in Social Work (3) I, II. Development of observational, interviewing and recording skills through classroom experiences and volunteer experiences in community social agencies.
SOWK 227. Ethnic and Cultural Diversity in Social Work Practice (3) I, II. Issues and concepts important to understanding problems surrounding ethnicity and relationship to social work. Prerequisite: sophomore standing.
SOWK 230. Social Welfare Institutions (3) I. Social welfare as social institution; history, developmental forces, value systems, relationships between, and various roles of public and private agencies. Prerequisite: SOWK 110.
SOWK 320. Human Behavior and the Social Environment I (3) I, II. Impact of biological, psychological and socio-cultural systems on human development and behavior. Prerequisite: junior standing.
SOWK 321. Human Behavior and the Social Environment II (3) I, II. Builds upon Social Work 320. Considers interaction of environment and individuals from several human developmental perspectives. A social systems framework is used to designate major levels and arenas of human behavior. Prerequisite: SOWK 320 .
SOWK 322. Social Policy and Social Services (3) II. Social problems, social policy and social services as interrelated areas. Basic models for evaluating and influencing social policy. Prerequisite: SOWK 230.
SOWK 325. Social Work Practice I (3) I, II. Components of generic social work practice; problem identification, selection of interventive techniques, development of skills. Prerequisites: junior standing and social work major.
SOWK 326. Social Work Practice II (3) I, II, III. Social work practice models, strategies for community organization and change. Prerequisites: junior standing and social work major.
SOWK 332. Law for Social Workers (3) I. Legal issues related to social work; court procedure, crime, poverty, income maintenance and family law. Prerequisite: junior standing.
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) I, II, III. Experience working in selected social agency under supervision. Emphasis on practice rather than observation. Weekly seminar required. Application deadline: May 15 of school year before placement. Prerequisites: senior standing, social work major and 2.5 GPA in core courses. Graded S/U.

SOWK 430. Practice Skills Seminar (3) I, II, III. Faculty and field instructors conjointly teach this course. Conceptual frameworks, precise techniques and practitioner styles are considered as they underlie the student's problem solving in field instruction Taken concurrently with SOWK 423.
SOWK 470. Independent Study (1-3) I, II, III. Student designs and carries out study or special project in area of interest. Prerequisites: junior'standing, social work major, faculty sponsor. May be repeated up to six hours.

## Sociology (SOC)

I SOC 101. Principles of Sociology (3) I' III, III. Elements and concepts of social organization, social change and group relationships.
$\dagger$ SOC 202. Social Problems (3) I, II, III. Sociological analysis of contemporary social problems. Prerequisite: SOC 101.
-SOC 210. Sociology of Religion (3). Role of religion in society; influence of religion upon society and effects of social structure on religious beliefs. Prerequisite: SOC 101.
\| $\dagger+1 \|$ SOC 231. Cultural Anthropology (3). Basic concepts and objectives in study of culture. Range of cultural phenomena and approaches to their study.
-SOC 289. Field Study in Applied Sociology (1-3) I, II, III. Field experience in an applied sociology setting. May be repeated once. Only three hours may be applied to a sociology major or minor. Prerequisite:-Six hours in SOC. Graded S/U.
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). Social behavior; process of interaction and interpersonal influence. Prerequisite: SOC 101.
SOC 302. Introduction to Sociological Theory (3). Major theories and concepts of sociology. Prerequisite: SOC 101.
SOC 311. Community and Urban Sociology (3). Communal life from beginnings in folk society; contemporary urban-metropolitan communities; foik urban contrasts and community types. Prerequisite: SOC 101.
SOC 312. Population and Society (3). 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). 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.
SOC 314. Popular Music and Society (3).
Formal organization of music industry and its impact on American society. Each facet of the industry examined: performer, production, marketing, record buying. Prerequisite: SOC 101.

SOC 315. American Society (3). Models of contemporary American society, dominant value orientations. Prerequisite: SOC 101
-SOC 316. Minority Groups (3). 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). Inequalities in distributions of wealth, power and prestige in societies. Types of systems of inequality; caste, estate, class. Consequences of inequalities for society as whole and for segments of society; educa-tional-occupational opportunities, racial-athnic relations, social mobility, social change. Prerequisite: SOC 101.
SOC 318. Social Organization (3). 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). 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. Prerequisite: SOC 101, 301.
SOC 320. Computers and Society (3). 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, modification in beliefs and values, the future of post-industrial society. Not a programming course.
sOC 331. Contemporary Cultures (3). Culqure area(s) emphasized varies with staff and student interest. Area announced in schedule of classes (Africa, Europe, Near East, Native North America, Latin America, Asia, Pacific). May be repeated to 12 hours. Prerequisite: SOC 231 or consent of instructor.
sOC 332. Archaeology (2). Prehistory of man; early cultural development throughout world. Prerequisite: SOC 231.

## SOC 334. Anthropology and Contemporary

 Human Problems (3). Contemporary cultures as collective patterns of living and attempts to create more human way of life. Methods of depicting and interpreting cultural codes of behavior, thought, feeling. Prerequisite: SOC 231 or consent of instructor.soc 335. Medical Anthropology (3). Crosscultural study of health and disease patterns in human populations. Emphasis on influence of cultural and ecological factors in the response to illness in traditional, rural, ethnic and urban communities.
-SOC 341. Juvenile Delinquency (3). Analysis and processes of development, treatment, prevention and control of juvenile delinquency. Prerequisite: SOC 101.

SOC 342. Deviance and Social Control (3). 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.
SOC 344. Deviant Sexual Behavior (3). 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 101.
SOC 352. Collective Behavior (3). How new social groupings and order arise from unstructured situations. Behavior of such collectivities as riots, mobs and crowds. Prerequisite: SOC 101.
-SOC 361. The Family (3). Traditional and contemporary family types; current similarities and differences of family organization in various cultural environments. Prerequisite: SOC 101.
SOC 369. Introductory Statistics (3) I, II. Data presentation, measures of dispersion, correlation, regression, probability,
probability distributions, sampling distributions, hypothesis testing and analysis of variance. Prerequisite: SOC 101.
SOC 370. Introductory Methodology (3) I, II. 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 371. Applied Survey Research (3). Practical experience in survey research in an applied context: policy issues, problem formulation, measurement, questionnaire-intervlew design, sampling procedures, data collection, electronic data processing, interpretation and report writing. Prerequisites: SOC 101, 369, 370 or consent of instructor.
SOC 395. Workshop on Current Topics ( 1 4) 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.
SOC 404. Social Gerontology (3). Problems of aged in contemporary society. Social gerontology as field of interest of interdisciplinary nature; emphasis on socio-economic approach. Prerequisite: SOC 101.
SOC 414. Society and the Environment (3). 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). Industrialization as a social process, labor force dynamics, models of organization, human relations, nature of work and job satisfaction. Prerequisite: SOC 101.
SOC 416. Polltical Sociology (3). Political behavior in society from standpoint of both classical and contemporary sociology. Prerequisite: SOC 101.

SOC 417. Sociology of Sport (3). Sociologine: cal 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). 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). Sociological approaches to understanding relationship between population trends and poverty in developing societies. Issues include food supplies, birth control, urbanization.
-SOC 441. Criminology (3). Nature, causes, treatment and prevention of crime. Prerequisite: SOC 101.
SOC 442. Corrections (3). Socio-psychological approach to origins and development of federal, state and local penal institutions. Prerequisite: SOC 101.

## SOC 443. White Collar and Organized

 Crime (3). Criminal behavior within and by organizations; analyses of employee theft, graft, corporate crime; governmental crime, professional crime, syndicated crime. Prerequisite: SOC 101.SOC 449. Field Work, Corrections (1-2). Field work experience in approved correction agency. Arrangements (usually one full day per week plus individual conferences, and group seminar for two consecutive semesters) must be approved in advance by instructor. May be repeated once. Prerequisite: senior standing. Graded $\mathrm{S} / \mathrm{U}$.
SOC 453. Ethnological Theory (3). Anthropological theories and varying uses of concept of culture in social sciences.
Prerequisites: SOC 231 and consent of instructor.
SOC 460. Gender Sociallzation (3). 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). 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 conflict and violence between family members. Prerequisite: SOC 101.
SOC 463. Leisure, Work and Retirement (3). Sociological analysis of three aspects of life cycle. Crisis in personal life occasioned by each of these stages and by transitions from one stage to another. Prerequisite: SOC 101.

SOC 470. Readings, Research and Internthip (1-8) I, II, III. Supervised independent work in selected areas. Extensive reading of more advanced literature, planned research or field placement in an approved setting. May be repeated, but cannot exceed a total of 12 hourrs. Prerequisites: junior standing and a minimum of 12 hours of accumulated credit in regularly scheduled SOC courses. Prior written permission of instructor and department 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. Internship (1-5) I, II, III. Provides practical experience in applied sociology 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 hours in SOC. Graded s/u.

## Soviet Studies (SOVT)

SOVT 216. The Soviet Union Today (3) II. Conemporary life in the Soviet Union, Soviet Culture and Societal values. Reading of primary sources in translation; Soviet film, television and music. Interdisciplinary approach.
SOVT 400. Seminar in Soviet Studies (3). interdisciplinary approach to the study of Soviet history, politics, culture and society. Required of Soviet studies majors but open to upperclass students with equivalent preparation. Prerequisite: senior standing or permission of instructor.

## Spanish (SPAN)

Students who had Spanish in high school should take the placement test during summer preregistration or prior to enrollment in a course. Credit will not be given for course work more than two levels lower than the highest level completed in high school, unless authorized by the chair of the department.
I\|SPAN 101. Elementary Spanish I (4) I, II. Beginning oral-aural study of language with attention to grammar. Four class periods and scheduled oral practice each week.
IISPAN 102. Elementary Spanish II (4) I, II. SPAN 101 continued. Four class periods and scheduled oral 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.
II SPAN 201. Intermediate Spanish I (3) I, II. Grammar review. Development of the four skills. Three class periods and laboratory practice each week. Prerequisite: SPAN 102 or two years of Spanish in high school.

II SPAN 202. Intermediate Spanish II (3) I, II. SPAN 201 continued. Three class periods and laboratory practice each week. Prerequisite: SPAN 201 or three years of Spanish in high school.
I§SPAN 211. Hispanic Culture Series III (3) I, II. Development of reading comprehension in Spanish using cultural materials concerning Spain. Conducted in English. Prerequisite: SPAN 102, 112 or two years in high school. Cannot be taken for credit if 201 credit has been received.
I↔SPAN 212. Hispanic Culture Series IV (3)
I, II. Development of reading comprehension in Spanish using cultural materials concerning Spanish America. Conducted in English. Prerequisite: SPAN 201 or SPAN 211 or three years of Spanish in high school. Cannot be taken for credit if 202 credit has been received.
SPAN 221. Hispanic Songs (1). Traditional and popular songs from various Hispanic countries, sung in Spanish; emphasis on study 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 351. Spanish Composition and Conversation I (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 361. Hispanic Literature in Translation (3). Literature of a specific country, genre, time period, author or theme. May be repeated for credit once if topics are clearly different. Does not count toward major, minor or foreign language requirement. No prerequisite.
SPAN 367. Introduction to Spanish Peninsular Literature (3). Outstanding authors, works and movements of Peninsular 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 or consent of department.
SPAN 377. Civilization of Mexico and the Caribbean (3). Political, social, intellectual, artistic development of Mexico, Central America and Spanish-speaking islands of the Carribbean. Prerequisite: SPAN 351 or SPAN 352 or consent of department.

SPAN 378. Civilization of South America (3). Political, social, intellectual, artistic development of Spanish-speaking countries of South America. Prerequisite: SPAN 351 or SPAN 352 or consent of department.
SPAN 380. Introduction to Spanish-English Bilingualism (2). Concepts and principles of bilingual-bicultural programs in the United States. Prerequisite: SPAN 202 or equivalent.
SPAN 382. Spanish Business Correspondence (2). Spanish for commercial purposes; business letter writing. Prerequisite: SPAN 351 or SPAN 352.
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 masterpieces 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. Spanish Literature of the Twentieth Century (3). Outstanding works from the generation of 1898 to the present; poetry and prose. Prerequisite: SPAN 367.
SPAN 450. Advanced Grammar and Composition (3). Grammar and composition, especially appropriate for future teachers of Spanish. Prerequisite: SPAN 351 and SPAN 352.

SPAN 455. Applied Linguisitics (3). Phonological, morphemic, syntactical, semantic aspects of Spanish; application to language learning and teaching. Prerequisite: SPAN 351 and SPAN 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 SPAN 352.

SPAN 470. Readings in Hispanic Literature (1-3). Independent reading for the advanced student who wishes to study a particular period or author. Prerequisite: 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 Il: Modernism to the Present (3). Representative authors from Modernism and subsequent 20th 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 are cleariy different. Prerequisite: SPAN 367 or SPAN 368.

## Applied Statistics (STAT)

STAT courses are listed under the heading Applied Statistics. See page 164.

## Special Education (EDSE)

EDSE 314. The Exceptional Child in the Regular Ciassroom (2) I, II, III. Teaching exceptional handicapped children in alternative settings. C/F hrs.: 10.
EDSE 395. Workshop on Current Topics (13) On demand. Intensive educational experience on selected topics related to skill development, content update, or materials development. Typically, an all-day concentrated time format used. Requirements usually met within format. May be repeated on approval of adviser.
EDSE 421. Young Handicapped Child in Early Childhood Classroom (3) II. Knowledge and skills essential to functioning of general education teacher to mainstreamed early childhood classroom. C/F hrs.: 15.5.
EDSE 431. The Education of Exceptional Students (3) I, II, III. Problems of exceptional school children, mentally retarded, learning/behavior disorders, speech/hearing handicapped, visually handicapped, gifted; etiology, diagnosis, personal-social problems and prognosis. C/F hrs.: 11. Prerequisite: sophomore year status 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 Mentally Retarded Sudents (3) I, II, III. Understanding and teaching of educable and trainable mentally retarded children: etiology, diagnosis, theory, educational procedures. C/F hrs.: 20. Prerequisite: EDSE 431.
EDSE 437. Occupational Orientation and Job Preparation for the Handicapped (3) I, II. III. Responsibilities of special class teacher for developing empioyable skills. Prsrequisites: EDSE 431, EDSE 433 and EDSE 451. C/F hrs.: 25.
EDSE 440. Curriculum Development and Methodology for Teaching Students with Moderate to Profound Handicaps (3) I, II, If. Materials and techniques emphasizing development and appropriate skills with practical applications. Prerequisites: EDSE 431, EDSE 433; or consent of instructor. C/ Fhrs.: 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 avallable to teachers; program evaluation for gifted/talented. C/F hrs.: 10.

EDSE 442. Applied Classroom Management with Exceptional Students (3) I, II, III. Arrangement of environments for handicapped individuals which facilltate learning, recording, analyzing behavior. Reinforcement schedules and criteria for selection; application of therapy and communicating management programs to parents. Prerequisites: EDSE 431, 433. C/F hrs.: 15.
EDSE 443. Practicum with Exceptional Students (1) I, II. Individual participation, and supervised practicum experiences. May be repeated to nine hours. Prerequisite: should be taken concurrently with EDSE 440, 470, 447, 448, 453. Graded S/U. C/F hrs.: 44.
EDSE 445. Adult Service Options for Persons with Moderate to Profound Handicaps (2) I, II, III. Sheltered workshops in rehabilltation of mentally retarded. Techniques for job analysis, analyzing skills, specific jobs and job areas. Prerequisites: EDSE 431, 433 or consent of instructor. C/F hrs.: 25.
EDSE 447. Language Arts for the Midily and Moderately Handicapped Student (3) I, II. Methods and procedures utilized in providing a clinical approach to individualization of instruction; methods and materials in reading, written communication and study skills for the mildly and moderately handicapped. Prerequisistes: EDSE 311 or 431; EDSE 451 or 433 . C/F hrs.: 8.
EDSE 448. Mathematics, Science and Social Studies for the Mildly/Moderately Handicapped Student (3) I, II. Accommodation and adaptation of curriculum methods and materials for instruction of mathematics, science and social studies, with application to a life skills curriculum for the mildly and moderately handicapped student. Prerequisites: EDSE 431, 433, 451 or consent of instructor. C/F hrs.: 14.
EDSE 451. Education of Specific Learning Disabled Students (3) I, II, III. Multiple origins and educational significance of specific learning disabilities. Prerequisite: EDSE 431 or concurrently. C/F hrs.: 15.
EDSE 453. Educational Evaluation of Exceptional Children and Youth (3) I, II. Identification and analysis of specific learning problems as direct or contributing factors to educational and behavioral failures of exceptional children and youth. Should be taken concurrently with EDSE 443, 447 and 448. Prerequisites: EDSE 431, 433, 451 or consent of instructor. C/F hrs.: 15. Lab fee.

## EDSE 454. The Education of Severe Be-

 haviorally Handicapped Students (3) I, II, III. Problems of severe behavior handicapped students: identification, placement, programs, support services, educational treatments. Disorders of the severe behavior handicapped student are considered in terms of etiology, incidence, prognosis and concomitant handicapping conditions. Prerequisite: EDSE 431 or consent of instructor. C/F hrs.: 11.EDSE 456. Introduction to Educational Neuropsychology of the Exceptional Child (3) I, II. 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, 451. C/F hrs.: 10.

EDSE 457. Parent Education and Interaction (3) I, II, III. Approaches for educators communicating with parents of handicappo. children. Counseling parents and families; understanding legisiated rights of the handicapped child and the role of educators/parents in instruction. Prerequisite: EDSE 431. C/F hrs.: 8.
EDSE 459. Introduction to Manually Coded English Systems/Total Communication (3) I, II, III. Introduction to Manual English and Total Communication Instruction, sign systems and processes. Development of basic sign skills for classroom use.
EDSE 460. Advanced Seminar in Manually Coded English/Classroom Techniques and Applications (3) I, II. Investigation of linguistics of manual English in classroom use, implementation procedures for oider students and parents. Development of advanced skills in manuaily coded English. Prerequisites: EDSE 459 or consent of instructor.
EDSE 461. Introduction to Education of the Deaf (3) I. History, philosophy, psychology and education of the hearing impaired. Definitions of terms, structure of the ear, causes of deafness, types of hearing impairments, classification of hearing impairments, educational needs. Prerequisites: EDSE 431, 451. C/F hrs.: 15.
EDSE 462. Beginning Methods of Instruction of the Hearing Impaired (3) I. Observation through public schools; review of commercial textbooks (K-HS). Developing lesson plans, unit plans, IEPs plus techniques of teaching supplemented by audicvisual workshops and demonstrations. Pre requisites: EDSE 431, 451, PSYC 324 or EDSE 459 or EDSE 460.

EDSE 463. Curriculum Development and Instructional Strategles for Hearing impaired (3) II (part two of two-part sequence). This course stresses a minipracticum experience in the public school program. A block period of four hours, three times per week. Stress on lesson plans, unit planning, development of materials and demonstration of teaching. Prerequisites: EDSE 431, 451, 461, 462. C/F hrs.: 15.

EDSE 464. Language Development of Hearing Impaired 1 (3) I (part one of twopart sequence). Students will observe and evaluate language; develop a language picture file; know how to analyze language through a hierarchy of language development. Compare normal language with hearing impaired language. Approaches to teaching both receptive and expressive language. Prerequisites: EDSE 431, 451, 461. C/F hrs.: 15.
EDSE 465. Language Development of the Hearing impaired II (3) II (part two of twopart sequence). Teaching structured lan-guage-Fitzgerald Key; teaching language patterns; developing spontaneous language, language charts, stories through oral/written form. Students will analyze and compare language samples of hearing impaired children. Prerequisites: EDSE 431, 451, 461 . 464. C/F hrs.: 15.

DSE 466. Orthographic Systems of the f and Phonetic Transcriptions (3) I. Teaching orthographic systems/hearing handicapped; observation/public schools comparative speech development normal and deaf; definitions/related terminology; emphasis on Northampton-Yale chart International Phonetic Alphabet; phonetic transcription and instruction in speech sensory stimulation. Prerequisite: EDSE 461. C/F hrs.: 15.

EDSE 467. Teaching Advanced Speech to the Deaf (3) II. Philosophy, teaching procedures, techniques of instruction through analytical and synthetical approaches. Use of current curriculum guides and testing materials. Speech practicum in the public schools. Assessment and diagnostic instruction used in the maintenance and correction of deaf speech. Prerequisites: EDSE 461, 466. C/F hrs.: 15.
EDSE 470. E:ducation of Multi-Handicapped Students (3) I, III. Educational dynamics, strategies, logistics and responsibilities involved in socialization and education of multi-handicapped children Prerequisites: EDSE 431, 433. C/F hrs.: 25
EDSE 484. Prepracticum with Exceptional Students (3) I, II. Observations of variety of educational programs for exceptional students. Experience in using media and developing IEP's with exceptional students. Must be taken concurrently with EDSE: 431 or 451 or 454 . Prerequisite: EDSE 431. C/F hrs.: 80
bSE 490. Froblems in Education (3) I, II, Ili. 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 iristructor.

EDSE 492. Student Teaching (1-10) I, II. 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.

EDSE 497. Student Teaching (1-10) I, II. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of stuclents 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.

## Sport Management (SMD)

SMD 201. Introduction to Sport Management (3) I, II. Basic concepts of sport management; career preparation; professional opportunities.
SMD 240. The Handicapped Client in Sport and Recreation (3) I, II. Introduction to knowledges and skills that will enable future sport and recreation management professionals to identify, assess, organize, superse and promote sport and recreational ograms for the disabled population.
SMD 245. Aquatics Operation and Management (3) I even years. Designing, constructing, planning, programming, operating and administering aquatic facilities. Prerequisites: CHEM 115 and BUSE 101.

SMD 250. Computer Utilization in HPER
Services (3) I, II. Manipulation and application of microcomputer software to selected problems in sport management, recreation and activity settings; two lectures, two lab hours per week.
SMD 291. Practicum in Athletic Training (12) I. Athletic training clinical experience working with a varsity intercollegiate sports program, under the supervision of an athletic training staff member. Bi-monthly seminars. May be repeated for a total of 3 credits. Prerequisites: SMD 310 and permission of instructor
SMD 298. Principles of Sport Management (3) I, II. 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 instructor.
SMD 310. Care and Prevention of Sports Injuries (2) I, II. Prevention, evaluation and temporary care of injuries; laboratory experience in bandaging, strapping, evaluating case studies, and use of the training room. One lecture, two lab hours per week. Prerequisite: C or better in PEP 230 or permission of instructor.
SMD 361. Applied Exercise Physiology (3) II. Metabolism, body composition, cardiac pathophysiology, training for fitness, exercise prescription and instrumentation. Practical applications and assessments are presented. Prerequisite: PEP 360.
SMD 375. Sport Facility Planning and Management (3) I, II. Planning, managing and marketing of sport areas and facilities for clients, preschool through retired citizens. Prerequisites: junior standing, SMD 387.
SMD 387. Practicum in Sport Management (1-5) I, II, III. 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.
SMD 390. Legal Issues of Sport and Recreation (3) I, II. Negligence liability; 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 Studies (2) I, II. For athletic coaching and athletic training minors only. Field experience with interscholastic athletic programs in an approved setting; weekly on-campus seminars; may be repeated once by athletic coaching minors. Prerequisites: athletic coaching minors - SMD 310 and 328 , current certification in American Red Cross CPR and Advanced First Aid and Emergency Care, SMD coaching course in the appropriate sport and permission of instructor; athletic training minors -C or better in PEP 230 , B or better in SMD 310 and 328, current certification in American Red Cross CPR and Advanced First Aid and Emergency Care, minimum of 90 credit hours, minimum of 600 clinical clock hours in athletic training under supervision of certified athletic trainer and 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. Advanced Techniques of Athletic Training (3) II (odd years). Mechanism of sport injuries, recognition of severity, examination, treatment and rehabilitation of specific areas of injuries. Prerequisites: C or better in PEP 230, B or better in SMD 310 or consent of instructor.
SMD 411. Therapeutic Exercise and Athletic Training Modalities (3) II even years. Examination of the application and physiological response to selected therapeutic modalities and exercise techniques available to the athletic trainer. Prerequisites: SMD 310, PEP 230 and permission of instructor.
SMD 421. History and Philosophy of Sport (3) I, II. Major historical and philosophical developments in sport.

SMD 423. Scientitic Foundations of Physical Fitness (3) II. Assessment and development of physical fitness. Prerequisite: PEP 360.

SMD 425. Women and Sport (3) II (odd years). Historical, cultural and physiological considerations of women's participation in sport.
SMD 429. Principles and Problems of Athletic Conditioning (2) I, II. 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 PEP 360/443 or consent of instructor.
SMD 431. Program Planning and Management for Recreational and Youth Sports (3) II (odd years). Planning, management, financing, promoting 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) I, II. Objectives, transactions and procedures to conduct professional physical activity and sport programs. Prerequisites: SMD 387 and 423, or SMD 431.

## SMD 470. Independent Study in Sport

 Management (1-3) $\mathrm{l}, \mathrm{II}, \mathrm{IIf}$. An in-depth 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.SMD 487. Practicum in Sport Management (1-5) I, II, III. 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.

SMD ABe. intemship in Sport Management (15) I, II, III. 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, an average of 2.7 in the major field, approval of appropriate division taculty and HED 313. (Option I majors only musti complete HED 313 as prerequisites.)
SHEL 400. Professional Resources in Sport Whanagement (3) I, II. Professional re-
sources for leadershlp roles in sport and physical activity. Prerequisite: SMD 387.

## Technology (TECH)

(Additional costs for materials in all laboratory courses)
TECH I0月. Technology I (3) I, II and Summer on demand. Communication processes knd methods will be defined by the technology systern model. Problem solving techniques will be introduced and developed. Students will use several application software packages on microcomputers to solve communication problems. Prerequisites: None.
Tech 102. Techoiogy II (3) I, II, and Summer on demand. The study of technology systems, elements and applications to meet indusintal or commercial objectives. Course applies the technology systems model and explores the basic human adaptive skills required to operate, bulld, maintain, test and develop tochnology systems. Prerequisites: None.
TECH 12t, industrial Mathematics (3), 1, 11, Ih. Mathematics as applied in industry and technology. Problems in geometry, algebra, frigonometry. Open only to freshmen and sophomores.
TECH 223. Mechanical Power Transmission (3) ll odd numbersd years. Mechanical drive systems and applications. Design, operation, maintenance of mechanical power systems used in industry. Four hours of lecture and laboratory. Prerequisite: ET 191 or consent of the instructor.

- C [2Ch 289. Cooperative Education (4) I, II, III. Work and siudy in business, industry, senvice or government agency in Collegeapproved, paid, full-time position related to student's intended areas of concentration. A ninimum of 520 hours of employment during one somester is required. Prerequisites: consent of department and successiul completion of co-op workshop. Graded S/U.
Tech 302. Technology Systems in Socievies (3) I, II 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 technology permeates all human affairs. Prerequisites: TECH Core and junior status or consent of instructor.
TeCh STM. Handicrafts (3) 1 , odd numbered years. Creative possibilities inherent in wide variety of materials and tool operations. Development of lifetime recreational interests, and abilities to direct activities in schools, camps for handicapped and adult educaion. Four hours of lecture and laboratory.

TECH 323. Fluid Power Transmission (3) II, odd numbered years. Pumps, motors, valves, curcuits, applications of hydraulic and preumatic power systems. Design, operation, maintenance of fluid power systems used in industry. Four hours of lecture and laboratory. Prerequisite: ET 191 or consent of the instructor.
TECH 389. Cooperative Education (4) I, II, III. Work and study in business, industry, service or government agency in Collegeapproved 10 - or 16 -week paid, full-time position related to student's area of concentration. Prerequisites: TECH 289 and consent of department. Graded S/U.
TECH 391. Internal Combustion Engines (3) I, II, II on demand. Otto (gasoline) or diese: cycles engines; emphasizes assembly, disassembly, testing and measurement procedures. One one-hour lecture and two twohour laboratories. Prerequisite: ET 191 or consent of instructor.
TECH 395. Technology Workshop (1-3) On demand. Intensive educational experience in a specialized technology. Typically an allday or concentrated format. Requirements usually completed within time format. May be repeated.
TECH 402. Innovation in Technology (3) II, III 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 adaption of innovations. Prerequisite: Junior status or consent of instructor. Lab fee.
TECH 454. Energy Conversion and Power Transmission (3) On demand. 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.
TECH 457. Handicrafts for Recreation, Therapy and Teaching Professions (3) I odd numbered years. Creative possibilities using various materials and tools in development of personal lifetime recreational interests and skill in directing others in such activities. Four hours of lecture and laboratory. Prerequisite: TECH 313 or permission instructor.
TECH 480. Topics in Technology. I, III 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) I, II, III. Work and study in business, industry, service or government agency in Collegeapproved 10 - or 16 -week paid, full-time position related to student's intended areas of concentration. May be repeated to six hours. Prerequisites: TECH 389 and consent of department. Graded S/U.
TECH 490. Problems in Technology (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in technology. Prerequisite: consent of college.

## Technology Education (TE)

(Additional costs for materials in all labor:tory courses)
TE 252. Elements of Instruction (3) 1. Models of instruction as related to tearner and functions and purposes of specialized career and technology education programs on all educational levels including individual observation and participation at various levels.
TE 352. Instructional Scope and Sequence (3) II. Design and implementation of instructional systems including performance objecfives, appropriate content, teaching-learning strategies and evaluation in specialized career and technology education program on all educational levels including individual observation and participation at various levels. Prerequisite: TE 252.
TE 428. Development of Training Programs (3) II on demand. Design production and evaluation of training programs for industry and business. Task analysis, work design and cost analysis in development of training programs.
TE 447. Teaching Technology Syatems (3) II. 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. Prerequisite: MFG 214, CONS 235.
TE 449. Organization and Administration (3) I. 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. cocurricular responsibilities, innovative prom. grams. Prerequisites: TE 352 and TE 497.
TE 462. Career and Technology Education in Elementary Schools (3) II on demand. Development and evaluation of instructiona! activities to facilitate career development and understanding of technology among elementary children.
TE 470. Coordinating Cooperafive Educe-
tion Programs. Il odd numbered years. Prepares coordinator of cooperative work education programs in all phases of career and technology education. Headings, discussion and field experiences designed to develop understanding of various types of cooperative programs, role of coordinator and related instruction.
TE 490. Problems in Industrial Education (1-3) On demand. For advanced student wanting to conduct intensive study of selected problems in industrial education. Prerequisite: consent of College.
TE 492. Student Teaching (1-10) 1 , II. 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 mos. repeated. Graded S/U.

TE 497. Student Teaching (1-10) I, II. Classom teaching under supervision on full-day sis. 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.

## Theatre (THEA)

THEA 110. Intercollegiate Forensic Activities (1) I, II. Instruction and experience in intercollegiate contest speaking, including forms of public address and, oral interpretation. May be repeated to two credits.
†THEA 139. Dramatic Production (1) I, II. Laboratory course for student who participates as performer or technician in Firelands College productions. May be repeated to two hours. Any combination of THEA 139 and THEA 146 may not exceed two hours. Prerequisite: consent of instructor.
fis THEA 141. The Theatre Experience (3) I, II, III. Art of theatre; heritage and contemporary values as humanistic discipline; importance as social/cultural experience; opportunity for some involvement in theatrical activities. Laboratory hours required.
THEA 146. Dramatic Production (1) I, II, III. 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) I. Methds of reading, studying and analyzing flayscripts 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 technician.
II THEA 202. Oral Interpretation (3) I, II, III. Introduction to the art of oral interpretation, particularly the solo performance of prose and poetry. Emphasis on literary analysis as well as the vocal and physical techniques of solo performance.
-THEA 241. Principles of Acting (3) I, II. 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) I. Introduction to stagecraft. 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) II. 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.
-THEA 302. Advanced Oral Interpretation (3) 11. Practice in the analysis and solo perforiiance of selected texts. Emphasis on programming and performance in social contexts. Prerequisite: THEA 202 or consent of instructor.

THEA 310. Intercollegiate Forensic Activities (1) I, II. Similar to THEA 110 for juniors and seniors. May be repeated to two credits.
-THEA 330. Theatrical Makeup (3) II, alternate years. Theory and application of makeup for stage, television and film, corrective and character makeup; prosthetics; facial hair.
$\dagger$ THEA 339. Dramatic Production (3) I, II. Laboratory course for student who participates as performer or technician in Firelands College Productions. May be repeated to three hours. Any combination of THEA 339 and THEA 346 may not exceed three hours. Prerequisite: consent of instructor.
-THEA 340. Creative Dramatics (3) I, II, III. Principles, methods and laboratory experience in guiding dramatics for pre-school, elementary and secondary school children, as well as recreation programs. Creative approach to dramatic play, language development, storytelling and story dramatization.
-THEA 341. Directing (3) I. Theory and techniques of play direction. Laboratory hours arranged. Prerequisites: THEA 141, 241 and 243 or consent of instructor.
THEA 342. Advanced Directing (3) II. 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) I. 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) II. Intensive and individualized laboratory work for advanced acting students. Three two-hour meetings per week. Prerequisite: THEA 241 and 344 or consent of instructor.
THEA 346. Dramatic Production (1) I, II, III. Same as THEA 146 except for juniors and seniors. May be repeated to three hours. Prerequisite: consent of theatre program. Graded S/U.
THEA 347. Theatre History and Literature: Origins-1700 (3) I. History of theatrical production, major dramas and dramatists from primitive time through 1700.
THEA 348. Theatre History and Literature: 1700-Present (3) II. History of the theatrical production, major dramas and dramatists from 1700 to the present.
THEA 349. Costume Design (3) I. 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.

THEA 350. Milestones in Black Theatre (3) II. Read, research and discuss/report on the aesthetics, dramatic intent, historical significance and production history of milestone black plays.
THEA 352. Musical Theatre (3) II. The history, theory and staging techniques of musical theatre production in the United States.
THEA 395. Workshop on Current Topics (13) 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) I. 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) I. Writer's 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 444. Scene Design (3) II. Designing for stage; dramatic action of script as organic element in design; effects of line, color and mass on setting, decor and lighting in enhancing action. Prerequisite: THEA 243 or consent of instructor.
THEA 446. Summer Theatre Performance (1-6) III only. Intensive laboratory work in study, preparation and development of roles. Particular problems of performance in summer theatre. Prerequisite: consent of theatre program.
THEA 448. Summer Theatre Production (16) III only. 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 program.
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) III only. 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 program.
THEA 489. Theatre Internship (1-12) I, II, III. Supervised field experience in theatre. Con-tract-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.
THEA 490. Problems in Theatre (1-3) I, II, III. 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 program.


## Visual Communication Technology (VCT)

(Additional costs for materials in all laboratory courses)
VCT 203. Visual Communication Technology (3) I, II, III. Visual communication theory and processes; television production, film making, display theory, slide presentations, multimedia production and image transfer systems. Four hours of lecture/laboratory. Lab fee.
VCT 208. Graphic Communications (3) 1 , II, III. Major printing processes; concentration in offset lithography; line-photography, image design, image assembly, photo conversion, Image carrier preparation and image transfer. Four hours of lecture/liaboratory.
VCT 209. Screen Process Printing (3) I, ill. Hand cut and photographic screen process image conversion; reproduction art ("mechanical") preparation for screen process; single and multiple color process. Four hours of lecture/laboratory. Prerequisite: VCT 203 or 208. Lab fee.

VCT 282. Photography I (3) I, II, III. Basic camera and darkroom techniques. Experiences in film processing and printing tech: niques as weil as basic camera operation. Four hours of lecture/laboratory. Lab fee.
VCT 308. Photo Ofiset Printing I (3) I, II, ill. "Prepress" areas of graphic reproduction. Art preparation techniques, typography, line and halftone photography, exposure calibrating and tone reproduction printing requirements. Cold type composition, spacing and copyfitting and paper specification. Four hours lecture/laboratory. Lab fee.
VCT 309. Photo Offiset Printing II (3) I, II, III on demand. Stripping, imposition procedures and platemaking; offset lithographic printing press theory, maintenance and operation. Ink and paper in relationship to offset presswork. Theory and practical experience in four-color-process reproduction. Four hours lecture/laboratory. Prerequisite: VCT 208. Lab fee.
VCT 382. Photography II (3) i, II, III. Photographic sensitometic, chemistry, problem solving for specific photo problems and using techniques to produce creative darkroom techniques, consistent, quality black and white negatives and prints. Four hours lecture/laboratory. Prerequisite: VCT 282. Lab fee.

VCT 386. Animation Technology (3) On demand. Types and techniques of animation and animated films. Stuctured experiences in producing simple film and effector animations. Four hours lecture/laboratory. Prerequisite: VCT 203. Lab fee.
VCT 456. Color Process Photography (3) II. Process photography for reproduction of photographs and illustrations in black and white and color. Half-tones, duotones (black and color), electronic scanning, color separation, photographic four-color-separation, and color prooting systems. Four hours lecture/laboratory. Prerequisites: VCT 208. Lab fee.
VCT 460. Photography (3) I. Research and experimentation in special effects photography and creative darkroom techniques. Four hours lecture/laboratory. Prerequisite: permission of instructor. Lab fee.
VCT 465. Commercial Photography (3) II. Application of skills and knowledge pertaining to the professional field of commercial photgraphy. Production requirements, studio management and the use of large format cameras and advanced lighting techniques in both B\&W and color photography. Four hours lecture/laboratory. Prerequisites: VCT 282, 382 and ART 211. Lab fee.
VCT 466. Projected Communication (3) i. Exploration and experimentation in 35 mm slide presentations; techniques in multiscreen, multi-image and multimedia as well as special slide composition using a variety of techniques. Four hours lecture/laboratory. Prerequisites: VCT 208, 282 and 382. Lab fee.
VCT 467. Visual Communications Technology Synthesis (3) II, ill 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 lecture/laboratory. Prerequisites: VCT 208, ART 211, senior standing. Lab fee.
VCT 468. Video Tape Recordings in Visual Communications Technology (3) I, il, Ili. Both $1 / 2^{\prime \prime}$ and $3 / 4^{\prime \prime}$ video tape production. Television recording theory, production designing, and planning and use techniques with paraprofessional equipment. Four hours lecture/laboratory. Prerequisite: VCT 203. Lab fee.

VCT 482. Zone Photography (3) On Demand. Theory, mechanics and application $y^{2}$ ese the zone system to all areas of photogra: phy. Designed to raise the student's level or awareness for the technical and creative content of a photograph. Four hours lecture/laboratory. Prerequisites: VCT 282 and 382. Lab fee.

VCT 483. Color Photography (3) On Demand. Theories and principles in production of coior negatives, prints and transparencies for commercial and industrial photographic applications; emphasizes basic color sensitometry, quality control techniques and use of taboratory color films. Four hours lecture/iaboratory. 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 visuai communication technology. Prerequisite: consent of coilege and instructor. Graded S/U.

## Women's Studies (WS)

qWS 200. Introduction to Women's Studies (3) 1 , II. Multidisciplinary survey of the new scholarship on women. Emphasis on women's experiences and viewpoints, and on current areas of change and chailenge in women's lives.
WS 300. Topics in Women's Studies (3) I, II. 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 400. Senior Seminar in Women's Studies (3) II. Theories, methods, approaches to women's studies. Interdisciplinary research project required. Required of all women's studies majors and minors. Prerequisite: senior standing or permission of instructor.
WS 470. Independent Study in Women's Studies (1-3) I, II. Study project to be designed by student and member(s) of women's studies faculty in subject area not offered in regular course offering. Prerequisite: junior or senior standing or permission of instructor.

# Administration and Faculty 

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## Numerical Index

1. McFall Center
2. Home Economics Building
3. Mooney Hall
4. Lowry Hall
5. Harmon Hall
6. Treadway Hall
7. West Hall
8. Administration Building
9. Shatzel Hall
10. Prout Chape
11. Williams Hall
12. University Union
13. Prout Hall
14. Chi Omega Sorority
15. Phi Mu Sorority
16. Johnston Hall
17. Early Childhood Education Center
18. Gamma Phi Beta Sorority
19. Alpha Xi Delta Sorority
20. Delta Gamma Sorority
21. Alpha Phi Sorority
22. Kappa Delta Sorority
23. Kappa Delta So
24. Alpha Chi Omega Sorority
25. Alpha Delta Pi Sorority
26. McDonald East Hall
27. McDonald North Hall
28. McDonald West Hall
29. McDonald Dining Hall
30. Offenhauer Towers West
31. Offenhauer Towers East
32. Art Annex
33. Ant Kex Alpha Fraternity
34. West. Alpha Phi Alpha Fraternin,
35. Greer
36. Techn
37. Warehouse
38. Central Services
39. Technology Annex
40. Psychology Buliding
41. Life Sciences Building
42. Physical Sciences Laboratory Building
43. Mathematical Sciences Building
44. Overman Hall
45. Hayes Hall
46. Eppler North
47. Eppler Center
48. Eppler South
49. Moseley Hall
50. Moseley Hail
51. Hanna Hall
52. South Hall
53. Centrex Building
54. Education Building
55. Educational Memorabilia Center
56. Kohi Hall
57. Commons
58. Rodgers Quadrangle
59. Sigma Phi Epsilon Fraternity
60. Phi Kappa Tau Fraternity
61. Business Administration Building
62. Memorial Hall
63. Jerome Library
64. Fine Arts Building
65. Student Services Building
66. Alpha Sigma Phi Fraternity
67. Alpha Sigma Phi Fraternity
68. Lambda Chi Alpha Fraternity
69. Pi Kappa Phi Fraternity
70. Delta Upsilon Fraternity
71. Beta Theta Pi Fraternity
72. Phi Gamma Delta Fraternity
73. Zeta Beta Tau Fraternity
74. Kappa Kappa Gamma Fraternity
75. Phi Kappa Psi Fraternity
76. Kappa Sigma Fraternity
77. Sigma Alpha Epsilon Fraternity
78. Conklin Hall
79. Sigma Chi Fraternity
80. Alpha Gamma Delta Sorority
81. Delta Tau Delta Fraternity
82. Sigma Nu Fraternity
83. Anderson Hall
84. Bromfield Hall
85. Chapman Hall
86. Dunbar Hall
87. Mileti Alumni Center
88. Ashley Hall
89. Batchelder Hal
90. Compton Hall
91. Darrow Hall
92. Health Center
93. Moore Musical Arts Center
94. Steller Field
95. Golf Clubhouse
96. Ice Arena
97. Stadium
98. Track Pressbox
99. Information Center
100. Popular Culture Center
101. Delta Zeta Sorority
102. Guest House
103. Social Philosophy and Policy Center
104. WBGU-TV
105. Heating Plant






MCYYQ
$\square \square, \square, \square$




[^3]$\qquad$

Nonomom Ongomporas.



[^0]:    except MATH 222, 226, 395, 414, 470, 489, 495. he of these courses may not be offered every
    ***35 hours of MATH required for students who have credit for CS 451.

[^1]:    313 (3) A 301 (2)
    PHIL 342 (3)
    PSYC 240 (3)
    CS 101 (3)
    General education requirements: select from humanities, art, foreign language and multicultural studies

    Third year
    Human gross anatomy; neuroanatomy and neurophysiology (9)
    Pathology and pharmacology (2)
    Physical therapy procedures (4)
    Principles of massage (2)
    Therapeutic exercise (4)
    Electrophysiological assessment and treatment (2)
    Functional anatomy (3)
    Applied medical sciences (2)
    Clinical practicum (2)
    Prosthetics and orthotics (2)
    Fourth year
    Human growth and development (3)
    Research methods (2)
    Therapeutic exercise (4)
    Cardiopulmonary physical therapy (3)
    Orthopedic and sports trauma (5)
    Pathology and pharmacology (2)
    Physical therapy trends and management (2)
    Evaluation rehabilitation techniques and principles applied (4)
    Prosthetics and orthotios (2)
    Independent Study (2)
    Clinical practicums (4)
    Summer
    inical Internship (10)
    To enroll in the summer clinical internship 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.
    *Required for admission to the professional curriculum in the third and fourth years.

[^2]:    celecting a Degree Option
    reshman 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.

[^3]:    WQ

