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# BGSU 1991-1992-1993 Undergraduate Catalog

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BGSU

# BOWLING GREEN STATE UNIVERSITY UNDERGRADUATE CATALOG 1991/93

# About This Catalog

1. Students are responsible for knowing all requirements and policies in this catalog, particularly those academic policies on pages 5-12.

2. All information in this catalog was correct as of April 30, 1991, and is subject to change. Except as specifically stated herein, Bowling Green State University makes no representation or contract that following a particular course or curriculum will result in specific achievement, employment or qualification for employment, admission to degree programs or licensing for particular professions or occupations.

3. Programs are listed in this catalog under colleges in alphabetical order. Under each program, courses are identified by a three- or four-letter abbreviation and a number. Course descriptions are listed in the back of this catalog in alphabetical order by subject area.

4. The semester schedule of classes should be used in conjunction with this catalog to determine course availability since all courses are not offered every semester.

5. The University reserves the right to change its course offerings, academic policies and requirements for the baccalaureate and associate degrees. To protect students from unnecessary penalty where changes in degree requirements occur, the following policies in regard to the Undergraduate Catalog are in effect:

a. Students who do not change their BGSU college follow the degree requirements specified in the Undergraduate Catalog in use during their first academic term at BGSU. If the initial term of enrollment is during the second academic year of a two-year catalog, students follow the approved degree requirements in effect at the time of enrollment.

b. Students may elect to complete a degree program under the most recent Undergraduate Catalog. If this choice is made, then the student must complete all degree requirements specified in the selected catalog.

c. Students who transfer from one BGSU college to another follow the Undergraduate Catalog in effect at the time of the transfer. If the transfer is made during the second year of a two-year catalog, students follow the approved degree requirements of the new college in effect at the time of the transfer.

d. Students who transfer from another institution follow the Undergraduate Catalog in effect at the time of their 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 agenices to secure any available financial assistance to meet their needs.

## Table of Contents

# The University

Bowling Green State University is situated on a 1,177-acre campus, which includes more than 100 buildings. The University offers more than 170 undergraduate degree programs, 12 master's degree programs in 69 fields and 14 doctoral programs with more than 60 areas of specialization. More than 18,000 students, including about 2,300 graduate students, attend classes on the main campus. The University enrolls an additional 1,500 students at the Firelands College and various off-campus centers. At the center of the University's academic community are the 750 full-time faculty members, who are engaged in teaching, research and scholarship activities.

Established in 1910 as a teacher-training institution, Bowling Green held its first classes in 1914, but it was not until the following year that the first two buildings—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, which opened for classes in 1967, 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. 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; many of these have been recently refurbished to preserve their original structure. Most 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 science-research 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 robotics center and specialized laboratories in design, electronics, manufacturing, visual communications and other technologies.

Art facilities include individual studios for design and workshops for such areas as jewelry making, woodworking, painting, drawing, enameling, weaving, printmaking, sculpture, ceramics and glass blowing. Photography laboratories are also available. An art gallery located in the Fine Arts Building, which is currently being renovated, 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 athletic and recreational facilities include a 30,000-seat football stadium, an ice arena, a 5,200-seat basketball arena, an 18-hole golf course and tennis courts.

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

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

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

## 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. To encourage further these qualities, a cultural diversity component has been added to the University's general education program. The University's emphasis on multiculturalism is intended to demonstrate that society is best served when its citizens are broadly educated.

## Accreditation and recognition

The University is fully accredited at the bachelor's, master's and doctoral levels by the North Central Association of Colleges and 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 Schools of Music (NASM); art, by the National Association of Schools of Art and Design; chemistry, by the American Chemical Society; communication disorders, by the Educational 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 Council 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.

## Academic organization

Courses of instruction leading to baccalaureate degrees are provided through: the College of Arts and Sciences, which includes the School of Art and the School of Mass Communication; the College of Business Administration; the College of Education and 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 specific degree-granting undergraduate colleges.

## 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 Community Services
Bachelor of Science in Criminal Justice
Bachelor of Science in Communication

Disorders
Bachelor of Science in Dietetics
Bachelor of Science in Economics
Bachelor of Science in Education
Bachelor of Science in Environmental Health
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 leading 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 Study (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, problem-solving and critical thinking; integrating values in decision-making, and the acquisition of functional understanding in literature, the fine arts and other humanities; the natural sciences; the social and behavioral sciences; an understanding of at least one culture other than one's own; and an understanding of cultural diversity in the United States.

The major provides the student with in-depth 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:

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; and
3. complete at least 20 hours of credit beyond the hours required for a single degree.

## General requirements for the baccalaureate degree

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

1. Satisfy all University entrance requirements. See Articulation Policy, page 7.
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 6 and 7.
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 8 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 Program Advisement Office, 365 Education Building. A student not accepted as a candidate under the above procedure or who does not fulfill requirements toward a degree within four weeks after commencement must apply again for graduation at the next commencement.

## General Education Core Curriculum

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

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

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

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

## Functional 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, 109 & 110, 117 & 118, 125, 127 & 128, 135, 137 & 138

**Geography**
GEOG 125

**Geology**
GEOL 100, 104, 105, 205, 322

**Physics and Astronomy**
PHYS 101, 201, 202, 211, 212
ASTR 201, 212

## Functional Understandings in the Social and 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 individuals and various groups in societies, economies, governments and subcultures. Courses in these social sciences will identify significant patterns of human behavior and provide means of inquiry by which these patterns may be explored.

**Arts and Sciences**
A&S 250

**Economics**
ECON 100, 200, 202, 203

**Environmental Studies**
ENVS 101, 301

**Geography**
GEOG 121, 122, 225, 230, 325, 331, 343, 344, 346, 349, 426, 452

**History**
HIST 151, 152, 180, 205, 206, 310, 311, 370, 382, 411, 429, 470

**Psychology**
PSYC 201

**Political Science**
POLS 201, 271, 272, 301, 335, 351, 361, 372, 402, 403

**Sociology**
SOC 101, 202, 231, 316

**Technology**
TECH 302

## Functional Understandings in Foreign Languages and Cultures

Core courses in foreign languages and cultures promote the recognition and understanding of foreign cultures and international relations. Knowledge of at least one foreign language is encouraged. Credit toward a degree is not granted for foreign language courses which duplicate more than two units of high school study.

***Foreign Languages***
**Romance Languages**
Beginning and Intermediate French, Greek, Italian, Latin and Spanish 101, 102, 201, 202, 211, 212
FREN 284

**German and Russian**
Beginning and Intermediate German, Russian, Japanese, Arabic and Chinese 101, 102, 201, 202
German 117, 118, 217, 218

***Foreign Cultures***
GERO 405
MUCH 233, 234, 235

*Social Science (cross-listed)*
SOC 231
GEOG 121, 122, 230, 325, 331, 343, 344, 346, 349, 426, 452
HIST 151, 152, 180, 310, 311, 370, 382, 411, 470
POLS 271, 272, 351, 361, 372

*Humanities and Arts (cross-listed)*
MUCH 125
ENG 269
GERM 260
ETHN 220

## Functional Understandings in Humanities and Arts

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

**American Culture Studies**
ACS 200, 230, 300

**Art**
ART 101

**Art History**
ARTH 145, 146

**Arts and Sciences**
A&S 250

**English**
ENG 150, 200/203, 261, 262, 264, 265, 266, 267, 269

**Ethnic Studies**
ETHN 220

**German and Russian**
GERM 260

**Music**
MUCH 101, 125, 221

**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

### nctional Understandings in ltural Diversity in the United States

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

**American Culture Studies**
ACS 250

**Educational Foundations and Inquiry**
EDFI 408

**English**
ENG D200

**Ethnic Studies**
ETHN 101, 120, 302, 410

**Geography**
GEOG 337

**Gerontology**
GERO 301

**Human Development and Family Studies**
DFS 107, 408

**istory**
HIST 319

**Music Composition and History**
MUCH 237, 431

**Psychology**
PSYC 324

**Radio-Television-Film**
RTVF 270

**Sociology**
SOC 316

**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 uals 1 year of high school course) as lows:

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

Students must make up all deficiencies by taking courses in the areas of deficiency; these courses may be used to satisfy general education requirements in most cases. All deficiencies must be completed within the 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 6). A student may not graduate until deficiencies are removed. Students pursuing two-year associate degree programs are exempt from this policy. If they decide, however, to pursue a baccalaureate degree at a later date, the policy will apply.

### Removal of deficiencies

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

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

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

**Deficiency in Social Science***—Satisfactory completion of one of these courses for each unit of social science deficiency: A&S 250; ECON 100; ETHN 101; GEOG 121, 122, 230; HIST 151, 152, 180, 205, 206; POLS 201, 250, 271; PSYC 201; SOC 101, 202, 231; University honors social science courses.

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

**Deficiency in Foreign Language** -- Two units of deficiency may be removed by successful completion of one of the following sequences: 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 coursework in these areas; for specific information regarding the additional courses that the individual college accepts, contact the college office.

**Reading Skills**
Students are required to take a reading test prior to initial registration. Students must demonstrate competency on this reading test to be advanced to sophomore standing (i.e., 30 semester hours). Students who do not demonstrate competency via successful completion of a reading test or successful completion of 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 to aid international students (i.e., non-native speakers of English) in improving their English proficiency are coordinated through the Program in English as a Foreign Language. Upon reporting to the University and before registering for classes, all entering international students admitted through the Office of International Programs and the Office of Admissions, except those whose native language is English, are required to take on-campus proficiency tests; international students transferring from other colleges and universities in the United States as well as 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 E 110 if the student has no transfer cred. 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 coursework 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 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, 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 does not fulfill requirements toward a degree within four weeks after commencement must apply again for graduation at the next commencement.

# Other policies

## Classification of students

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

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

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

## Status change to part-time

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

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

1. Ineligibility for intercollegiate athletics.

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

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

## Change of college or major

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

A student who wishes to change a major within a college should notify the college 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 staff of the Student Health Service, the physical 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/U only). Any S/U hours beyond this limit will not count toward graduation. The grading option must be declared at the Office of Registration and Records no later than seven calendar days 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/U 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 (see page 34).

A student who withdraws from a course may receive a grade of WP (withdrawn passing) or WF (withdrawn failing). WP is assigned when a student withdraws in good standing during the second through the ninth week of a course in the fall and spring semesters, the fourth class day through the twenty-first class day of the eight-week summer term, the fourth class day through the eighteenth class day of a six-week summer term, and the fourth class day through the fourteenth class day of a four-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 S/U. The grade of WF is used in computing the grade point average.

A student who officially withdraws from the University receives a W in all courses, unless the student has previously withdrawn from a course with a WF. WP and W grades are not

recorded on a student's permanent record.

See Incomplete Marks, this page.
See Withdrawal from the University, page 9.

## 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 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 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:

| | | |
|---|---|---|
| Biology | (a 4-hour course) | B |
| English | (a 3-hour course) | B |
| French | (a 4-hour course) | C |
| Health | (a 3-hour course) | A |

First, determine the number of quality points earned for each course. For example, each hour of B is worth 3 points and a 4-hour B is worth 12 points (3x4).
Therefore, the above grades translate into quality points as follows:

| | | |
|---|---|---|
| 4 times 3 | (B) | = 12 |
| 3 times 3 | (B) | = 9 |
| 4 times 2 | (C) | = 8 |
| +3 times 4 | (A) | = 12 |
| 14 hours | | 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 returning to the University after a period of time the option of having his or her grade point average calculated from the point of readmission without losing credit for all previous coursework with a grade of S or C or 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 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 coursework taken at BGSU will be used in calculating eligibility for membership in honor societies and graduation with honors.

4. Academic forgiveness is applicable only to the first undergraduate degree.

Students apply for academic forgiveness through the Office of Registration and Records. The policy went into effect fall semester 1986 and is not retroac 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 laude**
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 highest level of academic achievement and graduation 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 letter-graded 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) immediately preceding graduation. A student with written permission to participate in an approved combination curriculum in cooperation with a professional school or college of another institution is exempt from this requirement.

In reviewing the record of a candidate for honors, each case is judged on its own 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 each repeat registration will be used in computing the student's accumulative grade point average.
- If a student repeats a course at the University in which a grade of U was received, 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 classifications are intended to inform the student that academic improvement is needed to regain 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:

| Standing | Hours earned | Warning GPA of | Suspension GPA of |
|---|---|---|---|
| Freshman | 0-29 | 1.50-1.99 | 0.00-1.49 |
| Sophomore | 30-59 | 1.70-1.99 | 0.00-1.69 |
| Junior | 60-89 | 1.80-1.99 | 0.00-1.79 |
| Senior | 90+ | 1.90-1.99 | 0.00-1.89 |

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

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

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

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

1. such students may not participate in intercollegiate activities.
2. such students may continue in the subsequent semester if they earn a semester or session GPA of 2.00 or more until 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 10).

### 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 Continuing Education and Summer Programs, page 16.
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 Continuing Education and Summer Programs, page 16.

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

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

## Portfolio assessment

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

## Graduate courses for undergraduates

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

# Special Academic Programs and Services

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

## Academic advising

Each student at the University may seek assistance from an assigned academic adviser. The adviser assists students in planning their schedules, checking their progress toward completing graduation requirements and helping them in the 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 Laboratory (Reading Laboratory) and the Writing Laboratory.

The Mathematics Laboratory supports campus-wide learning in mathematics and statistics. Tutoring is available in the Mathematics Laboratory. In addition extra support in freshmen level classes is offered with lecture notes, video lectures, reference materials and computer assisted instruction.

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

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

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 Support 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.

## Language Laboratory

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 available. 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.

## 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 27 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 3.5 GPA and be registered for or have completed English 112. Continuing students should make an appointment with the director or associate director to discuss the Honors Program and course enrollment.

Most of the classes offered through the Honors Program are sections or seminars which satisfy general education requirements for 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; 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 is available in Darrow Hall in Kreischer Quadrangle. 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.

## Study abroad

### Center for International 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, 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 all present international student affairs and is the initial office for screening all new international student applicants.

**KOREA, JAPAN**

The Asian studies program offers outstanding undergraduate students the opportunity to study in Japan, Korea or China for a full academic year and to work with stipends in Japanese corporations as a student intern for half a year. BGSU has an exchange arrangement with Yonsei University in Korea, Nanzan University in Japan and Shandong University in China. Tuition is waived for American students at the Asian universities as is room and board at the Chinese university. Students bear the cost of airfare, room and board (except for China) and have a total cultural immersion experience. The Asian studies program also sends one student each to Teraoka Seiko Co. Ltd. and Sasaki Glass Co. Ltd. in Tokyo for a six-month business internship. Students pay airfare and receive a monthly stipend and free housing. All academic credits earned at the host institution are counted for graduation at Bowling Green.

**AUSTRIA-Salzburg**

The Deparment 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 October 1 through June 30. Applications are accepted starting in November of the previous academic year. Applicants should be in good standing, have at

least sophomore standing and complete the equivalent of two years of college German with a B average by the time the program begins. In addition to the academic year abroad in Salzburg, three- and six-week German language programs are offered each summer in Salzburg during July and August. These are open to students at all levels of language study, from beginning to advanced. For more information, call 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 from the Université François Rabelais and the Institut d'Etudes Françaises de Touraine. The program also features an intensive language orientation session and a stay in Paris during September. Extensive cultural travel includes in the cost of the program.

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.

A seven-week summer session allows FREN 101 or 102 students to finish their language requirement in France. A 3.0 GPA in French is required. Advanced undergraduates and graduate students are also eligible. For high school students, a three-week summer program is offered, as well as a three- or seven-week program for high school teachers. All courses are taught in French by native French speakers.

For more information, call 372-2667.

**FRANCE—Nantes**
The College of Business Administration offers an opportunity to enroll in a five-week summer session at the Nantes School of Management, a leading business school in Nantes, France. All students are eligible regardless of major. Courses are taught in English and carry six hours of credit. A graduate program is also available. 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 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, 372-8180 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 Alcalá de Henares, 20 miles from Madrid, Spain. The curriculum for the program, which runs for two semesters and the summer session, includes coursework in the Spanish language and literature, as well as in the arts, history and geography of Spain. All courses are taught in Spanish and are approved by the respective departments at BGSU. The teaching faculty is drawn from the staff of the University of Alcalá de Henares. An American program director resides in Alcalá and supervises the academic program. The program is open to any qualified student regardless of major area of study.

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

For more information, call 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 in Rio de Janeiro, Brazil. While completing the student teaching requirements, students live with national host families and participate in 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 class-room theory with practical, on-the-job realities through work assignments with employers in business, industry, government and the nonprofit sector that alternate with formal coursework. Employers assign students work which is relevant to each student's academic degree program or career interests, provide on-the-job supervision, evaluate the student's performance on a regular basis and 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 semester-long, 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 coursework. The Technology Cooperative Education Program requires that each student's employment be directly related to his or her academic program. The program also requires that work experiences increase in difficulty

and responsibility as the students progress through their college curriculum.

Interested students should contact 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

### 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 consortium of 80 U.S. colleges and universities.

A qualified, full-time student may participate for up to one academic year. Out-of-state tuition fees are waived at the host institution and NSE 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 NSE coordinator, 238 Administration Building, 372-2451, about costs, course selection, choice of host university and planning the best time for 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 Cooperative Education Program office. Interested students with a minimum 2.5 GPA are urged to contact the coordinator in 238 Administration Building, 372-2451, at least six months prior to the term in which they would like to intern.

## Continuing Education and Summer Programs

Continuing Education and Summer Programs offers educational services to traditional and nontraditonal 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 and testing service to potential students through its Adult Learner Services, directs the assessment of prior learning by portfolio assessment, manages the Computer Training Centers in Bowling Green and Maumee, meets the training needs of regional businesses and industry through its conference and customized training program and meets the educational needs of the community through the OPTIONS 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 6- or 8-week frames or in a workshop format. A student may enroll in a maximum of six semester hours during a 6-week session and a maximum of 10 hours during an 8-week session. 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 a guest student while determining academic interests and possibilities. A guest 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 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 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.

### Adult Learner Services

Any adult interested in returning to school, returning to work or changing careers may use the services of Continuing Education. No previous affiliation with BGSU is necessary. Interest testing is available for a non-fee. A licensed counselor is ready to help adults think through the options and problems involved in career decisions and direct them toward a new compatible career or appropriate education options. Continuing Education will supply information about programs and admission procedures for daytime, evening, full-time or part-time students at BGSU and other area educational institutions as well as dates and procedures for the GED examination. Continuing Education can also assist in identifying grant, loan and scholarship opportunities for adult students. Information on academic forgiveness, portfolio assessment and credit by examination is provided in the Academic Policies section of this catalog.

### 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. To be eligible for an area of the CLEP exams a student must not have done college level work in that specific area. To set up a testing date, contact the Counseling and Career Development Center. Other questions about CLEP should be

directed to Continuing Education and Summer Programs. The policies governing the administration of CLEP examinations are subject to change.

### Off-Campus Program

The Off-Campus Program offers upper-division baccalaureate and undergraduate 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 Academic Options

The Center for Academic Options provides academic programs and curricular options which serve to augment a liberal education and enhance the undergraduate experience. The center director coordinates the general education core curriculum and works with faculty to initiate and develop curricular projects. Through the center's programs, students may receive university credit for college level courses taken in high school, enroll in college courses before graduating from high school or develop independent study projects. Undergraduates, particularly freshmen, may take a course which will assist them in moving from general studies to an academic major or explore a major through an internship.

### Career and Life Planning

CAO 131, Career and Life Planning, helps students to develop a thorough understanding of who they are, the life-long career development process and occupational information in order to make informed and self-appropriate occupational decisions.

- Through self study, students will gain knowledge of their personality, interests, needs, achievements, abilities and values, and how these relate to occupational options.
- Through occupational exploration, students will gain a knowlege of the world of work and the occupational alternatives they can derive from occupational resources and informational interviews.
- Through career decision-making, students will learn how to make self appropriate occupational choices and set realistic career goals.

### High School Enrollment Program

The High School Enrollment Program offers students with a 3.50 grade point average, and in the top 20 percent of their class, the opportunity to strengthen and enrich their educational programs by enrolling in regular University courses for high school and/or college credit. During the summer only, a student wishing to study in a particular discipline in which he or she is exceptionally talented (such as music or computer science), whose GPA is below a 3.50, may apply for consideration with a letter of support from his or her teacher in the chosen area.

The Post-Secondary Enrollment Program is available under two options for juniors and seniors during the fall and spring semesters. Under Option A, junios and seniors may take courses for college credit only. With this choice, the parent or student is responsible for the cost of tuition, fees, textbooks and materials. Under Option B, high school juniors and seniors may take courses for high school credit and college credit. Under this option the cost of tuition, fees, textbooks and materials will be paid by the state under an established formula. If, after graduation, the student enrolls in Bowling Green State University, full college credit for all courses satisfactorily completed will be awarded.

Under the Summer Enrollment Option, eligible sophomores, juniors and seniors may choose to attend BGSU during the summer term. Under this option courses are taken for college credit and the parent or student is responsible for the cost of tuition, fees, textbooks and materials. Registration is based on course availability.

### Advanced Placement

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

With qualifying scores, students may earn credit and exemption from certain University courses. BGSU accepts Advanced Placement scores for the following exams: Studio Art, Art History, Biology, Chemistry, Computer Science (A and AB), English Language, English Literature, French, German, Latin, Spanish, American History, European History, Mathematics, Music: Listening, Literature and Theory, Physics (B and C), Government and Politics - U.S. and Government and Politics - Comprehensive.

Current credit guidelines are available from the Center for Academic Options.

### Independent study

The Independent Study Program allows BGSU students to develop their own special projects or experiential learning situations. Guided by a faculty sponsor, a student beyond the freshman year may earn up to 15 hours of elective credit for independent study.

Typical independent study options include special research or learning projects, internships and other on-the-job learning situations. Previous independent study projects completed by Bowling Green students have included a study of a school board election campaign, a study of the effects of rock music on teenagers, and the development of a training manual for the student newspaper.

## Center for Environmental Programs

The Center for Environmental Programs is responsible for coordinating, facilitating and monitoring a variety of academic programs relating to the environment. Four-year degree 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 program options that can best fulfill their personal goals and career objectives. An Environmental Resource Room 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 located in 145-147 College Park Office Building and are open from 8 a.m. - 5 p.m. daily with extended hours for the Resource Room during the academic year. Telephone: (419) 372-8207.

# ROTC (Reserve Officers Training Corps)

## Air Force ROTC

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

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

Admission to the POC is on a competitive basis for those students who successfully complete the GMC. Requirements for selection to the POC include successful completion of the Air Force Officer's Qualifying Test (general knowledge and aptitude), completion of a four-week summer field training camp and an Air Force medical examination. The student must be of high moral character and demonstrate outstanding leadership potential. The student spends four hours per week in AFROTC. While enrolled in the POC, students receive $100 per academic month (tax-free) and free AFROTC uniforms. Enrollment of foreign students is governed by Air Force regulations.

A two-year program is available to students who have two years remaining to complete either an undergraduate or graduate degree. In addition to meeting physical requirements for selection, the student must attend a six-week summer field training camp prior to admission to the 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 offer 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 graduates from the university is commissioned as a second lieutenant in the U.S. Air Force and will be called to active duty. Commitment incurred is normally four years; however, students designated for pilot or navigator training will serve a longer time, based on the current AF requirements.

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

## Army 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 Army National Guard. All ROTC courses are fully accredited.

Both two-year and a four-year programs 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 completed in the last two years at BGSU. In addition to one military science course each semester, it includes a six-week advanced camp, for which students are paid, during the summer after the junior year. All advanced course students receive a monthly allowance of $100 (tax-free). Textbooks and course materials for military science courses are free, as are uniforms.

The two-year program is a special option program designed for students 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 two-year program should contact the Department of Military Science.

All BGSU students (even those who have had no previous connection with ROTC) may compete for ROTC scholarships 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 Study 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 Journal of Popular Culture, The Journal of American Culture,* the *Journal 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 500,000 LP records, 160,000 45-rpm singles, 70,000 78-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, although the Management Center emphasizes assistance to clients located in northwest Ohio. The center has assisted many clients 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 co-sponsors 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.

## McMaster Institute

The Harold and Helen McMaster Institute 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 McMaster Fellows Program whereby two types of full-fee 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 supports visiting scholars.

## National Drosophila Species Resource Center

The center contains 400 species of fruit flies in 4,000 strains and is the largest scientific facility of its kind in the world. Flies are bred and supplied for international research in basic genetics, genetic engineering, evolution and cancer. The center was transferred to Bowling Green in 1982 from the University of Texas at Austin 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 PSRC serves the public and private social research needs of organizations within Ohio and, in particular, the greater metropolitan area of Toledo. The Survey Branch provides survey research services including research design, quesionnaire development, sampling, data collection, data base construction, data entry, data manipulation, data analysis and technical reporting of survey results. Sophisticated methodolgies are used to research subjects such as employee satisfaction, consumer preferences, market penetration and local and regional needs assessments.

The Demographic Analysis Branch houses complete census holdings for northwest Ohio and is affiliated with the Ohio Data Users Center. This branch responds to a range of population-related data requests, from current estimates to detailed site location analysis.

The PSRC's Software Development Group is devoted to the development of customized software applications for Apple Macintosh microcomputer systems, with staff trained to recognize and solve software application problems.

## 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 curriculum and instruction and ways in which attitudes and values are affected by physical education. The institute has worked to improve physical education programs 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, videotape and other media presentations, many of which have been designed and prepared by Bowling Green's own faculty and staff. Microcomputers complement course work on the utilization of computers in classroom teaching, are used with tutorials, simulations and statistical packages to teach various skills, and also assist students in producing written assignments.

## Philosophy Documentation Center

The Philosophy Documentation Center is a university press that publishes philosophical journals, indexes and directories. 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. The *Index* also contains information from related interdisciplinary publications. The Center is dedicated to serving philosophers, students and others by collecting, storing and disseminating bibliographic information in the discipline of philosophy.

## 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 the University.

## Center for Photochemical Sciences

The Center for Photochemical Sciences is a prototype research and teaching entity which focuses on chemical reactions intitiated by light. Research concentrations include photochemistry, photophysics, photobiology, photopolymer science and spectroscopy.

Educational programs of the Center prepare students at all levels for careers in academia and industry. A unique interdisciplinary Ph.D. degree in the photochemical sciences is offered to students with baccalaureate degrees in chemistry, biological sciences or physics. The center also provides a vital academic link to industry in the development of new technologies. One of the center's functions is to serve as clearinghouse for information in the photochemical sciences primarily through a quarterly scientific newsletter which is distributed to 5,000 scientists worldwide.

## MidAmerican Center for Contemporary Music

The center supports a variety of activities to foster creativity, performance and education in twentieth-century music, expanding the activities of the College of Musical Arts' New Music and Art Festival. The Festival is an annual forum for serious contemporary music and art and has generated regular radio broadcasts and recordings. Supported by a state-of-the-art music technology studio, two concert series include the Mostly MIDI series and New Music at the Forefront.

# Fees and Charges

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 1990-91 academic year:

| | semester | year |
|---|---|---|
| Instructional fee | $1,146 | $2,292 |
| General fee | 258 | 516 |
| Room charge | 712 | 1424 |
| Meal (board) charge | 545 | 1090 |
| TOTAL | $2,661 | $5,322 |

These charges were typical for a full-time 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 29, for a description of room and meal plans.

There is a surcharge for all out-of-state students. Nonresident students paid a surcharge of $3,350 during the 1990-91 academic year or $1,675/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—$1,675 for a full-time student or $159 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 a $1,146 instructional fee and a $162 general fee for a total of $1,308 in 1991. The nonresident fee was an additional $1,675. Part-time students paid $129 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 per-hour rate as credit class registration.

**Automobile registration**—$30 per year (fall semester through summer session). Firelands charge is $20 per year.

**Change of registration**—$2 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 to a maximum of $75 are paid late at the beginning of a term.

**Late registration fee**— $25 the first 14 days of the semester, $50 for the next 15-44 days and $75 thereafter for initial registration

**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 | $ 20 |
| Bowling | $ 25 |
| Beginning golf | $ 5 |
| Intermediate golf | $ 10 |
| Advanced golf | $ 20 |
| Ice skating, curling, hockey | $ 15 |
| Club hockey | $ 20 |
| Skiing | $ 92 |
| 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 paying late risks the cancellation of his or her schedule. 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 $75 and a late registration fee between $25 and $75, depending on the date of registration.

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

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

**Refund 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 calendar 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 contract-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.

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

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

## Nonresident fee regulations

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

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

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

**(A) Intent and authority**

1. It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education.

2. This rule is adopted pursuant to Chapter 119. of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Revised Code.

**(B) Definitions**

For purposes of this rule:

1. A "resident of Ohio for all other legal purposes" shall mean any person who maintains a twelve-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability under Section 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.

2. "Financial support" as used in this ru shall not include grants, scholarships and awards from persons or entities which are not related to the recipient.

3. An "institution of higher education" as used in this rule shall mean any university,

community college, technical institute or [illegible]ge, general and technical college, [illegible]cal college or private medical or dental college which receives a direct subsidy from the State of Ohio.

4. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, "domicile" is a person's permanent place of abode; there must exist a demonstrated intent to live permanently in Ohio, and a legal ability under federal and state law to reside permanently in the state. For the purpose of this policy, only one domicile may be maintained at a given time.

5. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

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

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

1. A dependent student, at least one of whose parents or legal guardian has been a resident of the State of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

2. A person who has been a resident of [illegible] for the purpose of this rule for at least [illegible]ve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.

3. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the State of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation of full-time employment and domicile shall include both of the following documents:

(a) a sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent or spouse of the student is employed full-time in Ohio.

(b) a copy of the lease under which the parent or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent or spouse is the owner and occupant; or if the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent or spouse resides at that residence.

**(D) Additional criteria which may be considered in determining residency for the purpose may include but are not limited to the following:**

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 motor vehicle 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 benefits (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 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.

3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.

4. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile as long as such person has fulfilled his or her tax liability to the State of Ohio for at least the tax year preceding enrollment.

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 under the provisions of paragraph (C) 1. of this rule 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 until his or her completion of any one academic degree program.

2. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C) 1. or (C) 2. of this rule.

3. For students who qualify for residency status under paragraph (C) 3. of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than 12 months after accepting employment and establishing domicile in Ohio.

4. Any person once classified as a nonresident, upon the completion of twelve consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident.

Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student's actual financial support.

5. Any 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.

6. Any institution of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

# 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 campus in Huron, Ohio. Admission is competitive and is based on grade point average, standardized test scores and class rank.

High school students are encouraged to apply for admission beginning August 1 between their junior and senior years. Since housing accommodations and classroom facilities are limited, students should submit their applications as soon after receiving them as possible. Prospective students should refer to the *Guide for Prospective Freshmen* for fall admission deadlines. 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 submitted 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 freshman- and 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 29.

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

**Recommended high school subjects and articulation policy**

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

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 page 7 for details of the University's Articulation Policy.

## Transfer Students

Candidates for admission who have attempted 12 or more hours at a college or university since high school are considered as transfer applicants. In addition transfer applicants should have been enrolled for a minimum of two collegiate terms prior to transfer. A transfer student who wishes to enroll at Bowling Green as an undergraduate must submit an application for admis-

n and a nonrefundable $30 applica- 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. The 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 days before the semester or the summer session to allow sufficient time for processing, notification, academic advising and registration for classes.

Transfer students interested in the ysical therapy program should contact College of Health and Human ervices for information (419) 372-8242.

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

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

1. if the student has most recently 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 rm to the student. Upon return of this m, 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 consultation 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.

**Please note: Some programs have additional transfer requirements. Transfer students should refer to the catalog description of their intended 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 also be awarded for experiential learning that meets the guidelines and is validated by procedures as described below.

### Acceptable Collegiate Sources

*Universities and colleges with accreditations or which are candidates for accreditation 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 recognition in the specific country in which located:*

1. Credit is accepted generally. Credit awarded may be exact BGSU course equivalent credit when a course is 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. (Example: anthropology assigned to sociology, some architectural courses assigned to art or technology.)

4. Credit may be deferred when a course is of college level and in a department offered at BGSU but when equivalency cannot be determined by the Office of Registration and Records. Procedures exist for the further evaluation of deferred credit by faculty members in an appropriate department.

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

1. Credit for basic education courses is accepted generally (with some specific exceptions).

2. Credit granted may be course equivalent and non-equivalent credit, or credit may be deferred.

3. Course work in technical or specialized disciplines is evaluated by faculty members in appropriate departments.

4. A maximum of 64 semester hours of credit up to the awarding of the associate degree may be transferred from a two-year 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 two-year 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):

1. Credit may be accepted only upon the recommendation of the specific department and/or college/school in which the course work is offered.

2. Before credit is awarded, previous course work may be subject to validation by examination if recommended by department/college/school. Procedures for validation of credit are in existence.

### Acceptable Noncollegiate Sources

Program on Noncollegiate Sponsored Instruction (PONSI): The American Council on Education (ACE) acts as 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 (300-400) level at BGSU may be subject to validation by appropriate departments before credit can be granted.

*Educational experiences in the armed services.* The American Council on Education (ACE) also accredits work offered by the U.S. armed services. Course descriptions and credit recommendations are available in its publication Guide to the Evaluation of Educational Experiences in the Armed Services.

1. Credit is accepted generally as recommended by ACE.
2. Normally, all credit accepted is non-equivalent course credit.
3. Equivalent course credit where appropriate may be subject to evaluation and recommendation of appropriate departments.

*Experiential Learning*

1. Credit for experiential learning may be granted for educational experience outside the classroom that corresponds to material taught at the University.
2. Credit 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 three-semester credit hour English course; in addition, a $70 fee is assessed for each course for which portfolio credit is requested.

## Institutional transfer

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

**Transfer module**

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

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

**Conditions for transfer admission**

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

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

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

**Responsibilities of students**

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

**Appeals process**

A multi-level, broad based appeal process is required to be in place at each institution. A student disagreeing with the application of transfer credit by the receiving institution shall be informed of the right to appeal the decision and the process for filing the appeal. Each institution shall make available to students the appeal process for that specific college or university. See "appeal of transfer credit," next page.

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

The Appeals Review Committee sha review and recommend to institutions the resolution of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

### 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 undergraduate guest students (this page) 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 or guest student. See guest students, this 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 last 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 available through the Office of Registration and Records of either institution.

### Guest students

Guest students are individuals attending classes but not pursuing a degree at Bowling Green State University. Applications to register as a guest student may be obtained from and must be submitted to the Office of Registration and Records, 110 Administration Building.

**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 **guest degree holder**.BGSU requires official confirmation from the appropriate institution of the highest degree received. Guest degree holders who maintain continuous attendance at BGSU will automatically be sent registration materials for succeeding terms. Students not in continuous attendance must resubmit the guest student application in order to obtain registration materials for the designated term.

**Undergraduate**

A student who has not attended another college or university and who is not a candidate for a degree may be eligible for enrollment as a **guest undergraduate**. A guest undergraduate must apply for enrollment each term. Registration is allowed on a space-available basis after advance registration has been completed. A guest undergraduate is limited to 16 credit hours of work **attempted** before applying for formal admission to the University. A guest undergraduate 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.

**Returning to home institution**

A student of another college or university who wishes to earn credits at Bowling Green State University may be enrolled as a **guest returning to home institution**. 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 BGSU are acceptable as part of the program there. A guest returning to home institution will register at a time announced by the Office of Registration and Records. The student is limited to 16 credit hours of work **attempted** before applying for formal admission to the University. The student is not required to file a transcript of previous college credit.

### BGSU students enrolled as guests (transient students) at another institution

Students pursuing a degree at BGSU who wish to earn credit from another college or university may transfer such credits to BGSU if they have a BGSU accumulative grade point average of at least 2.00 and all other criteria for the acceptance of transfer credit are met (see Transfer of Credit). Students are encouraged to verify with the Office of

Registration and Records the comparability of courses from another institution to BGSU courses and to consult with their college advisers concerning the applicability of the courses to their degree program. Grades earned at the other institution do not become part of the student's record at BGSU, but are included in the determination of all honors.

## Readmission of former students

A student who has not been in continuous attendance during the regular academic year and wishes to attend either spring or fall semester must complete the application for readmission form and submit it to the Office of Registration and Records. A copy of this form may be obtained by 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.

# Housing

## 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 resident students. A wide range of living options is available to students and a wide variety of educational and social programs is 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 on-campus residency on or before the first day of classes 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 on-campus housing acceptance agreement is an agreement 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.

The residential services office, 425 Student Services Building (372-2456), is responsible for the operation, staffing and programming of all campus living units, including sorority and fraternity houses. A trained 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.

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 vacations 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 On-Campus Housing in advance of the proposed move.

### Off-campus housing

The Off-Campus Housing Office, 425 Student Services Building, maintains up-to-date 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 off-campus housing. A contractual agreement 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 agreement card in the spring for the following fall semester. Dates and procedures for payment are outlined in the acceptance agreement.

Five 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. Returning 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 a meal plan.Students living in these units who desire a meal plan must purchase at least the minimum on-campus meal plan.

*Plan II* covers these residence halls: Kreischer, Harshman (excluding Chapman Hall), McDonald East and West, Founders, Rodgers, Kohl and Prout. This rate also applies to students living in Conklin and McDonald North halls who are taking part in a meal plan program.

*Plan III* applies only to Chapman Hall, where microcomputers are provided in student rooms.

*Plan IV* applies only to Offenhauer East and Offenhauer West.

*Plan V* is for the room-only rent for fraternities, sororities and the French House. 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. If a house does not have its own meal plan, residents' participation in the minimim on-campus meal plan is required.

Room and meal rates are established annually by the University Board of Trustees.

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 agreement is accepted. The acceptance agreement should be read thoroughly by both student and parents or guardian and retained for future reference. A residential agreement card accompanies the agreement. It must be signed and returned with the initial payment, indicating acceptance of the provisions of the agreement. Full payment may be made in advance for the semester, or entire academic year, or in accordance with an optional Installment Payment Plan described in the acceptance agreement. The initial payment date appears on the residential agreement card.

**Refunds**

Adherence to the payment schedule is a 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 22.

## Meal 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 items in the snack bars, convenience store, etc. Guests are welcome in the dining halls and their meals may be purchased with meal plans or cash.

There are five dining halls, two restaurants, three snack bars, a deli and a convenience store. 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.

Food Operations offers various food plans that provide different amounts c food to fit different lifestyles. Students who eat fewer than average meals or who leave campus frequently on weekends may want to purchase a minimum plan. Students 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.

# Financial Aid and Student Employment

All types of financial aid including scholarships, grants, loans and work opportunities are coordinated through the Office of Financial Aid and Student Employment (FASE). Detailed information on individual programs and financial aid counseling are available on a walk-in basis. Students and parents are encouraged to call ahead to confirm office hours which vary during the year.

The philosophy of need-based aid is that each student and the student's family are responsible for a reasonable contribution to the student's educational expenses. The calculation of the family's expected contribution is based on a formula established by the U.S. Congress. Financial aid is available to eligible students to fill the gap between the cost of attending the University and the calculated family contribution. To determine the family contribution, the student must submit an application to a national processor. The Financial Aid Form from the College Scholarship Service is preferred. The results of the analysis are sent to FASE who determines award eligibility (or ineligibility) and notifies the student.

Prospective freshmen who are admitted by March 1 and submit the FAF by February 15 (a priority date, not a deadline) will be given first consideration for institutional need-based financial aid for the following summer, fall and spring semesters. Awards are made assuming full-time enrollment, but some awards are available for part-time attendance. Notices of eligibility are mailed beginning in late April or early May and continue on a rolling basis throughout the award year. Early application assures consideration for institutional programs as well as federal and state programs.

For more information about the types of financial aid, eligibility criteria, application requirements and award amounts, consult the brochure available from FASE.

## 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 part-time employment opportunities is available both on and off campus. FASE posts on-campus job openings and refers applicants for interviews with prospective employers. Campus employment is available to undergraduate students who are enrolled on at least a half-time basis. Students typically work as clerks, custodians, library aides, receptionists, tutors, typists, lab assistants, delivery persons and food service employees. FASE also maintains a list of off-campus jobs in the Career Resource Library in the Student Services Building.

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

## Grants

### Pell Grant

The Pell Grant program is the largest of the federal grant programs. It is designed to provide a foundation of financial aid to low-income undergraduate students. Eligibility is determined by a federally mandated formula. Students can apply for Pell Grants by completing the FAF or an Application for Federal Student Aid.

### Ohio Instructional Grant

The OIG is a state-funded grant available to eligible low and middle income Ohio residents. The OIF is designated to pay tuition and fee charges and *requires a separate OIG application.*

### Supplemental Educational Opportunity Grant

SEOG is another federally funded award for students with exceptional need who are eligible for Pell Grants.

### Talent Awards and Grants-In-Aid

Students demonstrating special talents or abilities in athletics, music, drama, broadcasting or speech may be eligible for University funded grants. Recipients apply to and are selected by individual departments.

## Loans

### Stafford Loans

These are need-based, low interest (currently beginning at 8 percent) loans which do not require repayment or accrue interest until six months after the student graduates or no longer maintains at least a half-time enrollment. Students must obtain an application from a commercial lender and submit it to FASE, as well as file the FAF.

### Perkins Loans

These are need-based, lower interest (currently 5 percent) loans which do not require repayment or accrue interest until nine months after the student graduates or no longer maintains at least a half-time enrollment. Award amounts are determined by FASE.

### Parent Loans for Undergraduate Students (PLUS)
### Supplemental Loans for Students (SLS)

These loans are available to students and their parents who either do not qualify for need-based financial aid or who still need additional assistance above and beyond their determined eligibility. Applications are available from commercial lenders. Parents applying for PLUS loans on behalf of their students do not have to file an FAF form. Independent students applying for

an SLS must also complete an FAF. Interest rates are variable (not to exceed 12 percent); monthly payments are required within 60 days after the loan is disbursed, although some institutions will defer payments on the principal while the student is enrolled.

### Short-term loans

Short-term loans are available for tuition, fees and personal emergencies. Interest rates vary depending on the amount borrowed. All loans must be repaid within 45 days or by the last day of the semester, whichever comes first. Application is made on an appointment basis at FASE.

## Scholarships

A limited number of academic scholarships are available to students with outstanding academic records, regardless of financial need. Students who receive the Ohio Academic Scholarship are eligible to receive an institutional supplemental scholarship as well. Other scholarships, including FASE's University Scholarship, are awarded on the basis of academic achievement and need. Detailed information on scholarship programs at BGSU may be obtained in FASE's *Guide to Scholarships*.

FASE also provides a free scholarship search service to admitted and continuing students. Student characteristics and personal data are matched against a data base of more than 20,000 private and institutional sources of financial aid. A list of aid sources meeting the student's qualifications or characteristics is then mailed to the student, who is then responsible for contacting the individual donors. Applications are available at FASE.

## Other Programs

Students may also qualify for veteran's benefits, bureau of rehabilitation assistance or participate in the Job Partnership and Training Act programs, and should consult the yellow pages to contact the local, federal or state sponsoring office.

## 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.

All students receiving or being considered for financial 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), satisfactorily 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 terminate 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 conclusion 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; half-time undergraduate enrollment is 6 to 8 hours per semester.

**Section B: Programs Governed by the Policy**

- — Pell Grant
- — Supplemental 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 | 1.5 |
| 30 - 59 | 1.7 |
| 60 - 89 | 1.8 |
| 90+ | 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, WP, WF or NGR are not considered satisfactory.

2. Students who enroll in classes on a full-time basis will be expected to complete satisfactorily 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***

| When enrollment is: Fall | Spring | The required minimum credit hours to be completed satisfactorily are: |
|---|---|---|
| 12 hours (FT) | 12 hours (FT) | 24 hours |
| 12 hours (FT) | 00 hours | 12 hours |
| 12 hours (FT) | 09 hours (3/4 time) | 21 hours |
| 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 s 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 credit hours, an academic satisfactory progress status will be assigned as follows:

1-6 hours deficient— *Warning Status*: No action taken but student is encouraged to make up deficiencies in order to graduate within the time allowed.
7-12 hours deficient— *Conditional Status*: See Section F.
13 hours and beyond— *Unsatisfactory Progress Status*: Termination of financial aid eligibility

*[redacted]mples*

*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 x 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 x 24 hours per year = 72), and is 13 [redacted]urs deficient. The student is no longer [redacted]ible for financial aid.

**Section E: Maximum Academic Years of Financial Aid Eligibility**
To remain eligible for financial aid, the financial aid recipient must make sufficient progress to 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.

Transfer hours accepted by BGSU will be considered 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. Students 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 [redacted]eview that he/she is deficient by 7 to 12 [redacted]edit 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**
For purposes of this policy and because the University policy is designed to limit the frequency 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 A, B, C, 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 Eligibility**
A 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 eligibility 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 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 of the date on the denial letter.

**Section K: Policy Disclosure**
The policy "Standards of Satisfactory Progress for Undergraduate Financial Aid Recipients" shall be included in the financial aid section of the University's *Undergraduate Catalog* and the Office of Fianancial Aid and Student Employment's Notification of Financial Aid Eligibility brochure. The policy is also available upon request.

# 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 guest 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.

## Identification 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).

Guest 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 eating in the dining facilities, 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, identification 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 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). Photo identification is required.

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

## Academic load

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

## Registration schedule

All fully admitted students who are enrolled for the current semester are eligible to register for the next semester using the telephone registration system. Registration materials are distributed to campus addresses, on-campus mail boxes or home addresses two weeks prior to registration. Students who are either not currently enrolled or have not been admitted need to apply for admission or readmission prior to registration.

Registration is divided into three phases: Course Requests, Priority Section Registration, and Open Registration with Drop/Add. Course requests, which are made one term in advance, provide departments with information about demand for their courses. Only those students participating in Course Requests are allowed to take part in Priority Registration.

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

Priority Registration is followed by Open Registration. During Open Registration students may complete their initial registration, drop, add or change their grade options, and register for sections of courses which they did not request during the course request phase. Students registering late in the semester must pay their fees by 5 p.m. on the last working day prior to the start of the term or their registrations will be cancelled.

Students registering or reregistering after the first day of the term must prepay their fees and obtain a bursar clearance prior to registration. These registrations are also subject to late registration and late payment fees.

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

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

## Audit

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.

## Registration and Records Policies

### Change of address

To assure prompt receipt of grades and schedules, a student should complete a Change of Address form in the Office of Registration and Records when there is a change in this information.

### Change of personal information

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

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

### Student records policy

The University's Student Records Policy can be found in Appendix C of the Student Code which is distributed to students by the Office of Student Affairs.

### Veterans/reservists

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

### Certifications

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

# Organizations and Activities

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

## Student organizations

The most successful students are those who take advantage of the extracurricular activities offered at BGSU through its more than 180 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.

## 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.

A complete list of regulations governing student organizations can be found in the *Student Code.* 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, contemporary issues, exhibits, games, mini courses, news and views/ lectures, outdoor recreation, performing arts, public relations, publications, 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 total-sports 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). The hockey team participates in the Central Collegiate Hockey Association (CCHA). Bowling Green competes regularly with nationally prominent teams from other major conferences.

To be eligible for intercollegiate athletic competition, a student must meet various academic standards established by the University, the NCAA 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, flag football, floor hockey, golf, handball, racquetball, soccer, softball, volleyball and more. 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 noon and 1-5 p.m. daily.

**Athletic facilities**
Athletic facilities at the University include: an 18-hole golf course; a 5,000-seat ice arena; 25 outdoor tennis courts; the Eppler Complex; 5,000-seat Anderson Arena (basketball and volleyball) ; 30,500-seat Doyt Perry Stadium; Steller Field, which seats 2,000 for baseball; Falcon Softball Complex; Whittaker Track; Cochrane Soccer Fieldnumerous activity and practice fields; and Cooper Pool at the Student Recreation Center (see below) where the swimming teams compete.

## Student 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.

# Support 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. 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 IBM and Apple Macintosh microcomputers available for students use. There is at least one microcomputer laboratory located 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 on-duty 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 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. One section of `Career Exploration (CSP 480) is offered each spring semester for more advanced students.

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) and Miller Analogies Test (MAT) are administered by the center.

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

## 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 information and current job listings for many career fields.

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

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 Hazel H. Smith Off-Campus Student Center, located in 110 (ground level) of Moseley Hall (372-2573), provides a home base for off-campus and commuting students, although all programs and services are open to the University community. Facilities include a study lounge, television lounge, STAR registration telephones, refrigerators, microwave, vending machines, storage lockers and photocopier. A computer lab includes Macintosh and IBM personal computers, software, printers and correcting typewriters. Other services include 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), the Nontraditional Student Association (NTSA) and the Freshmen Off-Campus University Students (FOCUS). Hours of operation are 7:30 a.m to 10 p.m. Monday through Thursday and 7:30 a.m. to 5 p.m. Friday during fall and spring semesters and 7:30 a.m. to 5 p.m. Monday through Thursday and 7:30 - 11:30 a.m. Friday during summer session.

### 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 and in the OCSC main office indicates the mailbox numbers for students assigned mailboxes. Students may request or cancel mailboxes through th

ce of Registration and Records. The oom 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 Health 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 sses and accidents; sports, employnt 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, surgical procedures and sports, school and job physicals. Some laboratory procedures and medical consultations are referred to outside sources at the student's expense.

Students who become ill or are injured at times when the Student Health Service is closed and who believe that immediate medical attention is required should 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, atno 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 spitalization program under which are covered (generally as a dependent) since insurance companies have varying reimbursement policies. Students are encouraged to carry some form of health care insurance.

## Unigraphics

This department offers a full range of design, typesetting and graphic arts services, including desktop publishing service bureau capabilities. ASCII 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 variety 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 Services 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 outsides sources. In addition to the main service cetner 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, materials prepared under research contracts, consumption of materials in the Materials Production Laboratory, etc.).

## Parking 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 $30 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; career search 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; an electronic resume referral service; credential services for students seeking careers in education or admission to graduate school; the Alumni career connection; 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 end of their junior 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, located in the Department of Communication Disorders in 338 South Hall (372-2515), provides screening, diagnostic and treatment services for students with communication problems such as articulation, language, stuttering and voice disorders, foreign dialect and hearing loss. The clinic is open Monday through Friday, 8 a.m. to 5 p.m. Appointments and fee payments are arranged through the clinic. Services are also extended to children and adults throughout northwest Ohio.

# College of Arts and Sciences

Andrew Kerek, dean, 205 Administration Building, 372-2015
Michael T. Marsden, associate dean, 205 Administration Building, 372-2015
Ralph N. Townsend, associate dean, 205 Administration Building, 372-2015
Dawn Glanz, assistant 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, 141 Overman 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 Perry, Ph.D., chair, 117 Shatzel Hall, 372-2796
Department 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, Klaus Schmidt, Ph.D., interim chair, 133 Shatzel Hall, 372-2268
Department of History, Gary R. Hess, Ph.D., chair, 128 Williams Hall, 372-2030
Department of Interpersonal and Public Communication, John J. Makay, Ph.D., chair, 303 South Hall, 372-7168
Department of Journalism, Harold A. Fisher, Ph.D., chair, 302 West Hall, 372-2076
Department of Mathematics and Statistics, Andrew Glass, Ph.D., chair, 450 Math Sciences Building, 372-2636
Department of Philosophy, Thomas 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
Department of Psychology, Charles J. Cranny, Ph.D., chair, 207 Psychology Building, 372-2301
Department of Radio-Television-Film, 322 West Hall, 372-2138
Department of Romance Languages, Henry Garrity, 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, South Hall, 372-2222
School of Art, Thomas Hilty, M.F.A., director, Fine Arts Building, 372-2786
School of Mass Communication, F. Dennis Hale, Ph.D., director, 302 West Hall, 372-8349

## Academic Objectives

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

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

## Organization of the College

Largest of the collegiate organizations of the University, the College of Arts and Sciences includes two schools (Art and Mass Communication), and 21 academic departments, as well as an additional number of formally organized program areas. The academic departments span the range of the traditional disciplines in the 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 discipline-based 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 culture 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
- Canadian studies-minor only
- Classical studies-major only
- Computer science
- Consumer and family resource management-planned program
- Economics
- English
- Environmental policy and analysis-planned program
- Ethnic studies
- Film studies
- Folklore and folklife-minor only
- French
- Geography
- Geology
- German
- History
- International studies-planned program
- Interpersonal and public communication
- Italian-minor only
- Journalism-minor only
- Latin
- Latin American studies-planned program
- 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 curricula 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-education curriculum and other programs leading 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 65.

## General Requirements for a Degree

In addition to specific requirements listed on the following pages, a candidate for any degree in the College of Arts and Sciences must meet the general education requirements for the baccalaureate degree listed on page 5, 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 applicable—courses taken for a major may not also be counted for a minor).
3. Meet the University's general education core curiculum requirement (p. 6). These include functional understandings in natural sciences; social and

behavioral sciences; foreign languages [illegible]cultures; humanities and arts; and [illegible]ural diversity in the United States. Students wishing to apply University general education core courses also to college group requirements should consult the Arts and Sciences Handbook for a list of appropriate courses which could be used to fulfill both sets of requirements. See also the college foreign language statement in this catalog under specific degree being sought.

4. Students anticipating graduation must file for a junior audit four semesters (60 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 5.

## Academic Advising

Although the adviser and the dean's office advise students and check each student's record, upon request, the [illegible]onsibility for meeting graduation [illegible]quirements 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 requirements for a major and a minor area 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).

**Group II: Foreign Languages and Cultures**
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 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 foreign languages and cultures 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 117, 118, 201, 202, 217, 218, 231, 331, and/or GERM 260, 315, 316; or

Completion of CHIN 101, 102, 201 and 202; or

Completion of JAPN 101, 102, 201 and 202; or

Completion of RUSN 101 and 102 plus a minimum of six additional hours from: RUSN 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312, 313.

*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 demonostrated on a placement test;
2. MATH 115, 126, 128, 129 or 130;**
3. MATH 111 or 120** 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.

*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.

**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 culture studies; ethnic studies; music composition and history, philosophy (except PHIL 103 used to apply to group III), popular culture, theatre and women's studies. It is recommended that philosophy be one of these areas.

A list of courses approved for group V requirements is printed in the College of Arts and Sciences Handbook. A student majoring in the arts and 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.

## 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 Culture Studies

211 Moseley Hall, 372-8110

**Planned program**
An interdisciplinary program dedicated to the holistic study of American culture, society and institutions, American culture studies offers individualized programs using offerings in the humanities and social sciences which focus on the American experience. American culture studies courses develop the skills and methods appropriate to cultural studies and serve to integrate the substance of other disciplines into coherent patterns reflecting the complexity of American life and our national heritage. The director of American culture studies and the undergraduate adviser help students design programs suited to their needs and interests within the general requirements of the program and the college.

The program requires a minimum of 36 hours including the following:
ACS 200 and 400 (6)
ACS 230; 240, 300 (3)
HIST 205 and 206 (6)
Emphasis area (21)

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

A minor is required.

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

**Other programs**
An American culture studies option, leading to certification in social studies, history and either political science or geography, is available in the comprehensive social studies major offered by the College of Education and Allied Professions.

## Applied Human Ecology

11 Home Economics Building, 372-7

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 coursework in art, art history, folklore and folklife, popular culture or history.

### Consumer and Family Resource Management

11 Home Economics 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 i changing environment are influenced by public policy. An opportunity for field work in a consumer agency is included in the program.

***Core courses***
[redacted]HE 100, F&N 207, AMID 303, HDFS 305

***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)
[redacted]S 100 (3)
***Second year** (16 hours)*
ECON 202 (3)
PSYC 201 (3)
AMID 202 and 204 (6)
BA 203 or STAT 200 (3)*
AHE 389 (1-5) optional

***Third year** (15+ hours)*
AMID 303 and 313 (6)
MKT 300 (3)**
ACCT 325 (3)
MGMT 305 (3)
***Fourth year** (23 hours)*
AMID 401, 402 and 403 (9)
Business elective (3)
MKT 410 and 430 (6)
Select two: AMID 404, 412, 414 or AHE 480 (6)

*STAT 200 may be substituted for BA 203 if students have not completed MATH 127 or a higher level MATH course.
**MKT 300 prerequisites are an economics course, an accounting course and MATH 120+ level or a statistics course.

## Food Science and Nutrition
11 Home Economics Building, 372-7838

A major program designed for the student who wishes to specialize in the [redacted] science field preparatory to graduate study or for a career in business or industry. A minor is required.

***First year** (13 hours)*
CHEM 125, 127, 128 (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)

## Interior Design
206 Johnston Hall, 372-2026

The interior design program prepares students in the planning and executing of residential and contract interiors. Coursework is designed to evaluate problems and devise solutions. No minor is required.

***First Year** (21 hours)*
ART 102 (3)
AMID 103, 116 and 117 (9)
CS 100 (3)
DESN 105 (3)
SOC 101 (3)
***Second Year** (31 hours)*
ART 112 (3)
ARTH 146 (3)
AMID 219, 223 and 303 (9)
ECON 202 (3)
CONS 235 (3)
PSYC 201 (4)
DESN 236 and 237 (6)
***Third Year** (11 hours)*
AMID 319, 329, 333 and 345 (11)
***Fourth Year** (17 hours)*
ARTH 440 (3)
AMID 417, 418, 419 and 423 (11)
MGMT 305 (3)
Also see School of Art for specializations in graphic and environmental design and College of Technology for a specialization 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 406

***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
116 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 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
116 Fine Arts Building, 372-2786

***Major (42 hours)***
ART 102 (3)
ARTH 145, 146 (6)
Studio electives (3)
ARTH 441 or 442 (3)
ARTH 445 or 446 (3)
ARTH 456 or 457 (3)
ARTH 458 or 459 (3)

At least two courses from each of the following groups:
ARTH 448, 449, 453 (6)
ARTH 451, 454, 455 (6)
Two additional ARTH electives (6)

***Minor (21 hours)***
ART 102 (3)
ARTH 145 and 146 (6)
Art history electives (12)

## Asian Studies
142 Williams Hall, 372-7597

**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 one student to Nanzan University in Japan, one student to Yonsei University in Korea and one student to Shandong University in China. Each student receives one academic-year, tuition-free 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 programs at Teraoka Seiko Company in Tokyo or at Sasaki Glass Company Ltd. in Tokyo 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 three scholarships awarded each year through the Kiyo Kitahara Fund for Asian Studies, the Hiroko Nakamoto Fund for Japanese Studies, and Seiko McCann scholarships for Asian studies majors.

## Business, General Studies in
205 Administration Building, 372-2015

**Planned program; no minor required. (53 hours)**
MATH 126 (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 126 is prerequisite to 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.

## Canadian Studies
**(minor only)**
This program is designed to provide students with an interdisciplinary program of study focusing on Canada. It is intended to be used in conjunction with a variety of majors which would be complemented by an intensive yet broad examination of Canadian society and culture. The program consists of 21 credit hours planned in consultation with the director of Canadian studies. At least three departments are to be represented. The study of French is encouraged as part of the program. Arts and Sciences 200, "Introduction to Canadian Studies," (3 credit hours) is required of all students in the program. The remaining 18 credit hours are to be selected from among the following courses:
A&S 300—The Canadian Film (3)
ENG 269 (3)
FREN 284 (3)
GEOG 350 (3)
AHE 480—Canadian-American Women's Material Culture (3)
HIST 414 (3)
POLS 400—Government of Canada (3)
POPC 325—Folklore of the Great Lakes Region (3)

## Classical Studies
243 Shatzel Hall, 372-2667

***Major*** (only) (24 hours)
Fourteen hours of Latin beyond the 202 level including LAT 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 Building, 372-2337

***Major (30 hours)***
CS 101, 205, 207, 208, 305, 306, 307 (21)
Three CS electives at the 400 level, excluding CS 490 (9)
PHIL 344 or SOC 320 (3)
MATH 134-135 (6) or MATH 131 (5)
MATH 222 or 322 (3)
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, 205, 207 (9)
CS electives (9)
The following courses may not be applied to the 18-hour minor requirement: CS 100, 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 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

***Major (33 hours)***
***First year (7 hours)***
MATH 126(5) 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 (21 hours)***
***Second year** (6 hours)*
ECON 202 and 203 (6)
***Third year** (6 hours)*
ECON 302 and 303 (6)
***Fourth year** (9hours)*
ECON electives (Not Econ 304) (9)
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 thematicallly 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 250, Great Ideas, as one of the courses for Group V, Arts and Humanities.

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

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

**Other programs**
The College of Arts and Sciences also offers the Bachelor of Fine Arts degree with a major in creative writing and the Bachelor of Arts and Bachelor of Science degrees in scientific and technical communication. Programs in English are also available through the College of Education and Allied Professions.

# Environmental Policy and Analysis

153 College Park Office Building, 372-8207

**Planned program; no minor required**
The program emphasizes the multidisciplinary nature of the field of environmental studies and the role of the social sciences which address environmental issues from a point of view other than natural science. 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 or 388 (3)
LEGS 431 (3)
BIOL 101 and 104; or 204 and 205 (two courses) (7-10)
IPCO 205, 306 or 403 (3)
Two from: GEOG 125, 126, 127, CHEM 109 and 110, 117 and 118, 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; 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.

**Other programs**
The 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, 153 College Park Office Building, 372-8207, for help in selecting the program that most closely meets their career objectives.

# Ethnic Studies

117 Shatzel Hall, 372-2796

***Major (33 hours)***
ETHN 101; and either ETHN 110, 120, 130 or 140; and ETHN 400 (9)
Ethnic studies electives (18)
Courses in approved departments outside of ethnic studies (6) (a list is available from the ethnic studies adviser).
A student, in consultation with the adviser, may choose to focus on a specialized area of ethnic studies (e.g. black studies, 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,

journalism, philosophy, popular culture, romance languages, RTVF, technology and theatre.

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 coursework in the basic core, the student selects an additional 19 hours of coursework 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)**
**Popular Culture Building, 372-2981**

***Minor (20 hours)***
- POPC 220 (3)
- Oral folklore such as POPC 320 or 424* (3)
- Material or customary folk culture such as POPC 320 or 424* or AMID 401
- 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, premeterology), 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)***

**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
139 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
- GERM 260, 300 and 360 do not count toward the major.

***Minor (18 hours on 300 and 400 level)***
- GERM 317 and 318 (6)
- GERM 311 or 313 (3)
- One course from 315, 316 and 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 least three hours at the 400 level in each of the three categories:

*European History*
HIST 357, 360, 363, 367, 370, 377, 415, 444, 446, 448, 454, 458, 464, 469, 470, 471

*U.S. History*
HIST 301, 302, 303, 306, 307, 308, 319, 323, 325, 326, 337, 338, 419,

421, 422, 425, 426, 427, 428, 429, 430, 433, 436, 437
*er*
HIST 304, 305, 309, 310, 311, 315, 340, 381, 382, 386, 401, 411, 413, 414, 441, 442, 462, 483, 486
(HIST 391, 395, 400, 495 may be used to fulfill the requirements of the major and minor with approval of the department adviser)

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

# International Studies
136 Shatzel Hall, 372-7268 or 372-8082

**Planned program (57 hours)**
International studies is an interdisciplinary program for students preparing for positions in public administration/policy, non-profit 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 ersity.
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 of 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 American, 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 Communication
303 South Hall, 372-2823

***Major (36 hours)***
IPCO 102 and 201 (6)
100 (3)
TVF 103 (3)
ENG 207 (3)
THEA 202 (3)
IPCO electives (18)

***Minor (24 hours)***
IPCO 102 and 201 (6)
THEA 202 or RTVF 103 (3)
IPCO electives (15)

**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.

# 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 coursework appropriately selected from courses recommended by the linguistics adviser. No work can be counted both for the major and the minor.

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

# Mass Media
**Planned minor only**

This program is designed to give students—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)
Five 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 following 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 mathematics, a grade point average of 2.0 or better is required in those courses used to meet the requirements for the major. (The University policy for grades in repeated 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
MATH 441
A second course from one of the following groups**:
MATH 337, 437, 439
MATH/CS 451/452
MATH 441, 442, 445, 447

**Actuarial science**
This option is intended for students interested in a career as an insurance or pension actuary. It requires the following courses: MATH 131, 232, 233, 322, 432, 441, 442, 451, 426, 427. CS 101, 440, STAT 404, ECON 202, 203, OR 480, ACCT 221, FIN 420.

Suggested schedule for program courses:
***First year***
**Fall**
MATH 131 and CS 101
**Spring**
MATH 232
***Second year***
**Fall**
MATH 233, 322
ECON 202
**Spring**
MATH 332
ECON 203
CS 440 (odd year)
***Third year***
**Fall**
MATH 441, 451
**Spring**
MATH 442, 432
STAT 404 (even year)
ACCT 221
CS 440 (odd year)
***Fourth year***
**Fall**
MATH 426
FIN 420
**Spring**
MATH 427 or 480
STAT 404 (even year)

The economics courses may be counted toward the social science requirement. Suggested electives for a student following this program are ACCT 222, FIN 426, 428, STAT 402.
A minor is not required.

***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)

*except MATH 222, 226, 395, 414, 470, 489, 495.
**Some of these courses may not be offered every year.
***35 hours of MATH required for students who have credit for CS 451.

**Other programs**
A double major in mathematics and computer science and a Bachelor of Science in mathematics also are 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 associate 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, recording technology, scientific 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, 34 345, 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 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: Philosophy of Business, Philosophical Aspects of Health Care, Philosophy and the Law, Philosophy of Mind, Philosophy and Religion, Philosophy and Science, traditional track and individually designed track.

***Minor***

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

# Political Science

124 Williams Hall, 372-2921

***Major (33 hours)***

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, 335, 336, 341, 345, 346, 347, 374, 431, 434, 440, 443

*Comparative Government*
POLS 271, 335, 351, 354, 355, 361, 366, 368, 434, 452, 454, 458, 460, 462

*International Relations*
POLS 272, 335, 372, 374, 434, 458, 460, 462, 473, 475, 476

*Political Theory*
POLS 301, 304, 402, 403, 404, 405, 452

*Public Administration*
POLS 221, 302, 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 coursework 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 100-200 level (6)
POLS at 300-400 level (15)

**Other 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
ACS 200, 300, 400
ARTH 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 (33-35 hours)*
RTVF 103, 255, 360, 366, 460 (15)
RTVF 262 or 462 (3-4)
RTVF 263, 463 or 350 (3-4)
RTVF 261, 264 or 270 (3)
Three 3-credit hour courses from RTVF, numbered from 261 to 469 (9)
*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

136 Shatzel Hall, 372-2369

*Major*
25 hours beyond RUSN 202, or equivalent, and including RUSN 317, 318, 320, 417 and RUSN 303 or 319, plus two courses from RUSN 311, 312, 313.
*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 clearly and accurately conveys scientific and technical information. Technical communicators interpret specialized information for their readers' practical use. A technical communicator may be expected to create brochures, research reports, manuals, instructions, news stories, scripts and speeches. Although technical communicators are not expected to be scientists or engineers, they are expected to have a good background in at least one technical, scientific or business area. Technical communication is a rapidly growing profession needed in all industries, and technical communicators are in national demand.

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

**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 coursework and achieved an overall grade point average of 2.7; waivers of the grade point average requirement may be granted on the basis of the student's unique educational or work experience.

***Bachelor of Arts Program (57-63 hours)***
**Communication core—required courses**
ENG 207, 388, 389 and 488 (12)
ENG 489 (3-9)
One of the following: ENG 484, JOUR 301 or any 300- or 400-level English literature course (3)
**Computer science/technology requirement (9)**
(one of three of the four subgroups below)
CS 100, MIS 200
CS 101, CS 260, MIS 360
CS 205, CS 360, TECH 102, CONS 235, MFG 112
SOC 369, PSYC 270, STAT 200, MATH 115, MATH 247
**Graphics and Design Requirements (choose two) (6)**
DESN 104, 204, ART 102, ARTD 211, VCT 203, 208
**Project Management Requirements (choose two) (6)**
These courses may have prerequisites, some of which may be taken as part of the Group IV requirements.
PSYC 352, 452, 454, MGMT 300, 305, 361, IPCO 203, 207, 303, 304, SOC 318, 320, 415
**Cognate area—suggested concentrations (18)**
Biology
Psychology
Physics
Mathematics
Chemistry
Computer Science
Geography
Foreign Languages
Sociology
Law-Related Studies
Industrial Technology
Environmental Studies
Business-Related Studies
Journalism-Related Studies
Note: scientific and technical communication majors are required to take Great Ideas (A&S 250) as part of their Group V requirements.

***Minor***—recommended for students with science, technology or business majors (21 hours)
ENG 207, 388, 389, 488
ENG 484 or JOUR 301
Any two courses chosen from computer science/technology, graphics and design, and project management groups above.
***Minor***—recommended for students with humanities majors (21 hours)
ENG 388, 389, 488
ENG 484 or JOUR 301
Any three courses chosen from computer science/technology, graphics and design, and project management groups above.

**Bachelor of Science Program**
The bachelor of science program is similar to the bachelor of arts progra except that a total of forty-five (45) h of coursework is required in math and science, which may be distributed among college math and science requirements, the computer science

courses in the computer science/ technology group and the cognate area.

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

# Sociology

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, 443, 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. Coursework 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. Coursework 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 personnel. 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

21 Williams Hall, 372-8284

**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 (SOVT 216, The Soviet Union Today) and a senior seminar (SOVT 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 the 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

**Major (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)
Electives 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

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

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

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

***Major***
WS 200 and WS 400 (6)
Eight additional courses (24 hours) from among the approved courses listed below. Coursework counting toward the major must be completed in at least six departments. A 16-hour concentration in one of the arts and sciences departments offering courses on women and/or gender is also required. The area of concentration is planned in consultation with the program adviser to reflect the individual student's interests and career goals. Approved course list:

ACS 300*, 400*, 490*
BA 305/HDFS 305
EDFI 460
ENG 300*, 423, 470*
ETHN 300*, 360, 423, 470* 480*
HIST 326, 480*, 495*
HDFS 105, 107, 302, 408, 426, 427
IPCO 406*
PHIL 245
POLS 434
POPC 231, 424, 460*, 480*
PSYC 306, 307, 490*, 495*, 496*
RTVF 270*
SOC 300*, 313, 316, 361, 460*, 461, 470*, 480
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 and WS 400 (6)
15 hours of courses chosen from the above approved course 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 I: English Composition**
Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours.)

**Group II: Foreign languages and cultures**
Each student is required to demonstr 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. 6) 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 117, 118, 201, 217, 218, 231, 331, and/or GERM 315, 316, 2(
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, 313.

*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 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 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.

**Group IV: Social sciences: economics, ethnic studies, geography, history, political science, psychology, sociology**
Each student is required to complete 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, theatre, television and film), and two additional courses from the following areas: ART 101, art history; American, English or foreign literature; American culture studies, ethnic studies, music composition and history, philosophy, popular culture, theatre, 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: 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 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 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 general education requirements remain the same.

# Astronomy

**(minor only)**
104 Overman Hall, 372-2422

**Planned program to substitute for minor (18-21 hours)**
Five courses chosen from: 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 Sciences Building, 372-2332

***Major (32 hours)***
***First and second years***
BIOL 204 and 205 (10)
CHEM 125, 127 and 128 (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, 408, 442, 447, 449, 451
*Group 4: Cell Biology and Physiology*
BIOL 407, 411, 417, 419, 433, 438, 439, 443

***Minor (20 hours)***
***First and second years***
BIOL 204 and 205 (10)
CHEM 125, 127 and 128 or equivalent (10)
***Third and fourth years***
Electives in BIOL (10)

## Microbiology

519 Life Sciences Building, 372-8568

BIOL 204, 205 and 313 (14)
CHEM 125, 127, 128 and 201 (13); or CHEM 135, 137 and 138 (10)
CHEM 341 and 342 (10); or CHEM 306 (4)
CHEM 308 and 309 (4) or CHEM 445 and 447 (6)
MATH equivalent to 131
PHYS 201 and 202, or 211 and 212 (10)
CS 100, 101 or MIS 200 recommended

A minimum of 18 hours, at least 12 of which should be selected from the following list of core courses, including at least one course with a laboratory component: BIOL 421, 426, 443, 444, 447, 400 (up to 3 hours in a microbiology topic, with prior approval of microbiology adviser).

Additional hours may be selected from the following: BIOL 405, 407, 424, 439, 446. The following courses may also be taken as electives with prior approval of the microbiology adviser: BIOL 400, 401, 402, 470, 489, 490, all in the area of microbiology; BIOL 479; MEDT 404 (or 416), 434, 435, 421, 422, 431 and 432 (or 403)

**Other programs**
Programs in biology are offered also through the College of Education and Allied Professions. A program in applied microbiology is available through the College of Health and Human Services.

# Chemistry

141 Overman Hall, 372-2031

Students who take two courses in any one of the following groups may not receive graduation credit for both:
CHEM 100, 109, 125, 135;
CHEM 117, 127, 128, 137, 138;
CHEM 117, 306, 341;
CHEM 118, 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, 127, 128 and 201 (13) or CHEM 135, 137, 138 (10)
CHEM 341, 342 (10)
CHEM 321 or CHEM 454, 407 (3-5)
CHEM 352 or CHEM 405 (3-4)
PHYS 202 or PHYS 212 (preferred) should be taken by the end of the second year.

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, 127, 128 (10) or CHEM 135, 137, 138 (10); MATH 131
***Second year***
CHEM 201 (3) (For those having taken CHEM 128.)
PHYS 211, 212 (10)
MATH 232 (5)
CHEM 341, 342 (10)
***Third year***
CHEM 405, 406, 407 and 408 (12)
CHEM 413 is highly recommended
PHYS 401 or MATH 233 and 332
***Fourth year***
CHEM 454 (3)
CHEM 463 (4) or CHEM 445, 446 (4)
Additional 400-level CHEM courses to a minimum of five credit hours of lecture and two credit hours of laboratory.

A student who wishes a more limited major but one that is still adequate for advanced study or professional work in chemistry follows the same schedule during the first three years as given above, except PHYS 401 or MATH 233 and 332 are not required.

***Fourth year***
CHEM 454 (3)
Electives from 400-level CHEM (none required)

This program also gives excellent preparation for premedical students and other preprofessionals who anticipate possible research careers.

The least rigorous major is useful for certain preprofessional (predental or premedical) programs or for preparation for limited positions in industry or government:

***First year***
CHEM 125, 127, 128 (10) or CHEM 135, 137, 138 (10)
MATH 131 (5)
***Second year***
CHEM 201 (3) (For those having taken CHEM 128)
CHEM 341, 342 (10)
PHYS 201, 202 (10) or PHYS 211, 212 (10)
***Third and fourth years***
CHEM 352 (3) or CHEM 405 (4)
CHEM 321 (3) or CHEM 454 (3) and 407 (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, 127, 128 (10) or CHEM 135, 137, 138 (10)
***Second year***
CHEM 201 (3) (For those having taken CHEM 128)
CHEM electives
***Third and fourth years***
CHEM electives
CHEM 313, 395, 413 and 483 cannot count toward the 20 hours required.

## Biochemistry Specialization

Chemistry majors preparing for graduate study or research in the health related academic area requiring biochemistry should take: CHEM 445, 446, 447 and 449; BIOL 204, 205, 313, 350, and 4' or 439. CHEM 413 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, 205, 207, 208, 305, 306, 307 (21)
Three CS electives at the 400 leve' excluding CS 490 (9)
PHIL 344 or SOC 320 (3)
MATH 134-135 (6) or MATH 131 (5)
MATH 222 or 322 (3)
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, 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)***
[redacted]S 101, 205, 207 (9)
[redacted]S electives (9)
The following courses may not be applied to the 18-hour minor requirement: CS 100, 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
153 College Park Office Building, 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, particu- biology and chemistry. Additional [redacted]rses 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)
BIO 204 and 205 (10)
CHEM 125, 127 and 128 (10)
GEOL 104 (4)
MATH 131 (5)
ENG 207 or 388 (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; EDFI 416; ENVH 306; ENVR 421; GEOG 321, [redacted] 331, 333, 337, 412, 426, 442, 460; [redacted]L 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)

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 recommended. Individualized planned minors in 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, 153 College Park Office Building, 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 follow 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 127 and 128 (or 137 and 138), PHYS 202 (or 212) or BIOL 204

The degree required for most entry-level positions as a professional geologist in government and industry is the master's degree. Accordingly, students who wish to gain admission to a graduate 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, 127 and 128 (or 135, 137 and 138) (10)
PHYS 201 and 202 (or 211 and 212) (10)
CS 101 (3)

**Suggested program**
***First year***
GEOL 104 and 105 (8)
CHEM 125, 127 and 128 (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:
GEOL 104, 105, 300, 301, 309, 315, 316, 431 and 494 (38)
PHYS 201 and 202 (or 211 and 212) (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, 127 and 128 (or 135, 137 and 138) (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 approved by paleobiology adviser) (1-3)
GEOL 494 (or a substitute field course approved by the paleobiology 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 the Bachelor of Arts also is offered by the College of Arts 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 following 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 mathematics, a grade point average of 2.0 or better is required in those courses used to meet the requirements for the major. (The University policy for grades in repeated 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
MATH 441
A second course from one of the following groups**:
MATH 337, 437, 439
MATH/CS 451, 452
MATH 441, 442, 445, 447

**Actuarial Science**
This option is intended for students interested in a career as an insurance or pension actuary. It requires the following courses: MATH 131, 232, 233, 322, 332, 432, 441, 442, 451, 426, 427. CS 101, 440, STAT 404, ECON 202, 203 OR 480, ACCT 221, FIN 420

**Suggested schedule for program courses:**
*First year*
**Fall**
MATH 131 and CS 101
**Spring**
MATH 232
*Second year*
**Fall**
MATH 233, 322
ECON 202
**Spring**
MATH 332
ECON 203
CS 440 (odd year)
*Third year*
**Fall**
MATH 441, 451
**Spring**
MATH 442, 432
STAT 404 (even year)
ACCT 221
CS 440 (odd year)
*Fourth year*
**Fall**
MATH 426
FIN 420
**Spring**
MATH 427 OR 480
STAT 404 (even year)

The economics courses may be counted toward the social sciences requirement. Suggested electives for a student following this program are ACCT 222, FIN 426, 428, STAT 402.

A minor is not required.

***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)

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

# Physics

104 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)
PHYS 416 (3)
It is recommended that a student majoring or minoring in physics take the following:
CHEM 125, 127 and 128 (10)
MATH 332 (3)
For students expecting to continue on to graduate school, the following courses are recommended:
PHYS 303, 309, 402, 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 207, 208, 205 and 307 (12)
MATH 332 (3)
No minor is required.

**Applied physics specialization**
A student may elect to specialize in applied physics, with emphasis on the areas of current interest in the modern optics and solid state fields. The following courses should be included as part of the major:
PHYS 303, 306, 309, 410 or 411, 4 428 and 429 (21)
In addition, the following courses must be taken:
CS 101 (3), 207 (3)
CHEM 125, 127 and 128 (10)
DESN 243 (3)
No minor is required.

***Minor (22 hours)***
PHYS 211, 212, 301 and 313 (14)
PHYS 305 and 406 (5)
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

***Major***
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 ti 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

***Minor***
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 52, including the Arts & Sciences 250 requirement, except that appropriate courses from the science or technology cognate and from the computer science/technology group may count toward the 45-hour Group III (Mathematics and Sciences) general education requirement for the bachelor of science degree. A plan for these courses is worked out in consultation with and approval of the program adviser. Admission to the major requires adviser approval.

Before being fully accepted as a scientific and technical communication major, the student must have completed 30 hours of coursework and achieved an overall grade point average of 2.7; waivers of the grade point requirements may be granted on the basis of the student's unique educational or work experience.
***Minor***
See description under Bachelor of Arts Degree.

## Statistics

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 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 nontraditional students who enroll only in evening courses.

1. A fully admitted student at the University may be evaluated for admission to the BLS program if she/he has:
a. completed no less than 30 semester hours;
b. a minimum GPA of 2.25 or greater;
c. at least 45 semester hours of coursework remaining to be completed before graduation;
d. submitted the application for admission into the BLS degree program within the first 14 days of the semester in which the last 45 hours of the degree program are begun;
e. submitted a personal essay of three to five pages which articulates specific correspondences between the student's long and short term goals and objectives and the proposed curriculum;
f. completed English 112 plus two PEG activities courses;
g. removed all high school 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 to the program;
b. completed 100 hours of coursework within the college;
c. met all of the University's requirements for a bachelor's degree;
d. followed an approved program of study which is consistent with his/her original application to the program;
e. satisfactorily completed a minimum of 122 hours with the last 30 hours in residence at BGSU.

# BACHELOR OF FINE ARTS DEGREE

103 Hanna Hall, 372-8370

Each student must complete the group requirements listed below preferably in the freshman and sophomore years and must satisfy the requirements for a major in creative writing and a minor in an area of specialization.

## General Education Requirements

**Group I: English Composition**
Students are required to complete ENG 112 or to demonstrate by examination that they have proficiency in written expression equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours.)

**Group II: Foreign Languages and Cultures**
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 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 number 1, 2 or 3 above will need to take at least one foreign language and culture course from the General Education Core (p. 6) 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 117, 118, 201, 202, 217, 218, 231, 331 and/or GERM 315, 316, 260; or
Completion of CHIN 101, 102, 201 and 202; or
Completion of JAPN 101, 102, 201 and 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 100, 201, 202, 215, 216, 303, 313, 317, 319, 331 and/or RUSN 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 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 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 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 (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 one or more of these subjects. A list of approved ethnic studies courses is printed in the College of Arts and Sciences Handbook.

**Group V: Humanities: art, art history, English, music composition and history, philosophy, popular culture, radio-television-film, theatre**
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 and 407b (18)
ENG 205, 206 (or ENG 201) (4)
ENG 261 or 262 (3)
ENG 320, 323, 330, 333 (12)

***Minor (20 hours)***
ENG 208, 209, 308, 407 (12)
ENG 205 or 206 (2)
ENG 320 or 323 (3)
ENG 330 or 333 (3)

# BACHELOR OF ARTS IN COMMUNICATION DEGREE

The requirements for the degree of Bachelor of Arts in Communication (BAC) include completion of the general requirements for the baccalaureate listed on page 5 and;

1. Completion of the general education requirements in 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 equivalent to that attained by the student who completes that course. (A penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 10.) IPCO 102, THEA 202 and IPCO 201 are also required.

**Group II: Foreign languages and cultures**
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 foreign language and culture course from the General Education Core (p. 6) 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 117, 118, 201, 202, 217, 218, 231, 331 or GERM 260, 315, 316
or
Completion of CHIN 101, 102, 201, 202; or
Completion of JAPN 101, 102, 201, 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312, 313.

*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
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.

**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 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 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 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, 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.

# Specialized Programs

Each student is expected to present a program of specialization in communication study from exisiting 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 of courses can be used to define a career focus, but the choices must logically and clearly support the designated focus. (Internships may not count.) Students are expected to work closely with advisers 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 complete in sequence IPCO 102 and IPCO 201 before they can take any other IPCO courses (except IPCO 306, 403 and 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 select an emphasis 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 approximately twelve productions during the academic year. Plays and musicals that are presented represent a wide range of dramatic literature in a variety of production styles. The productions are presented in the Eva Marie Saint Theatre and the Joe E. Brown Theatre, both in University Hall. Open auditions are held for all productions and the entire University community is invited to participate. Opportunities are available for students to work in all aspects of theatre production from management and promotion to acting, directing, designing and crew work.

The theatre department offers talent scholarships in acting, forensics and technical theatre to qualified undergraduates. The scholarships are awarded on a competitive basis with students submitting applications, letters of recommendation and doing a live audition. Students interested in obtaining a talent scholarship audition form should contact the theatre office in 322 South Hall.

The theatre program also sponsors the Huron Summer Playhouse each year. Students must audition to be considered for membership in the company. Each year the Playhouse presents sevaral plays and musicals during the eight-week season. The Playhouse provides students with a full range of summer stock experience.

The theatre program is accredited by the National Association of Schools of Theatre.

# PRE-PROFESSIONAL PROGRAMS

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

## Four-year Curricula

These 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 preprofessional study may be completed at Bowling Green. The student then transfers to a professional school or college to complete a professional program.

**Combined Curricula**
The student may obtain both an arts and sciences degree and an education degree at Bowling Green by following this program.

**Combined Baccalaureate-Master's Program**
By following this program, the student may finish the coursework for a bachelor's degree in less than four complete years and is prepared for early enrollment in a graduate program.

A student who expects to receive a degree by completing one of these curricula must meet all of the requirements for the degree including major, minor and group requirements.

## Four-year 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 interested 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 65.

**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. 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 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. Up to four of these examinations can be taken while in school. There is a separate process for pension actuaries. A description of the actuarial science program can be found under the mathematics major.

**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 should select an academic program that provides for an alternate career should acceptance into dental school be denied. The Bachelor of Science degree program can be planned to meet all course requirements for dental school and still provide time for sufficient 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 prerequisites, to prepare for the Dental Aptitude Test and to make application to dental school.

**Recommended course sequence:**
BIOL 204, 205, 350, 352, 431 and 432
CHEM 125, 127, 128 or CHEM 135, 137, 138; CHEM 201 for those having taken CHEM 127.
CHEM 341, 342, 308, 309 (plus 445, 446, 447 if CHEM major)
PHYS 201, 202 or 211 and 212
MATH 130 or 128 or 129 (by placement) and 131 and 232 depending on major

A student should take the required courses to complete a major and a minor, as well as the 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 or 141 Overman Hall, 372-2031

Admission to medical school is selective and is dependent upon scholarship and aptitude as indicated by the scores attained on the Medical College Admission Test (normally taken during the spring semester of the student's third year) and by other criteria. The student should include in the premedical program a course of study to prepare for admission to medical school and for admission to an appropriate graduate school or for an industrial, government or teaching position in case the first choice cannot be realized. To meet the requirements for admission to most medical schools, the Bachelor of Science curriculum can be modified to include the required courses and still provide the student with enough depth in at least one area for graduate work or for career opportunities if medical school is not attended. There is no preferred major for entrance into medical school. Generally, either chemistry or biology is chosen by the premedical student, but other majors are possible.

The premedical student is urged to confer frequently with the adviser, particularly with respect to planning prerequisite courses for the Medical School Admission Test and for meeting the admission requirements of the medical school of the student's choice.

**Recommended course sequence**
BIOL 204 and 205 (10)
CHEM 125, 127, 128, or CHEM 135, 137, 138; CHEM 201 for those having taken CHEM 127
CHEM 341 and 342 (10)
MATH 130 or 128 or 129 (by placement) and 131 (232 optional depending upon major) (7-13)
PHYS 201, 202 or 211 and 212 (10)
ENG 112 (3)

In addition, a student should plan to take the required courses to complete a major and a minor; 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 coursework of engineering schools and is designed for the student who expects to transfer to a college of engineering at the end of two years. Since the requirements in engineering colleges and in different fields of engineering vary considerably, the student should consult with the pre-engineering program adviser early in the 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.

Engineering is presently a high-opportunity career area, and a pre-engineering program at Bowling Green offers several advantages, especially for those students who are uncertain about an engineering specialty. However, students should be advised that all engineering specialties require a high aptitude for mathematics and quantitative reasoning. In order to complete the curriculum below in two years, a student must be qualified to enroll in MATH 131 during the first semester of the freshman year; this normally requires four years of high school mathematics and good mathematics aptitude.

**Recommended course sequence**
- MATH 131, 232, 233 and 332 (16)
- CHEM 125, 127 and 128 or 135, 137 and 138 (10)
- PHYS 211, 212, 301 and 313 (14)
- CS 101 (3)
- CS 205 (3)
- DESN 104 (3)
- ENG 112 (3)
- Electives

### Preparation for Mortuary Science
503 Life Sciences Building, 372-8361

The Board of Embalmers and Funeral Directors of Ohio requires a minimum of 60 semester hours of general education to be eligible to register with the board prior to entering a college of mortuary science. At least 30 hours must be in the following subject areas, with a minimum hourly distribution of English (8 hours), science (6 hours), social science (8 hours), fine or applied arts (6 hours). In addition, 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 60-hour minimum requirement to enter. For more information, write to the American Board of Funeral Service Education, 14 Crestwood Drive, Cumberland, ME 04021.

### Preparation for Occupational Therapy
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 109 and 110 (4)
- ENG 112 (3)
- TECH 313 and 457 (6)
- MATH 115 (3)
- MRA 301 (2)
- PHYS 201 (5)
- POLS 201 (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, 127, 128, 341 and 342 (20)
- PHYS 201 and 202 (10)
- BIOL 204 and 205 (10)
- BIOL 313 (4)
- ENG 112 (3)
- MATH 130 or 128 or 129 (by placement) and 131 (8)
- PSYC 201 (4)
- 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 pharmacy may be obtained from the American Association of Colleges of Pharmacy, 4630 Montgomery Ave., Suite 201, Bethesda, MD 20014.

**Recommended course sequence (33 hours)**
BIOL 204 and 205 (10)
ENG 112 (3)
MATH 130 or 128 or 129 (by placement) and 131 (8)
PEG 100 (2)
Electives chosen from social sciences, literature and philosophy
CHEM 125, 127 and 128 (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 preveterinary study are necessary. The two-year preveterinary medical program which follows meets the requirements of the College of Veterinary Medicine at Ohio State University. Students should obtain information as early as possible about the requirements of the school where they plan to apply. A list of accredited colleges of veterinary medicine in the United States can be obtained from the American Veterinary Medical Association, 900 N. Meacham Rd., Schaumberg, IL 60172.

**Recommended course sequence (62 hours)**
BIOL 204 and 205 (10)
BIOL 313 (4)
BIOL 350 (3)
ENG 112 (3)
PEG 100 (2)
CHEM 125, 127 and 128 or CHEM 135, 137 and 138 (10)
CHEM 341 and 342 (10)
CHEM 308 or 445 (3)
MATH 130 (3) or MATH 128 (5) (by placement)
PHYS 201 and 202 (10)
Electives selected to meet requirements of the college of veterinary medicine to be entered.

## Combined Curricula

**Arts-Education Curriculum**
205 Administration Building, 372-2015

The student who desires to take an arts and sciences degree to qualify for certification to teach in the public schools may take work in education after graduation or qualify for the combined degree program outlined here. On the basis of the accumulative 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 Bachelor of Arts or Bachelor of Science degree from the College of Arts and Sciences and the Bachelor of Science in Education degree from the College of Education and 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; and
3. complete at least 32 hours minimum of credit beyond the hours required for a single degree major.

**Certification to Teach in the Public Schools**
365 Education Building, 372-7372

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 Baccalaureate-Master's Program in Chemistry**
110 Hayes Hall, 372-2031 or
205 Administration Building, 372-2015

The combined baccalaureate-master's program in chemistry offers the well-qualified student the opportunity to complete the Bachelor of Science degree in three years and the Master of Science degree at the end of the fourth. By completing the two degrees in four years, the student may become better prepared to earn the Ph.D. degree because of the more concentrated background. In addition, a preprofessional student may elect either to complete the three-year bachelor of science program and go directly to professional school or to continue on to earn the master of science degree to prepare for a research-oriented career.

The program is structured on a schedule of four years, including summers. Courses should be carefully chosen so that major and group requirements will be completed on time.

*First year*
A first-year student will take two semesters each of chemistry and calculus, will complete the English requirement and take social science and/or humanities courses. In the

summer session the student will take either eight hours of German (or Russian) or three hours of quantitative analysis, or both.

*Second year*
A second-year student completes two semesters of physics and two semesters of organic chemistry and finishes the requirements in social sciences and humanities 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, kinetics, quantum mechanics, reaction mechanisms, inorganic chemistry and atomic and molecular structure are taken. During the fourth year, the student may become eligible for a stipend as well as tuition waivers for assisting in one or more undergraduate laboratories.

In the final summer, the student would normally be expected to complete a formal thesis as part of the master of science program (plan I). Under certain circumstances, however, a student may, by early consultation with an academic adviser, elect the nonthesis option (plan II) and still complete the program within the four-year period.

This program also offers students the option of studying off campus for a semester in a governmental or industrial laboratory, which would likely be done during the summer between the third and fourth years.

**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

## BACHELOR OF FINE 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 5, include the completion of:

1. general education requirements;
2. 48 hours in the art core;
3. 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, glass, graphic design, jewelry/metalsmithing, painting, photography, printmaking or sculpture.

b. 9-hour art minor, 12 hours of support courses in art, and senior project (3) for studio majors; 21 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 page7.)

**Group II: Foreign languages and cultures**
A 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. 00) 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 III: Science, mathematics, computer science**
Each 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 culture studies, ethnic studies, music, philosophy, popular culture, radio-television-film, theatre 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

116 Fine Arts Building, 372-2786

The School of Art offers studio majors in the areas of two-dimensional studies, three-dimensional studies and design studies. Each major requires completion of the art core, a 15-hour 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, 326, 425, 425, 426
*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, 466
*Glass*: ART 267, 315, 415, 415, elective
*Jewelry/Metalsmithing*: ART 302, 321, 322, 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)

**Senior Seminar**
ARTD 414 (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.

## 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; 14 hours of ARTE 492 and/or 497
SOC 101, PSYC 201, PHIL 204, a POPC elective, EDFI 302, 402 and 408, EDFI/EDCI 202, EDSE 311 or ARTE 482, IPCO 102

## Related Degree Programs

The School of Art sponsors Bachelor of Arts programs in art history and art through the College of Arts and Sciences. The school also offers a Bachelor of Science degree in visual arts education in conjunction with the College of Education and 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 coursework.

# 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 communcation 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 society; 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-television-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.

A minor in broadcast meterology is available to journalism and radio-television-film majors. Students take 21 hours consisting of:

GEOG 125, 213, 303, 400, 404 (15)
GEOG 122 or 350 (3)
GEOG 405 or 460 or 490 (3)

For more information contact the geography department, 305 Hanna Hall, 372-2925.

## 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 inlcude a student magazine, *Miscellany*, and T*he 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 station WBGU-TV, and closed-circuit instructional television production and distribution facilities.

The center's staff of 30 full-time professional broadcasters is assisted by graduate assistants, doctoral fellows and more than 50 undergraduate employees.

WBGU-TV, a regional public television station serving northwest Ohio, broadcasts instructional television programs to elementary and secondary classrooms during the day and cultural and public affairs 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 materials used by academic departments. A campus-wide dual television cable system 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 non-commercial radio station is operated by stduent volunteers who work with a faculty adviser.

Carrier-current WFAL (120 West Hall, 372-2195) is a student-operated commercial AM radio station broadcasting to residence halls on campus. The station provides communication to and among students while offering commercial programming designed to meet students' interests. The station is heard in the residence halls on 680 AM.

Both WBGU and WFAL are organized and operated according to professional radio station practices and provide students with a wide range of experiences including on-air announcing, news and sports, broadcast sales and promotion, writing and production, audience research and station management.

Students interested in electronic journalism may participate in the Bowling Green Radio News Organization, which supplies news, sports, features and documentaries for the campus radio stations, WFAL-AM and WBGU-FM. They may also participate in the feature and documentary productions of WBGU-TV.

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, 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 and classrooms dedicated to the teaching of film. The lower floor contains still photography developing labs, printing labs and color labs, and the student yearbook. It also contains super 8 and 16mm motion picture labs. The first floor houses two radio stations, a complete television studio, video editing facilities and a property storage area. The second floor contains modern writing laboratories, three computer laboratories, a broadcast studio, a student-operated newspaper, an audio-visual classroom, numerous newspaper and magazine layout and paste-up areas and a lounge. The mass communication faculty is housed on the third floor, and that floor also contains several classrooms and a reading room with reference books and periodicals. Modern typesetting, broadcasting, photography, film, audio and video equipment is provided in the various laboratories.

Laboratory fees are charged in many of the skills courses utilizing equipment.

A field practice (internship) provides majors with professional training and experience on the staff of a daily or weekly newspaper, magazine, radio or television station, cable television system, college news bureau or public relations department of a business or governmental agency.

## Student Organizations

The school has chapters of six national organizations dedicated to professional interest in mass communication fields: Society of Professional Journalists, a society of journalists open to students wishing a professional association; Women In Communications, Inc., an organization dedicated to the professional advancement of women working in the media; Public Relations Student Society of America, an organization affiliated with the national Public Relations Society of America; the International Association of Business Communicators, an association for those employed in communication roles in the business world; the International Television Association, an organization of non-broadcast video practitioners, and a student affiliate of Radio/Television News Directors Association.

The Department of Journalism also has a chapter of Kappa Tau Alpha, the national journalism honorary society.

## School Requirements

All majors are required to seek program counseling at least once per semester with an academic adviser in the school. The school requires each major to have a senior audit of his/her program before making application for graduation.

Any change in a student's program requirements or course prerequisites must have approval of the director of the School of 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 5.

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 250 (Great Ideas), English literature and philosophy; 6 hours of computation and mathematics including computer science and a course in either college mathematics, statistics or accounting; and a 3-hour course in speaking and listening. Courses fulfilling the 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 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 foreign language and culture 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 117, 118, 201, 202, 217, 218, 231, 331 and/or GERM 260, 315, 316; or

Completion of CHIN 101, 102, 201, 202; or
Completion of JAPN 101, 102, 201, 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312, 313

*Romance Languages (French, Italian, Latin, Spanish)*
**Option I**
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 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 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, 11 or 12 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 Non-majors.

## Core courses in journalism required of all majors

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

## Broadcast journalism

(18 hours)
RTVF (3)
JOUR 330, 331, 430 (9)
JOUR electives (6)
**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

(18 hours)
JOUR 303, 304, 404 (9)
JOUR electives (9)

## News-editorial

(18 hours)
JOUR 302, 311, 312 (9)
JOUR electives (9)

## Photojournalism

(18 hours)
JOUR 206, 307 (6)
JOUR 302 or 303 (3)
JOUR electives (9)
**Note**: JOUR 407 and JOUR 305 are recommended as electives.

## Public relations

(18 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 (9)
**Note**: Two of the above three business courses may be applied to certain minors, in consultation with the student'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 intergroup 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 a journalism major 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 coursework consisting of general education requirements including ENG 112 and JOUR 103.

2. earn an overall grade point average of 2.7 in the abovementioned coursework. The coursework 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. 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.

5. If transferring into the BGSU journalism program, have a 2.5 grade point average in both journalism and overall coursework 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 coursework in journalism will be accepted for transfer from junior colleges. No more than 15 semester hours of coursework in journalism will be accepted for transfer from any four-year institution.
**NOTE**: Students seeking entry into JOUR 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 the field of journalism/mass communication. Students 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. 5:

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 page 7.) IPCO 102, THEA 202 and IPCO 201 are also required.

**Group II: Foreign languages and cultures**
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 foreign language and culture 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 117, 118, 201, 217, 218, 231, 331 and/or GERM 260, 315, 316; or
Completion of CHIN 101, 102, 201, 202; or
Completion of JAPN 101, 102, 201, 202; or
Completion of RUSN 101 and 102 plus a minimum of six additional hours from RUSN 100, 201, 202, 215, 216, 303, 317, 319, 331 and/or 311, 312, 313.

*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 complete 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 leeast 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 Handb

**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. Students may count one course from their specialized program/support field in this group as appropriate. 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 103 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 suppor field must make an argument in writing to his or her adviser. The support field must be declared in writing by the end of the student's junior year.

**Matriculation into Radio-Television-Film Sequences**

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

1. complete at least 30 hours of coursework consisting of general education requirements and RTVF 103 and 255.

2. earn an overall grade point average in the above-mentioned general education coursework of at least 2.5, and earn at least a 2.0 in both RTVF 103 and 255.

To remain a radio-television-film major, a student must receive a grade of C or better in all RTVF coursework. (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-television-film and overall coursework. No more than 12 semester hours of coursework in radio-television-film will be accepted for transfer from junior colleges. No more than 15 semester hours of coursework in radio-television-film will be accepted for transfer from any four-year institution.

***Major (33-35 hours)***

*Part I. All majors are required to take five core courses (15 hours):*

RTVF 103, 255, 360, 366 and 460

*Part II. All majors are required to take one course in <u>each</u> radio, television and film category to be selected from the lists below (3 courses; 9-11 hours);*

*Radio Courses*
RTVF 262, 462
*Television Courses*
RTVF 263, 463, 350
*Film Courses*
RTVF 261, 264, 270

*Part III. All majors are required to take <u>three</u> additional electives from RTVF courses numbered from 261 to 469. These electives are in addition to courses already applied toward satisfying Part II course requirements. The three courses should have an area of focus (e.g., radio, television, film, management, programming, new technology, writing, etc.) and must be approved by a faculty adviser.*

# College of Business Administration

Fred E. Williams, Ph.D., Dean, 371 Business Administration Building, 372-2747
Ronald V. Hartley, Ph.D., Associate Dean, 369 Business Administration Building, 372-2488
James A. Sullivan, Ph.D., Associate Dean, 371 Business Administration Building, 372-2747
Sarah A. Bates, M.B.A., Director, Program Advisement, 371 Business Administration Building, 372-2747
George S. Howick, B.S., Director, Management Center, 367 Business Administration Building, 372-2807
Charles R. Johnson Jr. , M.B.A., Director, Graduate Studies in Business, 369 Business Administration Building, 372-2488
Department of Accounting and Management Information Systems, Park E. Leathers, Ph.D., Chair, 332 Business Administration Building, 372-2767
Department of Applied Statistics and Operations Research, Wei Shih, 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
Department of Economics, J. David Reed, Ph.D., Chair, 3001 Business Administration Building, 372-2646
Department of Finance, Paul A. Mueller, Ph.D., Chair, 201 Business Administration Building, 372-2520
Department of Legal Studies, Donald Boren, J.D., Chair, 264 Business Administration Building, 372-2376
Department of Management, James M. McFillen, D.B.A., 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. Alan E. Rohrs, M.B.A., Chair, 164 Memorial Hall, 372-2176
Department of Military Science, Lt. Col. Ronald L. Hover, M.Ed., Chair, 151 Memorial Hall, 372-2476
Health Care Administration, Donald Boren, J.D., Director, 267 Business Administration Building, 372-8023
Hospitality Management Program, Melissa Bandy, M.B.A., Interim Director, 367 Business Administration Building, 372-8713
International Business Program, Charles Chittle, Ph.D., Director, 312 Business Administration Building, 372-8180

## 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 lifelor 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 12). 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
  - Office administration
  - Operations research
  - Production and operations management
  - Public and institutional administration
  - Purchasing and materials management
  - 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 five-week summer session at a business school in Nantes, France. Courses are taught in English and carry up to nine hours credit. Special courses in the French language are optional. The program is contingent upon enrollments. See page 15 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 unfulfilled graduation requirements are provided to all students each semester in which they are enrolled.

# BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

The curriculum leading to the Bachelor of Science in Business Administration (BSBA) degree consists of two phases. The first phase, completed in the freshman and sophomore years, consists of liberal arts, general education and preprofessional courses. These courses provide the foundation for the second phase, the professional core and specialization courses completed in the junior and senior years.

### Admission to the BSBA Program

Students who wish to pursue the BSBA degree enter the college as pre-business students and retain that classification until they are admitted to the BSBA program. BSBA admission, which should occur by the end of the sophomore year, requires completion of the eight preprofessional core courses (ACCT 221-222, BA 203, ECON 202-203, MIS 200, and STAT 211-212) with a minimum grade point average of 2.25 in these eight courses.

Pre-business students are expected to meet BSBA admission requirements before enrolling in upper division business courses. Those who do not meet BSBA admission standards by the end of the sophomore year (completion of 60 semester hours applicable to the degree) are placed on conditional standing for a maximum of one semester, to complete requirements for BSBA admission.

Pre-business students on conditional standing may take upper division business courses, subject to normal prerequisites. Students who do not meet BSBA admission requirements after the conditional semester are classified as undecided and may not register for upper division business courses until they meet BSBA admission standards. In cases of extreme hardship, extension of the conditional semester will be considered through the regular College of Business Administration appeal process.

### Completion of the BSBA Program

After gaining admission to the BSBA program, a candidate for the degree of Bachelor of Science in Business Administration must complete the general requirements for graduation listed on page 5 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 non-business

electives are required. Additional hours will be required for graduation if ENG 112 is not completed within the first 60 hours. See page 8.

### 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 5 for exemptions to this general University requirement.

## College Requirements
### Mathematics
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 two courses and a minimum of five 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 one course must be from the natural sciences. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

### Social and Behavioral Sciences
Each student is required to complete two courses and a minimum of five 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 two courses and a minimum of five hours of humanities electives. A list of approved courses satisfying these requirements is available in the College of Business Administration office.

### Cultural Diversity in the United States
Each student is required to complete one course from the area of cultural diversity in the United States. A list of approved courses satisfying this requirement is available in the College of Business Administration office.

### Foreign Languages and Cultures
Each student is required to complete one course from the area of foreign languages and cultures. A list of approved courses satisfying this requirement is available in the College of Business Administration office.

## Non-business Electives
Each student is required to complete four to eleven 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. BSBA admission is an additional prerequisite for BA 405. BA 405 must be taken at BGSU. No transfer credit is accepted by the College of Business Administration for BA 405.

### Areas of Specialization
Each student must complete the requirements for one area of specialization. Requirements for these areas of specialization are listed on the following pages.

### 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 [illegible] 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 Objectives-Accounting Specialization**

Accountants aid society by providing information that promotes optimal allocation and use of limited resources. Accordingly, one objective of the program is to introduce students to the institutional framework of business and society which accounting serves. Students also are educated about financial and operating decision-making; the goals, conflicts in goals, and constraints on decision-makers; and the information needed to support decision-making. Further objectives are (1) to aid the student in becoming a well-rounded individual by incorporating into the program courses in science and mathematics, social studies, and the humanities; and (2) to promote awareness of the need for continuing intellectual growth and adaptability to a dynamic environment. In general, the program is designed to enhance conceptual and analytical understanding, to provide exercises in communications skills, to foster a work ethic among 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 field—auditing, 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 total-career emphasis, students are expected to be motivated and well-qualified. They may expect upper-level instruction from full-time professors who are regularly involved with course development, practical accounting issues and problems, and current professional and academic research in 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 pre-accounting program within the College of Business Administration. To enroll in upper-level accounting classes (with an expectation of an accounting specialization), a student must:

1. attain an all-University accumulative grade point average of at least 2.6.
2. complete a minimum of 51 semester hours of University credit.
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 are not permitted to take ECON 304 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 management, word and data processing, and office organization and management. Graduates of this 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*, 204
*Second year*
BUSE 304, 305
*Third year*
BUSE 306, BUSE 335, MGMT 361
*Fourth year*
BUSE 455, MGMT 454 or MGMT 456 or MGMT 463

*BUSE 111 is a prerequisite for BUSE 204. However, if a student has one or more years of typing credit, BUSE 111 is waived.

## Business Pre-law

264 Business Administration Building, 372-2376

The program's intent is to provide the student with a broad foundation in business with a major concentration designed to enhance one's communication skills and critical thinking abilities. Emphasis on writing, research and a legal approach to problem solving provide the framework for the specialization.

This combination of experiences should enrich a student's understanding of the interaction of business, government and society. Such experience would be appropriate for law school candidates or any student seeking a firm foundation in business and economic concepts who does not desire a more narrow area of specialization.

Specific requirements for the area of specialization in business pre-law are as follows:

*Second year*
ENG 207
*Third year*
LEGS 305
*Fourth year*
LEGS 421 or 410, 490, and three additional hours in LEGS at the 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.

## Economics

3002 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 concentration in economics; examples of possible 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 ECON 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: 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 available through the College of Arts and Sciences 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. Areas of emphasis included within this curriculum are risk analysis and management, financial markets and institutions management, business financial analysis and management, and investment analysis and management. Career 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 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 300-400 level courses in ACCT, BA, BUSE, ECON, FIN, LEGS, MGMT, MIS, MKT, OR and/or STAT with no more than nine hours in any one area. The courses taken for the specialization in general business must be selected from business courses required by other BSBA specializations. A list of approved 300-400 level courses for the general business 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 dual area of specialization.

## Health Care Administration

264 Business Administration Building, 372-2376

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 420, BA 429*,

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.)

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 [illegible]r is a multi-billion dollar industry, [illegible]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 coursework, 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 multicultural-worldwide dimensions requirement.

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

*Third year*
[illegible]310
*[illegible]th year*
BA 480, F&N 331, MGMT 452 and MKT 405
Either LEGS 450 or F&N 437

Students are required to complete 800 hours of practical work experience. Contact the program office for details.

## Human Resource Management

3018 Business Administration Building, 372-2946

This curriculum prepares a student for a career in the field of human resource management, in the key staff positions of compensation, staffing-employment, training and organization development, or for a position in line managment. The human resource management specialization courses (six are required) develop advanced knowledge and skill in the areas of organization design, human resource planning, staffing, compensation, training and development, employee involvement programs, performance improvement programs and organization development and the management of change. Electives (two are required) are used to strengthen the student's background through courses in psychology, economics, law and/or applied field experience in organization development.

Students are encouraged to enroll in the human resource management program as freshmen. However, to be admitted officially to the specialization, students must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5.

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

*Third year*
MGMT 361
*Fourth year*
MGMT 454, 455, 456, 463, 465 and two electives
Electives are selected from: ECON 423, FIN 426, LEGS 419, LEGS 429, MGMT 468, PSYC 354, PSYC 452, PSYC 454 and PSYC 455 (other relevant courses may be substitued as electives with prior written approval of the student's academic adviser.)

See your academic adviser for more detailed information about requirements.

## Industrial and Labor Relations

3004D Business Administration Building, 372-6868/372-2646

This is an interdisciplinary program designed to prepare a student for work in industrial relations departments in corporations, government agencies and other organizations. This program will provide the student with a series of courses in the three areas of personnel, labor relations and the legal aspects of industrial relations.

Specific requirements for an area of specialization in industrial and labor relations are:

*Third year*
ECON 321
MGMT 361
*Fourth year*
LEGS 419
Three courses chosen from the following, but no more than two courses in any one field: ECON 323, 422, 423; LEGS 414, 429; MGMT 454, 455, 456, 463, 465

## International Business

312 Business Administration Building, 372-8180/372-2646

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.

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 Information Systems

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. All applicants must satisfy the following criteria in order to be considered for admission.

1. Be admitted to the BSBA degree program.
2. Achieve an overall GPA of at least 2.5 for all courses (taken at Bowling Green State University and transferred to Bowling Green State University).
3. Earn a grade of C or better in MIS 200, MIS 360 and CS 260, with at least a B in any one of these three courses.

The specific requirements for an area of specialization in management information systems are listed below. A grade of C or better must be earned in each course.

*Second year*
CS 260 or (CS 205)
*Third year*
CS 360, MIS 360, 370
*Fourth year*
MIS 412, 421, 471, 479

## Marketing

234 Business Administration Building, 372-2041

Marketing consists of a wide spectrum of activities that involve the initial conception of a product as service through the selling and post-sale activities involved as products and services move 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, 440, 442 and 450. Students who have designated 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. An interest in marketing research would suggest MKT 421 as one of the marketing electives. Or, for those students seeking to broaden further their background in marketing, the three electives may be chosen from diverse areas. The possibilities are numerous. Accordingly, each student should meet and maintain contact with his or her marketing faculty adviser throughout the program of study.

## Office Administration

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 managment, word processing, data processing, communication and decision making.

The specific requirements for an area of specialization in office administration are as follows:

*Second year*
BUSE 204, 207, 210
*Third year*
BUSE 304, 311 or 321, 314
*Fourth year*
BUSE 305, 306, 335, 401

A student with insufficient or no preparation in shorthand or typewriting must elect the beginning course.

## Operations Research

344 Business Administration Buildin, 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 help solve business, social and other problems. 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.

## Production and Operations Management

3018 Business Administration Building, 372-2946

Production and operations management is concerned with the theory and practice of making products economically in both manufacturing and service firms. In a typical organization, this function is responsible for designing, operating and controlling the productive system. Production and operations managers are responsible for making strategic and tactical decisions that determine quality levels, cost levels and the timely availability of goods and services.

Students are encouraged to enroll in the production and operations management program as freshmen. However, to be admitted officially to the specialization, the student must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5.

The specific requirements for an area of specialization in production and operations management are as follows:

*Fourth year*
MGMT 441, 442, 445, 449 and one of the following pairs of courses:
MGMT 330 and 430
or

MGMT 361 and 456
or
two courses (6 hours), approved in advance by the academic adviser, from any **one** of the following areas: ACCT, CS, MFG, MIS, OR, or STAT.

See your academic adviser for more detailed information about requirements.

## Public and Institutional Administration

323 Business Administration Building, 372-2688/372-2646

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 recommended 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 and/or 332
300 or higher level course(s) selected from courses in the optional study areas or approved by adviser from courses in business, economics or political science.

**Optional study areas (3-6 hours)**
Each student will select at least one course from the following options to complete the 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
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

## Purchasing and Materials Management

3018 Business Administration Building, 372-2946

This curriculum is for students who are interested in the field of purchasing and materials management. The course of study includes an integrated approach to the movement of goods from the supplier to the final customer. The purchasing department in a typical organization is responsible for securing necessary materials, supplies, capital equipment and services at the best possible terms. The materials management function typically coordinates the major activities contributing to material costs and availability including purchasing, production control and physical distribution.

Students are encouraged to enroll in the purchasing and materials management program as freshmen. However, to be admitted officially to the specialization, the student must have been admitted to the BSBA program and have an accumulative grade point average of at least 2.5.

The specific requirements for an area of specialization in purchasing and materials management are as follows:

*Third and fourth years*
MGMT 330, 430, 439, 441, 442 and 445

See your academic adviser for more detailed information about requirements.

## 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 discipline that utilizes a quantitative component.

Statistics and mathematics requirements 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 160.

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

# BACHELOR OF SCIENCE IN ECONOMICS

3002 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 disciplines. 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 adaptable structure, to provide the student with the necessary training for employment in a wide variety of occupations in business or government in which the skills of the economist are especially useful, or for continued study in professional schools or at the graduate level in economics or business.

A candidate for the bachelor of science in economics must complete the general requirements for graduation listed on page 5 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 electives are required. Additional hours will be required for graduation if ENG 112 is not completed within the first 60 hours. See page 8. In addition all economics majors must satisfy a written and oral communications requirement in economics. Certification by an economics faculty member that the requirement has been met will be required. Details are available in the economics department office.

### 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 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 Department of Economics 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. An approved list of courses is available in the Department of Economics office.

### Foreign Languages and Cultures

Each student is required to complete one course from the area of foreign languages and cultures. A list of approved courses satisfying this requirement is available in the Department of Economics office.

### Cultural Diversity in the United States

Each student is required to complete one course from the area of cultural diversity in the United States. A list of approved courses satisfying this requirement is available in the Department of Economics Office.

## Major 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 18 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 office 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 most courses satisfactorily completed toward the four-year degree program in office administration.

A candidate for an associate in applied business degree must complete the general requirements listed on page 8 and complete, at Bowling Green immediately before graduation, at least 30 of the 62 hours required.

*First year (29 hours)*

ENG 111 and/or 112 (3-6)
PEG 100 (2)
BUSE 101, 111, 204, 205, 206, 210, 213, 240 (18)*
Electives (3-6)

*Second year (33 hours)*

BUSE 240, 304, 305, 306, 311, 314, 321, 335, 401 (18)
ACCT 220 or 221 (3)
ECON 200 or 202 (3)
LEGS 301 (3)
BA 203 (3)
Electives (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 311. 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 office 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 ADMINISTRATION-EDUCATION

242 Business Administration Building, 372-2901

A candidate who has met all the requirements for the degree of bache of science in business administration also may qualify for the degree of bachelor of science in education and for an Ohio teaching certificate by completing a combined curriculum including the general and specific graduation requirements for each college.

The student who desires to pursue the combined program must:

1. Petition the board of appeals of the College of Education and 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 major in comprehensive business education or the marketing education major.
4. Complete the appropriate professional education courses, meet the general education requirements of the College of Education and 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 Depart ment of Business Education in planni the program.

# College of Education and Allied Professions

## Office of the Dean

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

## Office of Field Experiences

Robert Reed, Ed.D., director of field experience, 318 Education Building, 372-7389
Peggy Russell, B.S. coordinator of student teaching, 318 Education Building, 372-7389

## Office of Undergraduate and Graduate Student Services

Larry 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, Sally Sakola, M.A., acting director, 220 Memorial Hall, 372-2334
Department of Applied Human Ecology, Elsa McMullen, Ph.D., chair, 202 Johnston Hall, 372-2026
Department of Educational Administration and Supervision, Bill Reynolds, Ed.D., interim 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 Higher Education and Student Affairs, Carney Strange, Ph.D., chair, 332 Education Building, 372-7388
Department of Special Education, Richard Wilson, Ph.D., chair, 451 Education Building, 372-7358

## Aims and Purposes

The College of Education and Allied Professions has two primary purposes: to provide coursework that contributes to the general education program of the University and to provide programs that lead to careers in the fields of education, sport management, recreation, 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 field-based 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 either of these degrees, a candidate must complete the requirements listed on page 5, complete 42 hours of general education as indicated on page 86, 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.

- Aquatics (minor only)
- Art (non-certifiable minor also available)
- Athletic coaching (minor only)
- Athletic training
- Bookkeeping and basic business (minor only)
- Business education
- Child and family development
- Child and family community services
- 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 education (minor also available)
- Industrial technology education (minor also available)
- Latin
- Marketing education
- Music (minor also available)
- Philosophy (minor only)
- Physical education (three programs available) (two minors also available)
- Reading language arts (minor only)
- Recreation (three options available) (minor also available)
- Restaurant and institutional food service management
- Russian
- Sales (minor only)
- Secondary education
  - American studies (see social 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 (minor also available)
  - 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; six options available)
Stenography and typing (minor only)

**Endorsements/Validations Leading to Certification Offered at the Undergraduate Level in the College of Education and Allied Professions**

Adapted physical education
Driver education
Elementary school physical education
Pre-kindergarten
School nurse

## College Admission

Students accepted by Bowling Green State University may enroll in the College 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 94-96 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: appeals for reinstatement after being suspended or dismissed for academic reasons, appeals regarding the denial of admission to either the college or a program, and appeals to drop and/or change classes to or from S/U beyond the specified deadline. The dean of the college reserves the right 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 student is assigned to a faculty adviser. Faculty advisers assist their advisees in career-decision making, selecting appropriate classes, checking progress toward a degree and long-range program planning.

To supplement faculty advising, the college maintains a staff of program counselors in the Program Advisement and Teacher Certification Office, 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 certification requirements. Program revision, 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 usually results in one or more of the seven types of Ohio certificates described below. The only times that certification does not result is 1) when a student does not successfully complete the state-mandated competency examination, 2) when a student elects to graduate on Planned Program (see page 85), or 3) when a student is following a set of degree requirements that no longer meets Ohio teacher

certification standards (Since the State [redacted]rtment of Education has the [redacted]ority to change certification requirements at any time, students may be required to complete additional requirements for certification.).

All candidates seeking Ohio teacher certification must complete the Application(s) for Certification. These applications and directions for completing them are available at the student teaching meeting which occurs the day before student teaching begins or from the Program Advisement and Teacher Certification Office. Completed 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 [redacted]elopment major, possessing a 2.5 [redacted]umulative grade point average, and successfully completing the state-prescribed examination is eligible for a pre-kindergarten certificate.

### Elementary/Kindergarten Primary

A graduate completing the elementary education major, possessing a 2.5 accumulative 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 [redacted]cessfully completing the state-[redacted]cribed 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, 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.

### 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. To accommodate such students, the college has a plan whereby students admitted to a program 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, College of Musical Arts or College of Technology may take work in that college after graduation to complete degree requirements or qualify for the dual degree program prior to graduation. Students desiring a dual degree must:

1. secure permission of the deans of both colleges 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 coursework 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 before the junior year. (See page 8).

B. Each student must complete IPCO 102 (3).

C. Each student must complete two physical education activities courses (PEG 100). (See page 5).

### II. Natural Science/ Mathematics

Minimum total: 9 semester hours (three courses)

A. Each student must complete one of the following natural science courses: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109/110, 117/118, 125, 127/128, 135, 137/138; GEOG 125; GEOL 100, 104, 105, 205, 322; PHYS 101, 201, 202, 211, 212.

B. Each student must also complete two more courses from the areas of natural science or mathematics or computer science. (NOTE: Teacher education students **must** include at least one college-credit mathematics course in their programs; some programs require more than one mathematics course.) 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. Acceptable mathematics courses are 115, 116, 120, 126, 128, 130, 131, 135, 232, 241 and 242 (elementary and special education majors only), 247. Acceptable computer science courses are 100 and 101.

### III. Social and Behavioral Sciences

Minimum total: 9 semester hours (three courses)

A. Each student must complete PSYC 201 (4).

B. Each student must complete two additional courses selected from: A&S 250; ECON 100, 200, 202, 203; ENVS 101, 301; GEOG 121, 122, 225, 230, 325, 331, 343, 344, 346, 349, 426, 452; HIST 151, 152, 180, 205, 206, 310, 311, 370, 382, 411, 429, 470; POLS 201, 271, 272, 301, 335, 351, 361, 372, 402, 403; SOC 101, 202, 231, 361; TECH 302; any honors social science courses.

### IV. Humanities and Arts

Minimum total: 5 semester hours (two courses)

A. Each student must complete one of the following literature courses: ENG 150, 200, 203, 261, 262, 264, 265, 266, 267, 269; ETHN 220; GERM 260.

B. Each student must also complete one of the following courses: ACS 200, 230, 300; ART 101; ARTH 145, 146; A&S 250; LAT 141, 142; MUCH 101, 125, 221; PHIL 101, 102, 103, 204, 211, 212, 230, 325; POPC 160, 165, 220; RTVF 261; THEA 141, 202, 347, 348.

### V. Cultural Studies

Minimum total: 2-3 semester hours (one course)

A. Each student must complete one of the following courses: ENG 269; ETHN 220; FREN 284; GERM 117, 118, 217, 218, 260; SOC 231; GEOG 121, 122, 230, 325, 331, 343, 344, 346, 349, 426, 452; POLS 271, 272, 351, 361, 372; HIST 151, 152, 180, 310, 311, 370, 382, 411, 470; MUCH 125, 233, 234, 235; GERO 405; ARAB/CHIN/JAPN/GERM/FREN/ITAL/LAT/SPAN/RUSN 101, 102, 201, 202; FREN/SPAN 211, 212; Greek (offered under A&S 100).

### VI. Cultural Diversity in the United States

Minimum total: 3 semester hours (one course)

A. Each student must also select one of the following courses: ACS 250; EDFI 408; ENG D200; ETHN 101, 120, 306, 410; GEOG 337; GERO 301; HDFS 107, 408; HIST 319; MUCH 237, 431; PSYC 324; RTVF 270; SOC 316; WS 200.

## Professional Requirements

All students pursuing programs leading to teaching certification must complete a sequence of courses in professional education. This coursework is integrated with directed observation and participation in school settings (field experiences) and is accompanied by on-campus clinical experiences. Professional education coursework required in each of the 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**: HDFS 322, 423, 491; EDCI 202 or EDFI 202; EDFI 302, 408, 429; EDAS 409; EDSE 421.

**Developmentally handicapped**: EDSE 492 or 497; EDCI 202 or EDFI 202; EDFI 302; EDFI 402 or EDFI 429, and 408; EDAS 409; and EDSE 431, 437, 442 and 457.

**Elementary education**: EDCI 492; EDCI 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 EDFI 202; LEM 301; EDSE 311; EDFI 302, 402 and 408; EDAS 409; and EDCI 373 and EDCI 429.

**Health**: HED 497; HED 216 or EDCI 202 or EDFI 202; EDSE 311; EDCI 360; EDFI 3 402 and 408; EDAS 409; and HED 348, 3[illegible], 409 and 481.

**Hearing impaired**: EDSE 492 or 497; EDCI 202 or EDFI 202; EDFI 302, 402 or 429, and 408; EDAS 409; EDSE 431, 442, 451, 457; EDCI 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 EDFI 202; VCT 203; EDFI 302, 402 and 408; EDAS 409; and TE 252, 352, 447, 449 and 462.

**Marketing education**: BUSE 497; EDCI 202 or EDFI 202; EDFI 302, 402, 408; EDSE 311; EDCI 360; BUSE 314, 364, 461, 462, 463 or 465; EDAS 409.

**Multihandicapped**: EDSE 492 or 497; EDCI 202 or EDFI 202; EDFI 302, 402 or 429 and 408; EDAS 409; and EDSE 431, 437, 442 and 457.

**Music education**: MUED 497; EDFI 302, 402 and 408; EDAS 409; MUED 240 and 340. Music education is a major within the College of Musical Arts. See page 119 for content and general education requirements.

**Physical education, K-12 with elementary emphasis**: PEP 497; PEP 247 or EDCI 202 or EDFI 202; LEM 301 or VCT 203; EDFI 302 and 408; PEP 402; EDAS 409; and PEP 238, 241, 332, 337, 428, 433 and 438.

**Physical education, K-12 with secondary emphasis**: PEP 241, 247, 332, 362, 402, 433, 497; EDFI 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 [illegible] LEM 301; EDFI 302, 402 and 408; [illegible] 409; EDCI 370; and completion of the Secondary Professional Semester comprising the following courses: EDSE 311; EDCI 360; EDCI 497; and one of the following: EDCI 371, 372, 374, 375, 376 or 378.
**Severe behavior handicapped**: EDSE 492 or 497; EDCI 202 or EDFI 202; EDFI 302; EDFI 402 or 429; EDFI 408; EDAS 409; EDSE 431, 437, 442 and 457.
**Specific learning disabilities**: EDSE 492 or 497; EDCI 202 or EDFI 202; EDFI 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 activities under the guidance of a cooperating teacher and campus field supervisor. The student progresses from observation and directed participation to responsibility for full-time teaching. Students in physical education, music or art ordinarily teach in both elementary and secondary schools. Student teaching assignments for the student in public school music are individually planned to give proper balance or concentration in vocal or instrumental experience

The college attempts to place student teachers in the best available stations. While student preferences are taken into consideration, they cannot be met in all cases. Stations must have both college and program approval. Students are responsible for their own transportation to student teaching stations.

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

Upon completion of student teaching, students receive a copy of their student teaching evaluation report. Students should retain this copy for their records and future reference since the University does not include/retain this report/ evaluation as part of the permanent record.

## Student Teaching Eligibility Requirements

To be eligible for assignment in student teaching, the student must have:

1. Filed an application for student teaching 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. 94).
3. Been fully accepted in a certification program either as an undergraduate or baccalaureate degree holder.
4. Completed 90 hours of university credit, including:
   a. EDCI 202 or EDFI 202 or a program alternative accepted by the College with a C or better.
   b. ENG 112
   c. 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 the Program Advisement and Teacher Certification Office.
6. Earned an accumulative grade point average of 2.50 by the end of the semester prior to student teaching.

Students who are declared ineligible for student teaching have the right to appeal the decision via a letter to the Field Experience 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 Experiences, 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 School 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 coursework as well.* The coursework indicated has been approved by the College of Education and Allied Professions.

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

# American Studies

214 University Hall, 372-8110
See Social Studies, page 93.

**Other programs**
Programs in American Studies are also available through the College of Arts and Sciences

# Art

116 Fine Arts Building, 372-2786

***Major*** (meets special certification, kindergarten-twelfth grade) (53 hours)
ART 102, 103, 112, 205, 263 (15)
ARTH 145 and 146 (6)
Select two of these: ART 261; 267; 320 or 321; 466; 365 or 366; ARTD 213 (6)
Select two of these: ART 325; 371 or 373; 277; 390; ARTD 211 (6)
ART history elective (3)

ART electives (8)
ART sequence study in one area (6)
ARTH 442, 456 or 457 (3)

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, 205 (12); select one of these—ART 261, 263, 267, 320, 321, 365 (3); select one of these—ARTD 211, 213; ART 325, 371, 373, 277 (3)
ARTH 145, 146 (6)
**Other programs**
Programs in art also are offered by the College of Arts and Sciences and its School of Art.

## Astronomy
365 Education Building, 372-7372

Endorsement (leads to a strong background in astronomy, but does not lead to teacher certification) (8-9 hours)
ASTR 201 (3)
Two of these courses—ASTR 212, 305, 307, 403, 321 (5-6)
**Other programs**
Programs in astronomy also are available through the College of Arts and Sciences.

## Athletic coaching
See School of Health, Physical Education, and Recreation, page 102.

## Athletic training
See School of Health, Physical Education, and Recreation, page 104.

## Biological sciences
365 Education Building, 372-7372

*Major* (34-38 hours)
BIOL 204, 205, 301, 350, 352, 451 (21)
CHEM 117/118 or 308/309 (4)
BIOL 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, 413, 414, 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

*Major*-Comprehensive business education (60 hours)
BUSE 101, 321, 210, 204, 205, 206, 207, 240, 304, 305, 306, 335, 455 (27)
ACCT 221, BA 203, ECON 202, LEGS 301 (12)
MGMT 305, MKT 300 (6)
Select one: ACCT 222 or ECON 203 (3)
Select 12 hours from MKT 402, 410, 430, 436, 440; ECON 302, 303, 304, 311; MGMT 361; FIN 300; BUSE 307, 311, 401; CS elective (other than 100 or 130); MIS elective (other than 200) (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, sales or stenography. Students must follow the checksheet given to them; the checksheet indicates the business electives that must be selected to qualify for one or more of the additional areas of 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 (30 hours)
BUSE 240 (3)
BA 203 (3)
MKT 300, 402, 410, 430, 440 (15)
ECON 202 and MGMT 305 (6)
Approved elective in ACCT, ECON, MKT, MGMT, LEGS (3)
*Minor*-stenography and typing (23 hours)
BUSE 204, 205, 206, 210, 304, 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, 127/128 (10) or CHEM 135, 137/138 (10)
CHEM 201 (for those having taken CHEM 125, 127/128) (3)
CHEM 341 and 342 (10)
CHEM 352 (3) or CHEM 405 (3-4)
CHEM electives selected from CHEM 321, 442, 413, 463, 308/309, 406, 407, 408, 445 (6-10)
**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. 98.

## Child and Family Development
See Department of Applied Human Ecology, page 98.

## Communications
365 Education Building, 372-7372

*Major* (62-65 hours plus EDCI 420 and 349)
IPCO 102, 201, 306 and 308 (12)
ENG 201 or 205 and 206 (4)
ENG 380 (4)
IPCO 203 or 205 (3)
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 ar the two areas of concentration select in grades 9-12.

## Computer Science
365 Education Building, 372-7372

*Major* (30 hours)
CS 101, 205, 207, 208, 305, 306, 307 (21)
Two CS electives at the 400 level, excluding CS 490 (6)
PHIL 344 or SOC 320 (3)
MATH 131 or 134 and 135 (5-6)
MATH 247 or 313 (3)
MATH 222 or 322 (3)
Students with a minor or joint major in MATH need not complete the listed MATH courses.
**Other programs**
Programs in computer science are also offered through the College of Arts and Sciences.

## Dance
See School of Health, Physical Education and Recreation, p. 100.

## Developmentally Handicapped
451 Education Building, 372-7293

*Major* (meets special certification for teaching the developmentally handi-

capped child, K-12. See full admission, retention and student teaching eligibility requirements, page 00.) The following four-year plan indicates all the general education, curriculum content, specialization coursework and professional education coursework specifically required for graduation as a developmentally handicapped major. The four-year plan indicates one way the coursework 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)
PSYC 201 (4)
GEOG 121, 122 or 230 (3)
Approved general education electives (6)
HIST 151, 152, 205, 206 or 180 (3)

***Second year*** (30 hours)
IPCO 102 (3)
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 433, 437, 454, 457, 484 (15)
EDFI 402 or 429 (3)

***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)

## Dietetics

See Department of Applied Human Ecology, p. 98.

## Driver Education

See School of Health, Physical Education, and Recreation, p. 100.

## Dual Certification—Elementary and an area of Special Education

365 Education Building, 372-7372

A special dual certification program is available for students desiring certification in both elementary education and one of the following areas of special education—specific learning disabled, developmentally handicapped, multihandicapped, 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. 94 and p. 95. The following plan indicates all the general education, professional education, curriculum content, specialization and area of concentration coursework specifically required, and indicates one way the coursework can be sequenced. Because the program requires 166 semester hours, approximately 11 semesters are required for completion of the program. NOTE: The program outlined below is the dual program leading to elementary and SLD or DH or SBH certification. Students desiring MH/Elementary certification must take EDSE 440, 443, 445 and 470 instead of EDSE 447, 443, 448 and 453 during the fourth year.

***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. 97.

## 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)

All economics majors must satisfy a written and oral communicaitons requirement in economics. Certification by an economics faculty member that the requirement has been met will be required. Details are available inthe economics department office.

**Other programs**
Programs in economics also are offered through the College of Arts and Sciences and the College of Business Administration.

## Elementary Education

365 Education Building, 372-7372

**Major** (meets elementary education, certification, grades 1-8) See full admission, retention and student teaching eligibility requirements on p. 94.

The elementary program requires completion of coursework in four areas—general education, professional education, curriculum content and an area of concentration. All elementary education majors must complete specifically designated courses to fulfill the general education, 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 Education Building.

(The following four-year plan indicates all of the general education, curriculum content, and professional education coursework specifically required for graduation as an elementary education major. The four-year plan indicates one way this coursework and the area of concentration can be sequenced.)

*First year* (32 hours)
ENG 112 (3)
PEG 100 (2)
GEOG 121 or 122 or 230 (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 or SOC 101 (3)
GEOL 100, 101 or 104 (3-4)
Area of concentration (3)
*Second year* (35 hours)
EDCI/FI 202 (3)
PHYS 100, 101 or 104 (2-3)
Literature elective (3)
Cultural studies elective (3)
MATH 241 (3)
CHEM 100 or 115 (3-4)
EDFI 302 (3)
EDCI 349 (3)
MATH 242 (3)
Area of concentration (9)
*Third 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)
EDFI 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; and EDFI 342 or PSYC 303 or HDFS 321, completion of student teaching or methods field experience in a kindergarten, first, second or third grade setting 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, multihandicapped or severe behavior handicapped certification, should follow the dual certification program indicated on the preceding page.

## English

216 University Hall, 372-2576

***Major*** (38 hours beyond English 112, plus EDCI 420)
*Group I*
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 I and II before taking EDCI 371.

***Minor*** (29 hours of English beyond ENG 112 plus EDCI 420)
*Group I*
Select one: ENG 201 or (205 and 206) (4)
*Group II*
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) (21-22 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, 54, 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 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, 145-157 College Park Office Building, for additional information.

## French

365 Education Building, 372-7372

***Major*** (meets special certification in French, kindergarten-twelfth grade provided appropriate professional coursework 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: GEOG 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 coursework is also completed.) (31 hours of German beyond 202)
GERM 317, 318, 417 (9)
Select two: GERM 315, 316, 416 (6)
GERM 311 or 313 (3)

GERM 491 (Senior Project) (2)
GERM electives beyond 202 (GERM 260 and 360 may not be counted toward the major) (11)

**Other programs**
Other programs in German also are available through the College of Arts and Sciences.

## Health
See School of Health, Physical Education, and Recreation, p.1 00.

## Hearing Impaired
451 Education Building, 372-7293

***Major*** (meets special exceptional child for teaching the hearing handicapped child, K-12. See full admission, retention and student teaching eligibility requirements, p. 95. The following four-year plan indicates all of the general education, curriculum content, specialization coursework and professional education coursework specifically required for graduation as a hearing impaired major. The four-year plan indicates one way the coursework can be sequenced.)

***First year*** (32 hours)
Social science electives (6)
IOL 100 or 104 (3-4)
PEG 100 (2)
Science elective (3)
Humanities elective (3)
IPCO 102 (3)
ENG 112 (3)
PSYC 201 (4)
PEP 164 (2)
Approved literature elective (3)
***Second year*** (38 hours)
EDSE 431 and 451 (6)
CDIS 301 (4)
HED 346 (3)
MUED 248 (3)
MATH 241 (3)
EDCI 349 (3)
EDCI/FI 202 (3)
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)
ARTE 482 (3)
ENG 342 (3)
Two from EDSE 459, EDSE 460, PSYC 324 (6)
***Fourth year*** (35 hours)
EDSE 463 and 465 (6)
EDAS 409 (3)
EDSE 492/497 (6)
EDSE 457 and 467 (6)
CDIS 461 (4)
EDCI 365 (3)
PEP 433 (3)

## History
455 Education Building, 372-7407

***Major*** (33 hours)
HIST 205, 206, 480 (9)
Select one: HIST 151, 152 or 180 (3)
***History electives*** (21) Included in these 21 hours must be three 400-level courses and at least one course from each of the following groups:
Select one: HIST 301, 302, 303, 306, 307, 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, 340, 360, 381, 382, 386, 401, 411, 413, 414, 441, 442, 462, 483, 486 (3)

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

## Home Economics Education
See Department of Applied Human Ecology, p. 97.

## International Studies
455 Education Building, 372-7407

***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)
Select two: JOUR 206, 302, 303, 304, 305, 307, 311, 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 204, 205, 206 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, 322, 332, 441 (23)
MATH elective at 300/400 level, excluding 395, 414, 490, 495 (3)
MATH 339 or 403 (3)
MATH 421 or 430 (3)
MATH 402 or 405 (3)
***Minor*** (31 hours)
MATH 131, 232, 233, 332, 339 (19)
MATH 402 or 405 (3)
Three MATH electives selected from MATH 247 or any 300-400 level MATH course excluding 395, 414, 490, 495; one 400-level course must be included (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. 95. The following four-year plan indicates all of the general education, curriculum content, specialization coursework and professional education coursework specifically required for graduation as a multihandicapped major. The four-year plan indicates one way the coursework 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 Building, 372-2181

***Major*** (see College of Musical Arts, p. 119)
All prospective music minors must complete the music entrance examinations (see College of Musical Arts)
***Minor***-secondary instrumental (31-33 hours)
- MUCH 131, 132, 231 (11)
- MUCH 141, 142 (4)
- MUED 150, 151 or 154 (1-2)
- MUSP major instrument (3)
- MUSP 305 and 306 (4)
- MUED 340 (6-7)
- MUSP large ensembles (2)

***Minor***-secondary vocal (31-33 hours)
- MUCH 131, 132, 232 (10)
- MUCH 141, 142 (4)
- MUED 150, 151 or 154 (1-2)
- MUED 170, 177 or studio voice (4)
- MUSP 305, 306 (4)
- MUED 340 (6-7)
- MUSP large ensembles (2)

**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:

**Endorsement**—teaching courses in philosophy (15 hours)
- PHIL 101, 103, 470 (9)
- PHIL 102 or 204 (3)
- EDFI 408 (3)

**Endorsement**—Philosophy as a supplement to major field of study (15 hours)
- PHIL 101, 103 (6)
- EDFI 408 (3)
- PHIL electives (6)

**Other programs**
Other programs in philosophy also are offered through the College of Arts and Sciences.

## Physical Education
See School of Health, Physical Education, and Recreation, p. 101.

## Physics
365 Education Building, 372-7372

***Major*** (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 Scienc...

## Political Science
455 Education Building, 372-7407

***Major*** (30 hours)
- POLS 201, 331, 416 (9)
- Select two: POLS 345, 346, 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, 303, 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 Arts
365 Education Building, 372-7372

***Minor*** (does not lead to teacher certification) (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. 102.

## Restaurant Managemen...
See Department of Applied Human Ecology, p. 99.

## Russian
455 Education Building, 372-7372

***Major*** (meets special certification, kindergarten-twelfth grade in Russian provided appropriate professional education coursework 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, 372-7372

***Major*** (60 hours)
GEOL 104, 105 (8)
GEOG 125 or 213 (3)
CHEM 125, 127/128 OR 135, 137/138 (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 9-10 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, 127/128 OR 135, 137/138 (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 coursework 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 (EDCI 371, 372, 374, 375, 376 or 378) and student teaching EDCI 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. 95. The following four-year plan indicates all of the general education, curriculum content, professional education and specialization coursework specifically required for graduation as a severe behavior handicapped major. The four-year plan indicates one way the coursework 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
455 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.
A student desiring an American studies concentration in this major must complete/include ACS 200, 230 and 400 in the "additional social science" category; must complete ENG 266 and 267; and must complete history and either geography or political science as areas of concentration.
Students must consult an assigned social studies adviser and follow the checksheet given them. The checksheet indicates the courses appropriate for the areas of concentration. Upon graduation a student is certified to teach social studies in grades 7 and 8 and the areas of concentration selected in grades 9-12.

## Spanish
365 Education Building, 372-7372

***Major*** (meets special certification, kindergarten-twelfth grade provided appropriate professional education coursework is also completed) (31 hours beyond 202)

SPAN 351, 352, 367, 368, 371 (15)
SPAN 377 and 378 (6)
SPAN 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. 95. The following four-year plan indicates all of the general education, curriculum content, professional education and specialization coursework specifically required for graduation as a specific learning disabilities major. The four-year plan indicates one way the coursework 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 103.

## Technology Education

260 Technology Building, 372-2437;
365 Education Building, 372-7372

***Major***—Industrial Technology Education (Meets special certification, kindergarten - twelfth grade.)
***First year*** (32 hours)
ENG 112 (3)
PEG 100 (2)
IPCO 102 (3)
ENG 200 or 203 (3)
EDFI 202 or EDCI 202 (3)
DESN 104 or 204 (3)
MFG 112 (3)
TECH 101 (3)
ET 191 (3)
CONS 235 (3)
TECH 102 (3)
***Second year*** (34-35 hours)
PSYC 201 (4)
PHYS 201 or CHEM 109 & 110 (4-5)
CS 100, 101 or MIS 200 (3)
VCT 203 (3)
MATH 128 (5)
MFG 222 or 229 (3)
MFG 322 (3)
TE 252 (3)
TECH elective (3)
HUM & ART elective (3)
***Third year*** (30 hours)
Natural science elective (3)
EDFI 302 (3)
TE 462 (3)
TE 352 (3)
MFG 329 (3)
CONS 306 (3)
EDFI 402 (3)
DESN 301 or 404 (3)
TECH 302 (3)
Multicultural elective (3)
***Fourth year*** (31 hours)
Social science elective (3)
TE 497 (10)
EDAS 409 (3)
EDFI 408 (meets cultural diversity requirement) (3)
TE 449 (3)
TE 447 (3)
TECH electives (6)
***Minor***—Industrial Technology Education (meets high school certification) (36-38 hours )**

This minor in technology education is restricted to teacher education majors and practicing teachers in the following areas: comprehensive science, physics, chemistry, biology, earth science, social studies, environmental science, or computer science. Alternatively, students and practicing teachers from other areas may petition for admission through the technology education faculty. This minor leads to high school certification for industrial technology education.

TECH 101 or 102 or 302 (by advisement) (3)
DESN eelctives (by advisement) (
TE 352 (3)
TE 447 (3)
TE 449 (3)
MFG 112 (3)
MFG 222 or 229 (3)
MFG 329 (3)
ET 191 (3)
CONS 235 or 306 (3)
VCT 203 (3)

# College of Education Retention/Full Acceptance Requirements

Several programs in the College of Education and Allied Professions have established retention/full acceptance requirements in addition to those specified by the College on page 84. Following is an alphabetical listing of these program areas and the additionally specified requirements.

## Elementary Education and Early Childhood Education

All students desiring admission to the elementary education program will be labeled pre-elementary education and must meet specific admission criteria. Prospective elementary education majors will be assigned an elementary education adviser, 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 Admission

1. Completion of the following courses with a grade of C or BETTER:
ENG 112
IPCO 102
EDCI/FI 202
EDFI 302
MATH 241 and 242 or MATH 243

2. Possession of at least a 2.5 accumulative grade point average.

NOTE: Transfer students who transf 60 or more hours to BGSU must subm an official transcript from all previously attended institutions to: Program Advisement and Teacher Certification

Office, 365 Education Building, BGSU, Bowling Green, Ohio 43403, during their first term of enrollment at BGSU. For admission consideration purposes, the BGSU grade point average AND previous grade point average(s) will be considered together for students tranferring 60+ hours. Transfer students must complete at least 15 hours at BGSU before being considered for eligibility.

3. Successful completion of at least 60 semester hours.

4. A ranking in the top 100 of all "pre-elementary" students meeting the first three criteria according to the following policy:

The elementary education program area accepts a maximum of 100 students each semester of the academic year—100 in fall and 100 in spring for a total number of 200 students per year. If more than 100 pre-elementary education students meet criteria 1, 2 and 3 above in a particular semester, all eligible students will be rank-ordered according to GPA. The top 90 eligible students will be admitted. An additional 10 will be admitted based on GPA and/or need to assure equal access to eligible students from historically underrepresented populations. It is possible for a student, therefore, to meet all eligibility requirements and not be admitted to the program. If a pre-elementary education students has not been admitted to the program by the time 75 hours are earned, the student should consult his or her assigned adviser and/or a counselor in the Counsling and Career Development Center to discuss career alternatives. The elementary education program is a competitive one, since admission is limited to 200 student per year.

Pre-elementary education students admitted to the program will be classified as "elementary education" students and subsequently permitted to enroll in elementary methods courses—EDCI 350, 351, 352, 353, 355 and 356. (No student having the label of pre-elementary education will be permitted to take these courses.)

Students admitted to the elementary education program will receive information about the two delivery systems (MEP and AIM) for the methods coursework with their acceptance letters and will be asked to return a form indicating a preferred term delivery system for these courses. The elementary program area, however, reserves the right to assign the term/delivery system.

### Student Teaching Eligibility Requirements

1. Full acceptance into elementary program (this includes C or better in ENG 112, IPCO 102, EDCI/FI 202, MATH 241, 242 or 243 and EDFI 302).

2. 90 semester hours of college credits.

3. Completion of all methods courses (EDCI 350, 351, 352, 353, 355 and 356) with a grade of C or better.

a. Methods courses must be taken at BGSU unless consent of Review Board is given. Methods courses must also be completed within the five-year period immediately preceding student teaching.

b. No methods course in elementary education (EDCI prefix) may be taken more than twice without the permission of the Review Board gained through the appeals procedure.

4. Application 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 pre-requisites) 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.

## Physical Education

(see page 101)

## Secondary Education

Biology, Chemistry, Communications, Computer Science, Earth Science, Economics, English, Environmental Science, 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 courses 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:

1. Completion of all professional education courses with C or higher.

2. Attainment of a BGSU GPA of 2.5.

3. Satisfactory completion of the state-prescribed teacher tests.

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 Acceptance

1. Completion of a minimum of 60 semester hours.
2. Completion of the following courses with a grade of C or better:
   ENG 112
   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) coursework selected from EDSE 431, 433, 451, 454 with at least a 2.5 in the EDSE courses.
6. Completion of or current enrollment in EDFI 302.

Students who have not met the above criteria upon attaining junior status (60 semester hours) will not be permitted to enroll in the following methods courses—EDSE 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.

# Technology Education

(see page 139)

# 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 elderly, 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, [illegible]ing and interior design. There are [illegible]ndergraduate 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 available 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 SCIENCE IN EDUCATION

### Teacher Certification Programs

(See introduction to College of Education and Allied Professions for general education requirements.)

### Early Childhood Education

206 Johnston Hall, 372-2026

[illegible]*or* (meets pre-kindergarten, kinder[illegible]n/primary and elementary certification requirements. This triple certification requires the completion of 160 semester hours, which will involve 10-11 semesters of full-time enrollment to complete.

Also see full admission requirements on page 94.)

***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 or SOC 101 (3)
- Area of concentration (3)

***Second year*** (41 hours)
- EDCI/FI 202 (3)
- PHYS 100 or 104 (3-2)
- Literature elective (3)
- Area of concentration (3)
- Cultural studies elective (3)
- MATH 241 and 242 (6)
- CHEM 100 or 109/110 (3-4)
- EDFI 302 (3)
- EDCI 349 (3)
- Area of concentration (6)
- HDFS 224, 320 (6)

***Third year*** (51 hours)
- HED 346 (3)
- ENG 342 (3)
- MUED 248 (3)
- PEP 342 (3)
- ARTE 343 (3)
- Area of concentration (3)
- EDCI 348, 350, 351, 352, 353, 355, 356, 357 (24)
- HDFS 321, 322, 421 (9)

***Fourth year*** (36 hours)
- EDFI 402 or 429 (3)
- EDFI 408 (3)
- CDIS 471 (3)
- Area of concentration (3)
- EDSE 311 or 421 (2-3)
- 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 kindergarten-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 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 109/110, 117/118 (8)
- MATH elective (3)
- ENG 112 (3)
- AMID 101 (3)
- 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 103 and 202 (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)
- AMID 303 (3)

***Fourth year*** (32 hours)
- HOEC 354 and 405 (5)
- AMID 406 (3)
- HDFS 302 (3)
- EDFI 402 (3)
- HOEC 497 (10)

EDAS 409 (3)
EDFI 408 (3)
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 coursework. In addition to the coursework 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)
F&N 331, 333, 431 and 433 (12)
F&N 230, 437, 335 (9)
DESN 104 (3)
MGMT 305 or ACCT 325 (3)

**Multi-area job training** (6 hours)
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 HOEC 224, 320, 421, 422, 423 (15)

***Minor*** (meets high school certification provided appropriate professional education coursework 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 nursery 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*** (33 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)
Approved literature elective (3)
Approved science elective (2-3)
***Third year*** (32 hours)
HDFS 321 and 407 (6)
Content specialty selections* (9)
Electives (6)
Approved cultural studies electives (5)
General education elective (3)
Approved science elective (3)

***Fourth year*** (29 hours)
Ten hours from HDFS 322, AHE 389, AHE 489 (10)
Content specialty selections* (7)
Electives (12)

*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 agencies serving young children.)

***First year*** (31-33 hours)
ART 101, MUCH 101 or PHIL 10[illegible] 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 (2)
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 5 for degree requirements.

### Dietetics

206 Johnston Hall, 372-2026

A student who completes the coursework 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)
- [redacted]HE 100 (1)
- [redacted]IOL 205 (5)
- ENG 112 (3)
- SOC 101 (3)
- CHEM 125 and 127/128 (10)
- F&N 210 (3)
- PEG 100 (2)
- IPCO 102 (3)

*Second year* (35 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 120 (5)

*Third year* (31 hours)
- ECON 200 (3)
- F&N 331, 432 and 436 (9)
- MGMT 305 and 361 (6)
- ACCT 325 (3)
- BIOL 332 (4)
- EDFI 302 (3)
- AMID 303 (3)

*Fourth year* (27 hours)
- SOC 231 (3)
- F&N 431, 433, 434 and 435 (12)
- Cultural studies elective (2-3)
- Approved humanities elective (2-3)
- HDFS 305 or HOEC 405 (3-4)
- F&N 438 (2)
- [redacted]Choose 2-3 hours from: F&N 326, [redacted]3; 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
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 109/110 (3-4)
- F&N 210 (3)
- MATH 115 or STAT 200 or STAT 211 (3)
- [redacted]MATH 120, 126 or 131 (4-5)
- SOC 101 (3)
- IPCO 102 (3)
- ENG 112 (3)
- PEG 100 (2)
- Cultural studies elective (3)

*Second year* (32 hours)
- MKT 300 (3)
- ECON 200 (3)
- HED 313 (3)
- Approved literature elective (3)
- F&N 207 and 212 (6)
- PSYC 201 (4)
- MIS 200 or CS 100 (3)
- Cultural studies elective (2-3)
- Humanities elective (2-3)
- 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* (29 hours)
- MGMT 452 (3)
- F&N 431, 433 and 480 (7-8)
- Electives (11)
- AHE 489 (5)
- F&N 437 (3)

# Applied Human Ecology Programs In Other Colleges

## 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 45.

**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 44.

**Dietetics**
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 108.

**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 45.

**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 45.

**Interior Design**
209 Home Economics Building, 372-2026

The interior design program trains student in the planning and executing of residential and contract interiors. Coursework is designed to help students evaluate problems and devise solutions for them. Students who complete the approved four-year program are eligible to apply for membership in the American Society of Interior Designers (ASID). The interior design major is currently being reviewed and, if approved, will be implemented in fall 1991. Requirements and courses may change for persons entering the interior design program at that time. See page 45.

# School of Health, Physical Education and Recreation

Sally Sakola, 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 (SMD), 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 settings.

Concentrations in recreation or sport management programs are designed to prepare students for management, supervisory and leadership positions in private enterprise, public agencies and community organizations. A program in dance is also available.

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 student must fulfill the University requirement of two semester hours of physical education. 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, HUM 101, ENG 112, IPCO 102, two PEG activities and PSYC 201 must be included. See college general education requirements, page 85.

*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 (12)
Select one of the following concentrations:
*Dance education* (12 hours)
DANC 106, 111, 215/315, 325 and RED 387/487, DANC electives
*Dance performance* (12 hours)
DANC 220/320, 224, 215/315, 325 and 327, DANC electives

## Driver Education

*Certification pattern* (6 hours)
HED 362 and HED 462 (6)

## Health Education

202 Eppler North, 372-2395

***Major*** (Option I—meets special certification, kindergarten through twelfth grade)
***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 or EDCI/FI 202 (3)

PEG 100 (2)
General education elective (3)
Humanities elective (2-3)
***Second year*** (32 hours)
HED 348 (3)
F&N 207 (3)
BIOL 331, 332 (8)
Social science elective (2)
Approved literature elective (3)
Math elective (3)
Free electives (4)
EDFI 302 (3)
Cultural studies elective (3)
***Third year*** (31 hours)
HED 313, 338, 340, 393, 409 (15)
EDSE 311 (2)
EDCI 360 (2)
PEP 360 (3)
SMD 250 (3)
Electives (6)
***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 HED 216 with a grade of C or better.

To be eligible for student teaching the student must have:
1. met college student teaching eligibility requirements;
2. successfully completed EDCI 202 or EDFI 202 or HED 216; HED 209 or 315, 313, 338, 340 and F&N 207;
3. received a C or better in HED 348 and 393.

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)
F&N 207 (3)
BIOL 331, 332 (8)
Approved literature elective (3)
EDFI 302 (3)
Cultural 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)
Electives (8)
ENG 388 (3)

***School Health Minor*** (meets seven through twelve certification provided appropriate professional education coursework is also completed.)
***First year*** (14 hours)
HED 209 or 215 (3)
SOC 101 (3)
BIOL 104 (4)
PSYC 201 (4)
***Second year*** (7 hours)
BIOL 332 (4)
F&N 207 (3)
***Third year*** (12 hours)
HED 313, 338, 340 (9)
PEP 360 (3)

**Health 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

**Major**-K-12 Physical Education with Elementary Emphasis
(meets special certification, in physical education kindergarten-twelfth grade)
See page 84 for admission requirements.
***First year*** (30-31 hours)
PEP 116, 121, 124, 137 and 138 (8)
PEP/DANC electives (1-2)
PEP 164 (2)
PEP 227 (2)
ENG 112 (3)
BIOL 104 (4)
General education requirements (10)
***Second year*** (32 hours)
PEP 203, 230, 238, 241, 247 and 433 (14)
PEP/DANC activity electives (2-3)
IPCO 102 (3)
BIOL 332 (4)
Literature elective (3)
HED 313 (3)
General education requirements (3)
***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 hours)
PEP 402 and 438 (5)
EDFI 408 (3)
EDAS 409 (3)
PEP 497 (student teaching) (16)
General education requirements (4)

***Major***-K-12 Physical Education with Secondary Emphasis
(meets special certification, in physical education kindergarten-twelfth grade)
See page 84 for admission requirements.
***First year*** (31 hours)
PEP 137, 138, 164 and 227 (6)
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*** (32 hours)
PEP 230 and 241 (5)
LEM 301 (2)
BIOL 332 (4)
PSYC 201 (4)
RED 106, 111, 115 or 120 (2)
Approved literature elective (3)
Humanities and arts electives (3)
Math elective (3-5)
PEP/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*** (27 hours)
PEP 412 and 433 (6)
PEP 497 (10)
EDFI 408 (3)
EDAS 409 (3)
Electives or minor (5) (Student teaching or practicum at elementary level suggested)

Major-Physical Education, Athletic Coaching and Health
(meets high school certification in physical education and health education)
See page 83 for admission requirements.
***Semester I*** (16 hours)
PEP 110 or 112 (2)
PEP 218 (1)
Social 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)
***Semester III*** (16 hours)
PEP 230 (3)
PEP 247 (3)
PEP professional activities (4)
HED 209 (3)
EDFI 302 (3)
***Semester IV*** (17-18 hours)
PEP professional activities elective (2)
BIOL 332 (4)
F&N 207 (3)
Humanities elective (2-3)
Literature elective (3)
Cultural studies elective (3)
***Semester V*** (17 hours)
PEP 350 (3)
PEP 360 (3)
HED 313 (3)
HED 340 (3)
PEP 328 (3)
Coaching specialization (2-5)
***Semester VI*** (13 hours)
PEP 303 (2)
PEP 362 (3)
HED 338 (3)
HED 348 (3)
SMD 429 (2)
***Semester 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 officially admitted to any of the physical education major programs, the following college and program area criteria must be met.

**College of Education and Allied Profession Requirements**
1. Completion of 60 semester hours;
2. Completion of IPCO 102 and ENG 112 with a grade of C or better;
3. University GPA of 2.5
4. Completion of early field experience course, PEP 247 with a grade of C or better.

**Physical Education Professional Division Requirments**
1. Completion of 10 PEP semester hours on the BGSU campus;
2. Removal of all articulation deficiencies;
3. Completion of PEP 227;
4. Major GPA of 2.6;

***Courses designated for the major GPA***
*Professional Physical Education*
PEP 164, 227, 230, 247
*Professional Physical Education Activity*
Gymnastics: PEP 110/112, 138, 214
Dance: PEP 137, DANC 106, 111, 115
Net games: PEP 121, 124, 202
Field games: PEP 116, 203, 208, 217
Aquatics: PEP 205, 218, 219, 222, 322
Other: PEP 123, 201, 204, 207, 209, 226

5. Completion of physical education activity course requirement:
a. GPA of 2.7 in a minimum of four activity courses, and a total of eight semester hours;
b. Successful completion of one course in four of the six activity categories with a minimum of eight semester hours:
Gymnastics: PEP 110/112, 138, 214
Dance: PEP 137; DANC 106, 111, 115
Net games: PEP 121, 124, 202
Field games: PEP 116, 203, 208, 217
Aquatics: PEP 205, 218, 219, 222, 322
Other: PEP 123, 201, 204, 207, 209, 226

To be eligible for student teaching a physical education major must meet the college's student teaching eligibility requirements and the additional program requirements indicated on the major checksheet.

**Adapted Physical Education Validation**—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** (32 hours)
(certification as an endorsement for elementary physical education on a standard elementary, music, physical education or special education teaching certificate)
PEP 137, 138, 238, 241, 247, 332, 337, 402, 428 and 492 (25-28)
HED 313 (3)
Select two hours from: PEP 164, 230, 303, 340 or 350 (2)
Select two hours from: PEP 433, 438, 387 or 487 (2)

***Minor***—Secondary Physical Education Minor
(meets secondary certification in physical education provided appropriate professional education coursework 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, 328, 329, 331, 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.

## Recreation 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 YMCAs, 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 electives will be chosen from the areas of 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)
- RED 190 and 210 (6)
- PSYC 201 (4)
- Approved literature elective (3)
- Cultural diversity in the U.S. 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)
- Cultural studies elective (2-3)
- 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 electives (20)
- Elective (3)

***Fourth year*** (30 hours)
- RED 482, 483 and 488 (21)
- Career 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 YMCAs, 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 electives will be chosen from the areas of 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 diversity in the U.S. 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 (2-3)
- 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)
- Career electives (18)
- Electives (3)

***Fourth year*** (30 hours)
- RED 482, 483 and 488 (21)
- Career 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. Career electives will be chosen from the areas of adventure programming, organized camping, interpretive-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 diversity in the U.S. 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 (2-3)
- Career 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)
- Career electives (12)
- Electives (3)

***Fourth year*** (31 hours)
- RED 482, 483 and 488 (21)
- Career 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 Management

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).

To be formally accepted into the sport management major, a candidate must meet the following criteria:

1. Completion of 44 semester hours including a C or better in ENG 112, IPCO 102, SMD 201 and either SMD 250 or SMD 298; 2 hours in PEP/PEG/ DANC activity courses (Option I students must see their advisers concerning activity courses); and 30 hours in additional College of Education and Allied Professions general education 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;
2. SMD 489—52 hours in major field, satisfactory completion of SMD 387, GPA of 2.5 and major GPA of 2.7. Option I majors must also satisfactorily complete HED 313.

The three options and their emphases are exercise and sport science (sport emphasis, physical fitness emphasis and athletic training emphasis), sport information management (sports information emphasis, sport marketing emphasis) and sport organization management (sport enterprise emphasis).

***Major***—Option I, exercise and sport science
Students in Option I study the scientific bases of human movement and exercise. This knowledge will be applicable through careers in areas such as intramural programs, recreational sport, YM-YWCAs, corporate fitness centers, cardiac rehabilitation clinics, sports medicine clinics, and professional or intercollegiate sports teams.

*Option I requirements* (70-74 hours in addition to general education requirements of the College of Education and Allied Professions; see page 84.)
SMD 201, 250, 298, 375, 390, 489, 490 (33)
SMD 387 (3-6)
SMD 240, 310, 365, 421 (12)
HED 313 (3)
PEP 164, 230, 303, 360 (11)
BIOL 104 or 205 (4-5)
BIOL 332 (4)

*Sport emphasis* (44-47 hours)
SMD 423, 425, 431, 440 (12)
PEP 340 (3)
ACCT 221 or 325 (3)
ECON 100 or 200 or 202 or 203 (3)
MATH 115 or higher (3-5)
MKT 300 (3)
SOC 101 (3)
Sociology elective (3)
Activity requirement (3)
Electives (8-9)

*Physical fitness emphasis* (36-40 hours)
SMD 361, 423, 429, 440 (12)
ACCT 221 or 325 (3)
F&N 207 (3)
CHEM 109/110 or higher (3-5)
SOC 101 (3)
MATH 115, 120 or higher (3-5)
Activity requirement (3)
Electives (5-6)

*Athletic training emphasis* (31 hours plus at least 800 hours of clinical experience)
SMD 311, 410, 411, 413, 429 (15)
HED 209, 314, 340 (7)
F&N 207 (3)
PEP 328 (3)
SOC 101 (3)

***Major***—Option II, sport information management
Option II students who emphasize the sport information areas usually seek careers as sports journalists or as sports information directors in universities, conference offices or sports governing bodies. Students who emphasize the sport marketing component are preparing for careers such as account executives for professional teams, sales representatives for sporting goods companies and marketing directors in intercollegiate athletic programs, conference offices or governing bodies.

*Option II requirements* (77-82 hours in addition to the general education requirements of the College of Education and Allied Professions; see page 84.)
SMD 201, 250, 298, 375, 390, 489, 490 (33)
SMD 387 (3-6)
SMD 240, 365, 421, 425 (12)
PEP 164 (3)
ACCT 221 or 325 (3)
JOUR 103 or RTVF 103 (3)
JOUR 340 (3)
MKT 300, 410 (6)
MATH 115, 120 or higher (3-5)
ECON 100 or 200 or 202 or 203 (3)
SOC 417 (3)
SOC 101 (3)

*Sports information emphasis* (19 hours)
JOUR 300, 402, 412 (19)
JOUR electives (12)

*Sport marketing emphasis* (18 hours)
JOUR 301 (3)
MKT electives (9)
IPCO electives (6)

***Major***—Option III, sport organization
This option, with a strong business component, provides opportunities for students to develop skills applicable to management-level positions in organized sport. Examples of such positions are public relations director, corporate administrator of sporting events, tournament director, university athletic director or associate/assistant AD, business manager and fundraising administrator.

*Option III requirements* (54-57 hours in addition to the general education requirements of the College of Education and Allied Professions; see page 84.)
SMD 201, 250, 298, 375, 390, 489, 490 (33)
SMD 387 (3-6)
ACCT 221 and 222 (6)
BA 310 (3)
JOUR 340 (3)
MKT 300 (3)
VCT 203 (3)

*Sport enterprise emphasis* (47-48 hours)
SMD 240, 365, 421, 425 (12)
PEP 164, 328 (5)
ECON 100 or 200 or 202 or 203 (3)
MATH 115 or higher (3)
IPCO elective (3)
SOC 101 (3)
Electives (17-18)

***Minor***—aquatics (20-22 hours; currently under revision)
SMD 229 and 245 (5)
SMD 387 (2-3)
HED 313 (3)
PEP 225, 322 (3)
SMD 240 or PEP 433 (3)
Select 4-5 hours from: SMD 231, 324, RED 178, PEP 205, 218, 219, 222, 339, PEG 100-200

**Athletic Training Certification Program**
(50 hours and a minimum of 800 hours of clinical experience)

This program is designed for students who major in education or another discipline and wish to prepare themselves as athletic trainers.
SMD 310, 311, 391, 410, 411, 413, 429 (20)
HED 209, 313, 314, 340 (10)
PEP 164, 230, 303, 328, 360 (13)
BIOL 332 (4)
F&N 207 (3)

# College of Health and Human Services

Clyde R. Willis, Ph.D., dean, 100 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, Steven Lab, Ph.D., director, 102 Health Center, 372-2326
Dietetics, Kay Soltesz, M.H.E., director, 402 Johnston Hall, 372-2026
Environmental Health, Gary Silverman, D.Env., director, 102 Health Center, 372-7774
Gerontology, John Hiltner, Ph.D., director, 102 Health Center, 372-2326
Physical Therapy, Robert Livengood, M.Ed., P.T., adviser, 101 Health Center, 372-8242 (or Catherine Hornbeck, M.S., P.T., interim director, Medical College of Ohio, 381-3519)
Rehabilitation Counseling, Robert Blackwell, Ph.D., interim director, 451 Education, 372-7296

## Departments

Communication Disorders, Linda Petrosino, Ph.D., chair, 338 South Hall, 372-2515
Medical Technology, Bob Harr, M.A., chair, 504 Life Sciences Building, 372-8109
Social Work, Mary Pegram, D.S.W., chair, 413 South Hall, 372-2441

## Schools

School of Nursing, Barbara Keeley, R.N., M.S.N., coordinator, 101 Health Center, 372-8760 (or Joyce Shoemaker, Ed.D., R.N., dean, Medical College of Ohio, 381-5858)

## 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, pre-professional 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 5. In addition, all students must complete all major requirements. Required internships, field work and clinical practicums completed during the last 30 hours will be considered in residence even though taken off campus.

Bowling Green State University also offers master's degrees in communication disorders and rehabilitation counseling as well as a doctoral degree in communication disorders and a graduate certificate in gerontology.

## 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 one course in each of the functional understandings of natural sciences, social sciences, humanities and arts, foreign languages and cultures, and cultural diversity in the United States **plus** three additional courses from any of the functional understandings. Some programs may specify which courses to take, so talk to your adviser.

### Functional understandings

**Natural Sciences**: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109-110, 117-118, 125, 127-128, 135, 137-138; GEOG 125 (weather and climate); GEOL 100, 104, 105, 205, 322; PHYS 101, 201, 202, 211, 212.

**Social Sciences**: A&S 250; ECON 100, 200, 202, 203; ENVS 101, 301; GEOG 121, 122, 225, 230, 325, 331, 343, 344, 346, 349, 426, 452; HIST 151, 152, 180, 205, 206, 310, 311, 370, 382, 411, 429, 470; POLS 201, 271, 272, 301, 335, 351, 361, 372, 402, 403; PSYC 201; SOC 101, 202, 231, 361; TECH 302.

**Humanities and Arts**: ACS 200, 230, 300; ART 101; ARTH 145, 146; A&S 250; ENG 150, 200, 203, 261, 262, 264, 265, 266, 267, 269; ETHN 220; GERM 260; LAT 141, 142; MUCH 101, 125, 221; PHIL 101, 102, 103, 204, 211, 212, 230, 325; POPC 160, 165, 220; RTVF 261; THEA 141, 202, 347, 348.

**Foreign Languages and Cultures**: Foreign Languages (Arabic, Chinese, French, German, Greek, Italian, Latin, Japanese, Russian, Spanish) 101, 102, 201, 202; FREN 211, 212, 284; GERM 117, 118, 217, 218, 260; SPAN 211, 212; ENG 269; GEOG 121, 122, 230, 325, 331, 343, 344, 346, 349, 426, 452; GERO 405; HIST 151, 152, 180, 310, 311, 370, 382, 411, 470; MUCH 125, 233, 234, 235; POLS 271, 272, 351, 361, 372; SOC 231.

**Cultural Diversity in the United States**: ACS 250; EDFI 408; ENG D200; ETHN 101, 120, 306, 410; GEOG 337; GERO 301; HDFS 107, 408; HIST 319; MUCH 237, 431; PSYC 324; RTVF 270; SOC 316; WS 200.

## Readmission policy

Students returning to the University after an absence who have completed a portion of a professional program must have those courses re-evaluated by the program or department. It should be understood that certain courses may be outdated or lack relevancy to the current professional curriculum and may have to be repeated. Furthermore, it shall be the responsibility of the department or program to determine the appropriate checksheet for returning students.

## 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 S/U basis. Check with an advisor 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 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 coursework 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 specialization 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, 127-128 (10) or CHEM 135, 137-138 (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 3-1

**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 specialization 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 the art therapy specialization. It is quite common today to find art therapists working in special education programs, nursing homes, community mental health centers, psychiatric hospitals and other health care and social service agencies. Students graduating from this program are able to work for change within 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 earn a 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 practicum. All majors must also have an accumulative GPA of 2.5 before enrolling in ARTT 488. No class required for the major can be taken S/U. Transfer students must complete the appropriate prerequisites at BGSU 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*
- ARTH 145 or 146 (3)
- ART 205, (3)
- ARTT 230 (3)
- ENG 207 (3)*
- PSYC 303 or EDFI 490 or HDFS 321 (3)
- PSYC 403 (3)*
- PHIL 319 (3)
- Required beginning level studio course (ART 261, 263, 371, 373) (6)
- 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 482 or 343 (3)
- Cognate (6)
- ARTH 456 or 457 (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 Disorders

338 South Hall, 372-2515

Speech-language pathologists and audiologists specialize in the study and treatment of human communication disorders. They work in a variety of professional settings such as public and private schools, hospitals, community clinics, universities, nursing homes and other health care facilities, as well as in private practice. Speech-language pathologists and audiologists work with all ages, from infants to the elderly.

The minimum entry level qualification for professional practice in the fields of speech-language pathology and audiology is a master's degree. The pre-professional undergraduate curriculum in communication disorders is designed to provide instruction in the basic components of the discipline and to prepare the student for entrance into a graduate training program. The undergraduate student will study the basic speech and hearing sciences and the normal human communication process, as well as the theoretical and practical aspects of therapy. Clinical observations are required and a supervised clinical practicum in which direct treatment is provided to a communicatively disordered client will be completed during the junior or senior year. The school practicum experience occurs at the graduate level, however it is strongly recommended that students take the necessary coursework for school certification at the undergraduate level. These courses can be taken as electives.

Admittance to the major is restricted to those applicants meeting the following requirements:

1. minimum grade of C in CDIS 223, 224, 225; and
2. an overall GPA of 2.5 after 30 hours.

For a student to maintain a CDIS major once admitted, the student must have:

1. minimum grade of C in all CDIS courses completed; and
2. 2.5 GPA in the major; and
3. 2.5 GPA overall

For a student to gain entrance into CDIS 421, the student must have:

1. minimum grade of C in all CDIS courses completed; and
2. 2.7 GPA in the major; and
3. 2.7 GPA overall.

All major core courses must be taken for a grade, except for those courses graded only S/U.

**Suggested program**

*First year (29-36 credits)*
- BIOL 101, 104, or 205 (3-5)
- ENG 112 or equivalent (3-6)
- IPCO 102 (3)
- PEG 100 (2)
- PHYS 101 or 201 (3-5)
- CDIS 223 and 224 (6)
- Humanities and arts (3)
- Foreign languages and cultures (3)
- Cultural diversity in the United States (3)

*Second year (31-33 credits)*
- MATH 120 or 128 (5)
- CS 100 or 101 (3-5)
- PSYC 201 (4)
- EDFI 302 (3)
- ENG 380 (4)
- CDIS 225, 301, 302, 311 (12)

*Third year (30-34 credits)*
- EDSE 431 (3)
- EDCI 349 (3)
- PSYC 270 or SOC 369 and PSYC 303 (6-7)
- GERO 301 or 405 (3)
- IPCO 306 (3)
- CDIS 351, 361, 401, and *421 (9-12)
- Social science (3)

*Fourth year (29-35 credits)*
- REHB 401 (3)
- PSYC 304, 309, and 405 (8)
- EDSE 459 or PSYC 324 (3)
- *CDIS 421 (3)
- Natural science (3)
- Social science (3)
- Humanities and art (3)
- Electives (3-9)

* The student will be placed into CDIS 421 by his/her academic adviser during the junior or senior year. The student will only be able to take 421 at the time designated by the adviser because of the need to limit the enrollment in such a clinical practicum class.

# Criminal Justice

102 Health Center, 372-2326

In preparation for careers in law enforcement, investigative units, private security organizations, penal institutions, probation and parole work and other agencies in the criminal justice system, the criminal justice program integrates coursework and interaction with professionals in various disciplines. The graduate of the program receives a bachelor of science in criminal justice degree. The program prepares students for entry into all types of agencies in the criminal justice system—law enforcement, corrections, investigative, forensic, security. (Students interested specifically in corrections should also consider the corrections cognate in the social work program.)

Admittance to the program is restricted to those applicants meeting these three requirements:

1. have CRJU 210 or its equivalent on the record with a C or better;
2. have a 2.5 GPA or higher on a total of at least 25 graded hours; and
3. rank in the top 30 applicants each year according to GPA. (Details may be obtained from the Criminal Justice Office, 102 Health Center.)

The program places emphasis on superior academic attainment, ability to communicate verbally and in writing, and research potential. Every student must complete an original proposal for research (CRJU 480, Senior Seminar) as well as the field placement or practicum of 480 agency hours. It is anticipated that a large number of CRJU graduates will go on to graduate school, law school or enter the field of practice with a view to becoming 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 languages and cultures: (1 course)
- Social sciences: POLS 201, PSYC 201, SOC 101
- Cultural diversity in the United States: SOC 316.

**Core courses**
- CRJU 210, 220, 320, 330 and 480
- CRJU 230 or 340 or 410
- PHIL 327
- POLS 221, 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 justice core courses.

**Suggested program**

*First year*
- CRJU 210
- ENG 112 or equivalent
- POLS 201
- PEG 100
- PSYC 201
- SOC 101
- Natural sciences
- Foreign languages and cultures
- Humanities and arts

*Second year*
- CRJU 220 and 230 or 340
- Computer science course
- Statistics course
- Completion of general education requirements

*Third year*
- CRJU 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, 372-7821

This program leads to membership in the American Dietetic Association and registration certification. Requirements for registration are an internship or an approved pre-professional 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 Bachelor 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 practicums, as described above, and the Registration Certificate (Registered Dietitian), a graduate can function in varied roles within the professional field of dietetics.

**Suggested program**

*First year*
- BIOL 205 (5)
- ENG 112 (3)
- PEG (2)
- SOC 101 or PSYC 201 (3 or 4)
- IPCO 102 (3)
- AHE 100, F&N 210 (4)
- MATH 120 (5)
- General education requirements

*Second year*
- ECON 200 (3)
- MATH 115 or STATS 200 (3)
- CHEM 125, 127-128 (10)
- SOC 231 (3)
- F&N 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)
- EDFI 302 (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; 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, insurance-risk management agencies, health care facilities and educational institutions.

The curriculum emphasizes the [illegible]gical, chemical and physical [illegible]nces 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. New majors to the program are admitted following department guidelines. Please check with the program office for specifics.

**Suggested program**

*First year*
- ENG 112 (3)
- MATH 128 or 130 or 131 or 120 and 129
- CHEM 125 and 127-128 (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)
- [illegible]HYS 201 (5)
- [illegible]OLS 331 or 336, or LEGS 431 (3)
- ECON 200 (3)
- CHEM 306 (4)
- General education requirements and electives

*Third year*
- ENVH 302 (4)
- ENVH 304 (4)
- ENVH 301 (3)
- ENVH 306 (3)
- ENVH 403 (4)
- 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 offered by the College of Arts and Sciences and the College of Education and Allied Professions.

# Gerontology

102 Health Center, 372-2326

[illegible]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, 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. completed GERO 101 (Introduction to Gerontology) or its equivalent on the record with a C or better;
2. completed a 2.5 GPA or higher on a total of at least 30 credit hours.

Prior to admission, students will be 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. Prior to the field experience, each student must complete a volunteer or paid experience in a facility or a program with elderly clients.

**Suggested program**

*First year*
- ENG 112 or equivalent (3-6)
- GERO 101 (3)
- PSYC 201 (4)
- PEG 100 (2)
- BIOL 104 or 205 (4-5)
- F&N 207 (3)
- Cognate requirements
- General education requirements
- Electives

*Second year*
- BIOL 332 (4)
- GEOG 326 (3)
- PSYC 309 (3)
- GERO 301 (3)
- PSYC 270 or SOC 369 (3-4)
- Cognate requirements
- General education requirements
- Electives

*Third year*
- BIOL 310 (2)
- GERO 405 (3)
- PHIL 319 (3)
- F&N 436 (3)
- Cognate requirements
- Electives

*Fourth year*
- GERO 410, 420 and 493 (7)
- 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 12 courses in accounting, business administration, economics, finance, legal studies and management. The student is also required to complete a practicum of a minimum of 800 hours of experience in an approved nursing facility under the supervision of an Ohio licensed nursing home administrator.

Because of the need for close supervision of the student registered for this practicum experience, 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)
- PSYC 201 (4)
- PEG 100 (2)
- BIOL 104 or 205 (4-5))
- F&N 207 (3)
- General education requirements
- Electives

*Second year*
- MIS 200
- ACCT 221 and 222 (6)
- BIOL 332 (3)
- ECON 202 and 203 (6)
- GEOG 326 (3)
- PSYC 309 (3)
- GERO 301 (3)
- GERO 405 (3)
- STAT 212 (3)
- Electives

*Third year*
- BIOL 310 (2)
- BA 325 (3)
- FIN 300 (3)
- LEGS 301 (3)
- MGMT 305 or 360 (3)
- PHIL 319 (3)
- F&N 436 (3)
- GERO 422 (3)
- Electives

*Fourth year*
- BA 420 (3)
- GERO 410, 411, 420, 493 (10)
- GERO 491 (10)
- LEGS 425 (3)

MGMT 361 (3)
MGMT 461 (3)
GERO 402 (3)
Electives

*Fifth year*
GERO 491 (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.

**Other programs**
The Gerontology Program offers a graduate certificate. Contact program director for further information.

## Medical Record Administration

101 Health Center, 372-8242

This program will not be available 1991-93.

## Medical Technology

504 Life Sciences Building, 372-8109

Certified medical technologists (clinical laboratory scientists) 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, physicians' 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 and certificate of clinical training, and are eligible to take either of the national certification examinations for medical technologists. The professional studies program in medical technology is fully accredited by the 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, have completed all major course requirements with a grade of C or better, and are chosen for a clinical practicum position at one of the program's affiliate hospitals. These positions are assigned at the time of acceptance by a committee of hospital and University representatives. The clinical affiliates of the program are 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 practicum 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 or equivalent (3)
CS 100 (3)
CHEM 125 (5)
PEG 100 (1)

*Second term* (14 hours)
ENG 112 (3)
BIOL 205 (5)
CHEM 127 and 128 (5)
PEG 100 (1)

*Third term* (15-16 hours)
Physical science/math elective (3-5)
BIOL 332 (4)
BIOL group elective (3-4)
Cultural diversity in the U.S. elective (3)

*Fourth term* (13-18 hours)
Physical science/math elective (3-5)
BIOL 313 (4)
BIOL group electives (3-4)
MEDT 201 (1)
Foreign languages and cultures elective (3)

*Fifth term* (14-16 hours)
CHEM 306 or 341 (4-5)
Social science elective (3)
BIOL group electives (3-4)
Humanities elective (3)

*Sixth term* (14-16 hours)
CHEM 308-309 or 342 (4-5)
BIOL group elective (3-4)
Social science elective (3)
Other elective (3)

**Professional Training**
*Seventh term* (16-18 hours)
Didactic and laboratory courses in clinical laboratory sciences.

*Eighth term* (16-18 hours)
Didactic and laboratory courses in clinical laboratory sciences.

*Ninth term*
**Clinical practicum**—as scheduled at either The Toledo Hospital, St. Vincent Medical Center, or St. Rita's Medical Center.
(18 hours)

Students may take CHEM 341-342 as physical science/math electives if using CHEM 306-308-309 as program requirements. Students who take CHEM 341-342 as program requirements may take CHEM 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.

**BIOL group elective courses**—4 required
BIOL 310, 331, 350, 405, 407, 41[illegible] 419, 426, 433, 435, 438, 439, 44[illegible] 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

101 Health Center, Bowling Green State University, 372-8242
2601 Dowling Hall, Medical College of Ohio, at Toledo, 381-3518

The physical therapy educational program provides opportunities for development of the knowledge, skills, and attitudes which enable students to be competent entry-level clinical practitioners, to participate in clinical research, and to have the basis for future graduate study. The professional education phase:

—fosters values and attitudes that promote caring and concern for the individual and for society

—enhances concepts and principl[illegible] derived from knowledge of the natural sciences, the social sciences, and the humanities

—develops skills in:
- the collection of information from about patients
- the establishment of rapport with patients to facilitate both problem identification and therapeutic intervention
- the application of the scientific method to the analysis, synthesis, and management of practice-related problems
- the critical appraisal of relevant literature and clinical evidence
- the continuation of one's own professional development

The physical therapist is a highly skilled practitioner who is knowledgeable of the health problems of the disabled in all age groups and in a variety of environments. Physical therapy provides a career option for men and women who want to work with other health care professionals in the restoration of maximal functional capabilities of individuals of all ages temporarily or permanently disabled by illness, disease, trauma or congenital abnormalities. Physical therapists provide services in hospitals, public health agencies, health maintenance organizations, rehabilitation and extended care facilities, public schools and governmental agencies, or they may establish their own independent practices.

During the freshman and sophomore years, students complete pre-professional course work that permits them to fulfill all prerequisite requirements and to attain a general education background in communication skills, natural sciences, social and behavioral sciences and the humanities.

The professional education phase of the program is provided on the campus of the Medical College of Ohio. Courses in the professional curriculum, which continues for seven consecutive semesters, include courses in the basic sciences, physical therapy theory and procedures and applied clinical sciences. Concurrent clinical practicums and a six-month clinical internship, which are required of all students, provide supervised experiences that ensure professional competency.

Instructional fees for the baccalaureate physical therapy program are the same as for all other undergraduate degree programs. There are, however, additional costs for uniforms, required professional liability insurance, and laboratory fees. Transportation to and from classes at the Medical College of Ohio, room and board, expenses incurred with clinical education experiences (e.g., travel, lodging) that may take the student out-of-state for up to three months and any other specific health tests required by the clinical education facilities are the financial responsibility of the students.

**Admission Procedures**
Candidates for acceptance to the physical therapy professional phase in the third and fourth years at the Medical College of Ohio in cooperation with The University of Toledo and Bowling Green State University must have:

1.been enrolled at Bowling Green State University for a minimum of 30 semester hours

2. filed the physical therapy professional curriculum application prior to the deadline date of January 2 of the year the student wishes to enroll in the professional curriculum of the Physical Therapy Program at the Medical College of Ohio

3. obtained a minimum of 2.8 cumulative GPA. No S/U options are permitted in required courses, except for those graded only on that basis

4. completed each of the following courses or their equivalent with a minimum grade of C

*Natural Sciences*:
BIOL 205 and 331
CHEM 125 and 127-128
PHYS 201

*Behavioral and Social Sciences*:
PSYC 201
SOC 101

5. completed prerequisites and all other general program requirements specified by Bowling Green State University

6. provided documentation of volunteer or paid experience(s) under the direction of a licensed physical therapist totalling 200 hours

7. completed a personal interview as stipulated by the Admissions Committee for the professional curriculum

8. 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 selecting students for enrollment into the professional component of the curriculum is vested in the Committee on Admissions, which is composed of representatives from the 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, evidence of observation of physical therapy services, and personal characteristics important when working with people in the health care fields.

**Suggested program:** * courses required for admission into the professional curriculum in the third and fourth years.

*First year*
ENG 112 or equivalent (3-6)
PEG 100 (2)
SOC 101 (3)*
MATH 130 (3)
CHEM 125 and 127-128 (10)*
PSYC 201 (4)*
MEDT 101 (1)
General education requirement (2-3)

*Second year*
PHYS 201 (5)*
BIOL 205 and 331 (9)*
IPCO 102 (3)
MEDT 301 (2)
PHIL 342 (3)
PSYC 240 (3)
CS 100 or 101 (3)
General education requirements: select from humanities and art, foreign languages and cultures or cultural diversity in the United States

*Third year*
Human Gross Anatomy & Physiology; Neurosciences (12)
Pathophysiology (2)
Physical Therapy Procedures (6)
Introduction to Physical Therapy (2)
Foundations of Physical Therapy (3)
Therapeutic Exercise (2)
Electrophysiological Assessment and Treatment (3)
Kinesiology (5)
Musculoskeletal Problems (3)
Early Development (3)
Clinical Practicum (4)

*Fourth year*
Psychology of Physical Disability (3)
Musculoskeletal Problems (3)
Scientific Inquiry (2)
Therapeutic Exercise (5)
Exercise Physiology (3)
Management of Physical Therapy Services (3)
Computer Applications in PT (2)
Principles of Rehabilitation (3)
Research Topics (1)
Gerontology in PT (2)
Clinical Problem Solving (2)
Fundamentals of Teaching & Learning in PT (3)
Professional Issues (1)
Seminar (1-3)

*Summer*
Clinical Internship (7)

To enroll in the summer/fall clinical internships the student must have a GPA of 2.5 or above in professional courses with a PHYT prefix and faculty consent.

This program is subject to revision and may be modified to meet student needs.

# Social Work

413 South Hall, 372-2441

This program is undergoing extensive curriculum modifications. Students should be aware of this fact. Contact the Department of Social Work for further information.

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 Academic Handbook for requirements.) The number of students accepted into the social work major is limited by the availability of field placement sites and faculty.

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.

## Admission and Continuation in the Social Work Program

1. Students who declare social work as a major will be classified as pre-social work majors prior to admission to the program.

2. Students may apply for admission to the program after

a. Completion of 45 credit hours.

b. The attainment of a 2.5 overall GPA.

c. Satisfactory completion of SOWK 110 and 220 with a grade of C or better.

• Transfer students will also be evaluated upon the same criteria.

3. Program applications are submitted in January every year.

4. Applications will be read as they are received. Final readings will occur early in March. Students will be notified of interview date by March 15.

5. Students who apply for senior field placement must have a minimum GPA of 2.5 in the core courses. They must have a minimum of 2.5 overall to apply for graduation in social work.

**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 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 and eligible to take the licensing examination to become a registered nurse and prepare 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 tracks to obtain a Bachelor of Science in Nursing Degree:

1. BSN for students entering the nursing profession.
2. RN/BSN for students who are A.D. or diploma graduates and licensed as registered nurses.

## BACHELOR OF SCIENCE IN NURSING - BSN

A candidate for the Bachelor of Science in Nursing Degree must earn a minimum of 123 semester hours of credit either in residence, by advanced standing or through transfer of credits, in addition to the requirements listed on page 5.

A minor is not required for graduation.

### Admission requirements

Admission to the pre-professional nursing program is through the Office of Admissions of the University. Successful completion of the pre-professional requirements is a prerequisite for admission to the professional nursing program. The number of students accepted into the nursing program is limited by the availability of clinical facilities and faculty. Admission to the professional program is competitive and based upon:

1. Completion of the following prerequisite courses with a C or better:
   ENG 111, 112
   MATH-demonstrated competency above 095 level
   CHEM 109, 110 and 117,118
   BIOL 205
   PSYC 201
2. minimum accumulative grade point average of 2.5 in the pre-professional program. If a grade of less than C is earned, two courses may be repeated, one time only.
3. completion of 29 semester hours of credit.
4. Faculty evaluation of all candidates for admission to include, but not limited to (a) Academic progression (including age of coursework) and (b) Repeated coursework.

Admission applications are available from the nursing office in December of each year. Applications to the nursing program must be submitted by January 1 for the following fall class.

### University requirements

These courses are offered at the BGSU main campus or at Firelands College in Huron, Ohio. Each student is required to complete ENG 112 or demonstrate a proficiency in written expression equivalent to that attained by students who have completed the course. A penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 8.

Each student must take two different PEG 100 courses.

### Functional understandings

**Natural sciences**
Each student is required to complete BIOL 205, CHEM 109, 110, 117, 118.

**Social sciences**
Each student is required to complete PSYC 201.

**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 from the approved list. A list of courses approved for the humanities requirements is available from the School of Nursing Office, 101 Health Center.

**Foreign languages and cultures**
Each student is required to complete one course from the approved list.

**Cultural diversity in the United States**
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 55 hours. These include 22 nursing 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 S/U other than those specifically graded S/U only.

**Suggested program**

*First year* (pre-professional program)
CHEM 109, 110 and 117-118 (8)
MATH-demonstrated competency above 095 level
Cultural Diversity in the U.S. elective (3)
PEG 100 (2)
ENG 111 and 112 or equivalent (3-6)
BIOL 205 (5)
PSYC 201 (4)

NURS 100 (1)
General education 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 languages and cultures elective (3)
PSYC 405 (3)
*Summer between second and third year—A technology course was proposed but not finalized when the catalog went to press.
*Third year* (upper division)
NURS 370, 371, 372, 373; 380, 381, 382, 383, 384; 390, 391, 392, 393, 394
*Fourth year*
NURS 471, 474; 481, 484; 491, 492, 493, 495, elective credit
*Electives*
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—RN/BSN Degree track for the registered nurse

The School of Nursing also offers an opportunity for graduates of associate degree and diploma nursing programs to earn a baccalaureate degree with a major in nursing. The RN student achieves the same terminal objectives as the basic student. However, this alternate track for the RN provides for flexibility and an individualized approach for the nurse in practice. This program is offered through the Bowling Green main campus and the Firelands campus.

## Admission requirements

Criteria for seeking admission to the major are:

1. minimum of 29 semester hours of college credit including prerequisite courses in chemistry and biology or equivalents with minimum GPA of 2.5.
2. 50th percentile success on selected NLN Examinations.
3. current license to practice as a registered nurse in the state of Ohio.
4. completion of general college prerequisite courses.
5. professional liability/malpractice insurance coverage of $1 million per incident, $3 million per aggregate.
6. graduation from an NLN accredited school of nursing.

Application to the major takes place in January preceding the Fall semester in which the student plans to enter the major.

A lab fee is assessed for all technology courses.

A minimum of 123 hours is required for graduation, of which 40 hours must be in upper-division course work. In addition, the 30 hours earned immediately before graduation must be completed through Bowling Green State University uninterrupted by coursework at another university or college.

## University requirements

Each student is required to complete ENG 112 or demonstrate a proficiency in written expression equivalent to that attained by students who have completed the course. A penalty is imposed if ENG 112 is not completed within the first 60 hours. See page 8.

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 109, 110 (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.

**Arts and humanities**
Each student is required to complete one course in literature (American, English or foreign), PHIL 102, and one other course. 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 cultures**
Each student is required to complete one course from the approved list.

**Cultural diversity in the United States**
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 28 hours in the nursing major. Typically, students take the 28 hours part-time spread out over two years. An acceleration plan is possible; however, prior approval must be obtained from the director for the RN program.

# College of Musical Arts

Robert W. Thayer, Ph.D., dean, 1031 Moore Musical Arts Center, 372-2181
Richard Kennell, Ph.D., associate dean, 1031 Moore Musical Arts Center, 372-2181
Department of Music Composition/History, Vincent Corrigan, Ph.D., chair, 1031 Moore Musical Arts Center, 372-2181
Department of Music Education, Victor Ellsworth, Ph.D., chair, 1031 Moore Musical Arts Center, 372-2181
Department of Music Performance Studies, Richard Cioffari, M.M., 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 teaching, performance, composition and musical 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 of Music.

## Entrance Examinations

Students wishing to major or minor in music (recording technology minor excepted) are required to audition in their principal performance medium and to take a diagnostic examination in general musicianship including music reading and elementary music theory. A study guide is provided prior to the examination. In addition, a personal interview is strongly recommended. Applicants with performance skills in more than one medium are encouraged to audition in the second medium as well. Admission to a degree program in music is dependent upon satisfactory completion of these auditions 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 Requirements.

## Music Performance Ensembles

Membership in music ensembles is open to all students in the University who qualify on the basis of auditions. These ensembles include the A Cappella Choir, Men's Chorus, Women's Chorus and Collegiate Chorale; Concert, University, Athletic, Marching, and Symphonic Bands; Philharmonia Orchestra; and a variety of small vocal and instrumental ensembles, including Brass Choir, Jazz Lab Band, Early Music Ensemble, Balinese Gamelan Ensemble and New Music Ensemble. See course descriptions for a full listing of ensembles.

# PROGRAMS OFFERED

## Bachelor of Music

The College of Musical Arts offers majors leading to the Bachelor of Music degree as follows:

- 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. The curriculum for each Bachelor of Music program stresses not only technical and musical skills, but also a broad understanding of the social and cultural environment in which the art of music is practiced. See the sections immediately following as well as the course descriptions for specific details of 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 associate 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 satisfactory 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 fullfil 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 check sheets.

Students admitted to the College of Musical Arts as music majors or minors 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 suitable major within music in consultation with an adviser. 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 Major

A student interested in a double major should consult the chairs of the departments involved for information pertaining to the requirements. Double majors must be approved by the chairs of the appropriate departments. Such programs ordinarily require more than eight semesters to complete.

### Recital Attendance

All freshman, sophomore and junior music majors (and minors during terms in which they are engaged in performance study) are required to attend 15 music recitals or concerts on campus each term, exclusive of those in which the student is a participant. Attendance at the biweekly College Recitals may be counted toward the minimum of 15 recitals per term. To monitor recital 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 music 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. Open to all University students who meet the course prerequisite. No performance audition required. Obtain further information from chair, Department of Music Composition/History.

***Recording Technology minor program (28)***

*Required courses*

PHYS 350—Musical Acoustics (3) (spring only-offered alternate years)
MUCH 436—Recording Techniques (2) (fall only)
MUCH 437—Advanced Recording Techniques (2) (spring only)
MUCH 444—Music Technology I (3) (fall only)
MUCH 445—Music Technology II (3) (spring only)
MUCH 446—Music Technology III (3) (fall only)

*Elective courses at least 12 hours selected from the following:*

MUCH 447—Music Technology IV (3) (spring only)
TECH 121—Industrial Mathematics (3)*
ET 240—Electricity (4) — Prereq: TECH 121 or MATH 120 or equivalent (fall only)
ET 241—Electronics (4) — Prereq: ET 240 (spring only)

CONS 235—Intro to Construction (3)
Prereq: High School Math
CS 100—Computer Basics (3)
Prereq: one year High School Alegbra or
MATH 095**
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) -Prereq: Junior Standing

*Open only to freshmen and sophomores
**Not recommended for students with prior programming experience

### 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
Music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University. Ensemble choices should be appropriate to the student's major. Students who qualify may also participate in ensembles in other media. See degree programs for individual requirements and limitations.

### Aural Skills
In order to acquire those hearing and sightsinging skills which are basic to any career in music, all music majors are required to pass level IV of Aural Skills prior to graduation (see course descriptions). Qualified students may progress faster than the normal rate of one level per semester. See Music Composition/ History Chair for information regarding credit waiver for levels skipped.

### Course Prerequisites
For all music majors, completion of MUCH 131, 132, 141 and 142 with passing grades is prerequisite to enrollment in MUCH 231. Certain upper-division courses have specific prerequisites (see course description for details).

# 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 must demonstrate their understanding and facility in the jazz idiom as well. This will normally be accomplished by a separate audition with the coordinator of jazz studies. Acceptance into the program is contingent upon the approval of the coordinator of jazz studies. It is also possible to add jazz studies to an existing major for a double major.

### Jazz Performance Ensembles
Jazz studies majors must perform in either the Jazz Lab Bands or Jazz Combos (or both) as part of the requirements for this degree program. Refer to the specific performance requirements for the Jazz Studies major below. All music majors are expected to participate in ensembles throughout their undergraduate program at Bowling Green State University. Performance opportunities in the Jazz Lab Bands and Combos are not limited to jazz studies or other music majors.

### Jury Examinations
Jazz studies majors must complete jury examinations in their major applied medium as described in the course description section of this catalog under Applied Instruction. In addition, jazz studies majors must perform a jazz jury examination at the end of each semester. This jury examination is conducted by the coordinator of jazz studies. Requirements for satisfactory completion of all jury examinations are as specified in the course description for Applied Instruction.

### 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 credits in PEG 100.
8. 3 credits in POPC 280.

For specific information, consult the coordinator of jazz studies.

### General Requirements
All jazz studies degree candidates are subject to the general requirements listed under Academic Policies in this catalog as well as general requirements listed under Bachelor of Music degree, none of which are superseded by individual degree programs.

#### Writing Proficiency
See Academic Policies, Writing Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year.

#### 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 general education list—3 hours

#### II. Natural Sciences/Computation and Mathematics
Two courses from the approved general education list—6 hours.

#### III. Social and Behavioral Sciences
Two courses from the approved general education list—6 hours.

**IV. Foreign Languages and Cultures**
At least one course from the approved list—3-4 hours.

**V. Cultural Diversity**
At least one course from the approved general education list—3-4 hours.

### Additional requirements outside music

ETHN 120 Introduction to Black Studies 3 hours
POPC 280 Introduction to Popular Music 3 hours

### Music Requirements

All jazz studies majors are required to complete the following music courses. Total: 91 hours.

**Music core**
MUCH 131, 132, 141, 142, 231, 232, 233, 236, 241 and 242. Total: 25 hours.
**Music Performance**
Large ensembles 4 hours; small ensembles 12 hours; major nstrument/ voice 16 hours; MUSP 305 2 hours; MUSP 495 recital 2 hours. Total: 36 hours.
**Piano**
MUED 150, 151 (may be waived by proficiency exam). Keyboard proficiency tests I and II are required. Total: 2 hours.
**Music electives**
(MUCH 234 and 235 strongly recommended) Total: 6 hours.
**Jazz studies major courses**
MUCH 211, 212, 213, 237, 311, 312, 411, 436 and 438. Total: 22 hours.
**Recital requirement** (see above).

### Suggested program

**Note:** Exact order of courses is dependent upon semester of entry into program and frequency of offerings, which is subject to change. This is a general guide only.

*First year (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)
Foreign languages and cultures general education electives (3-4)
Cultural Diversity general education electives (3-4)

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.

## Music 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 Musicum as a training ground for performance practice and showcase for music not usually performed by other music ensembles. Ensemble credit is available in New Music Ensemble, Early Music Ensemble 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.

### Keyboard Proficiency Requirement

Functional keyboard proficiency tests I 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.

### Completion Requirement

Candidates for the bachelor's degree in music composition are required to present a half-recital of original compositions (or equivalent, such as music for a stage play or film of substantial length). Composition majors planning to give a degree recital must be registered for MUCH 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 128-136 total credits distributed as follows:

1. 34-36 credits in general educatic
2. 45-51 credits in basic musicianshp, including performance;
3. 44 credit hours in advanced courses in music theory, literature and composition
4. 3 credits in ENG 112.
5. 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 are superseded by individual degree programs.

**Writing Proficiency**
See Academic Policies, Writing Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year.
**Physical Education**
See Academic Policies, General Requirements for the Baccalaureate Degree.

### General Education Requirements

**I. Humanities and Arts**
At least one course from approved general education list - 3 hours.

**II. Natural Sciences/Computation and Mathematics**
At least one course from approved general education list - 3 hours.

**III. Social and Behavioral Sciences**
At least one course from approved general education list - 3 hours.

**IV. Foreign Languages and Cultures**
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. 8 hours.

**V. Cultural Diversity**
At least one course from approved general education list - 3 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 34-36 hours.

## Music Requirements

All composition majors are required to complete the following music courses. Minimum total: 89 hours.

**Music core**
MUCH 131, 132, 231, 232; either 236 or 237, and one the following: 233, 234 or 235.
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 306 4 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). MUCH 444, 445, 446, 447 (40 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 (33-34 hours)*
MUCH 131, 141, 142, 233 or 234 or 235, and 236 or 237 (12-13)
PEG 100 (2)
Applied music (2)
Arts and humanities general education requirements (3)
Cultural diversity general education requirement (3)
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)
General education electives (6)
*Third year (34 hours)*
MUCH H341 (2)
MUCH 308 and 309 (4)
MUCH 315 (2)
MUCH 320 or 325 (2)
MUCH 410 (4)
MUCH 316 (6)
MUCH 444 annd 445 (6)
Ensembles (2)
Music literature electives (4)
Natural sciences general education requirements (3)
Music performance electives (3)
*Fourth year (32 hours)*
MUCH 316 (6)
MUSP 305 and 306 (4)
MUCH 403 and 404 (4)
MUCH 410 (4)
MUCH 446 and 447 (6)
Electives in and out of music (4)
Social sciences general education requirements (3)
Ensembles (1)

The above is a sample program which may be modified with the approval of the chair of the Music Composition/History Department according to the student's individual needs and capabilities.

# Music Education

(courses coded MUED)
1031 Moore Musical Arts Center, 372-2181

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: choral, instrumental, classroom music and choral/musical theater. The choral option is intended for those who wish to teach junior and senior high school choral ensembles; the instrumental option for those who wish to work with bands and/or orchestras at elementary and secondary levels; the classroom option for those who are interested in teaching elementary and 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 coursework each year. Music education majors usually take between 16 and 18 credit hours per semester. The total number of hours required is distributed over the areas of general and professional study which appear below and vary slightly according to the specific options.

1. 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).

## Selecting a Degree Option

All freshman music education majors are enrolled in a general course of study for the first academic year. Students are required to select a degree option during that year.

Approval of an option is initially determined on the basis of the student's academic standing and performance achievement.

1. Academic standing is determined on the basis of cumulative grade point hours and quality points, and standing in the basic music courses.
2. Performance proficiency is measured through applied juries which are scheduled at selected times and are posted for each academic year. These performance juries are used to determine a student's performance proficiency for choosing a specialty area,

and to determine whether performance progress has been satisfactory. Only students whose performance status is satisfactory will be granted an area of specialty.

3. To remain in a degree option, students must exhibit teaching competency as judged by the music education faculty.

Students who decide to change from one option to another must first consult with the department chair. In addition, they may be required to meet additional professional and performance requirements. Any student changing an option must complete at least 10 credit hours in one performance area.

# DEGREE REQUIREMENTS

## General Requirements

All music education degree candidates are subject to the general requirements listed under Academic Policies in this catalog, as well as general requirements listed under Bachelor of Music degree, none of which are superseded by individual degree programs.

**Writing Proficiency**
See Academic Policies: Writing Proficiency Requirement. Note that a penalty is imposed if ENG 112 is not completed by the junior year.

**Physical Education Requirement**
See Academic Policies: General Requirements for the Baccalaureate Degree.

## General Education

To ensure a general education background in addition to the teaching major, a student is required to complete a minimum of eight courses, totaling at least 42 hours of credit, from the five 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 three 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. Exception to this requirement are described 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 Science/Computation and Mathematics**
Students must complete at least two courses selected from the approved natural science/computation and mathematics general education list. Minimum total: 2 courses.

**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 Cultures**
Students are required to complete one non-western music course: MUCH 233, 234, or 235. Minimum total: 2 hours.

**V. Cultural Diversity**
Students are required to take one course from the approved Cultural Diversity general education list. EDFI 408 is required for music education students. Minimum total: 3 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: 6 hours.

**Total group requirements**
1. Instrumental and choral options—Group I, II, III, IV, and Communication; total: 33 hours.
*Classroom option* - Group I, II, III, IV, V, and Communication; total: 33 hours
*Classroom option*—Group I, II, III, IV, Communication, computation and mathematics; total 33 hours.
*Choral/musical theater option*—Group I, II, III, IV, Communication, 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 music courses, one course which must be from the general education core approved list. The remaining seven hours must be selected from music courses that are not on the required list.
*Classroom option*—9 hours, a minimum of two of which must be in general education; exclusive of required music courses.
*Choral/musical theater option*—0 hours.

These hours may be elected from one or more of the 5 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 choral/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 Requirements

To ensure adequate professional preparation for a career in teaching, the following courses are required: EDFI 302 and 402 and EDAS 409. (The prerequisite for EDFI 302 is PSYC 201). EDFI 408 appears as a requirement in group V, 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 I-IV (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**
[redacted]ours 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: 21 hours.

**Choral option (vocal emphasis)**
MUED 340, MUED 341, MUED 359, [redacted]SP 310; 3 hours of instrument [redacted]sses (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 (instrument emphasis in woodwind, brass, string, guitar or percussion)**(Students wishing to know more about the classroom option should contact the chair.
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: [redacted]-22 hours.

**[redacted]horal-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 University musical (theater program and College of Musical Arts) and three theatrical productions well distributed over the following: opera, opera workshop, educational theater, community theater, professional theater, and dance theater. Each production must be approved by the chair of music education.

MUED 340/341 consists of four major methods components: elementary general music, junior high school general music, the student's major option area of emphasis, and a field component (MUED 341). Specific option areas will be offered only during certain semesters. Students should consult the department for details.

## Performance Requirements

In addition to specific course requirements, music education majors must meet the following performance-oriented requirements.
*Performance jury examinations*
Students in music education must have a major performance emphasis and must pass an examination in that area at jury examination times. Jury examinations are scheduled at selected times and are posted for each academic year. Students wishing to change their area of performance emphasis must do so with the approval of the chair of music education and the appropriate performance faculty.
*Recital*
A half recital (or its equivalent) is required of all music education majors. 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 simply by taking piano for a specified number of credit hours. The following skills are required for each proficiency examination:

*Proficiency I*: (freshman level) scales, basic chord progressions, chording melodies, and sight reading

*Proficiency II*: (sophomore level) harmonization, score reading, and transposition, etc.

*Proficiency III*: (sophomore level) accompanying

*Proficiency I* is a freshman-level requirement; 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 150-151 and take MUSP 264 in lieu of proficiency III.

All freshmen are expected to pass functional proficiency I 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 assignments, there must be at least one full semester between the time the final proficiency is passed and the semester of student teaching. Proficiency III may be taken after student teaching and must be passed to qualify for graduation and certification. Summer session is considered equivalent to one semester. Proficiency examinations are scheduled on an arranged basis 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 above). On the basis of this examination, students may be required to enroll in MUCH 110, Elements of Music. Credit for MUCH 110 will be applied to the elective in music category.

### Field experiences

Field-based experiences are an essential part of professional teacher preparation. In compliance with state 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 50 miles from campus.

*Withdrawal from student teaching*

Once an assignment has been accepted by a school system, a student teacher may not withdraw except in cases of emergency (e.g., ill health, a death in the family).

*Changing semester of teaching*

Students requesting to change their assigned semester of student teaching may have to wait one or more semesters if no opening in the semester requested exists.

*Extended student teaching*

If a student does not successfully meet the performance objectives and competencies outlined by the Office of Student Teaching and the Department of Music Education during the semester of student teaching, s/he may be required to do extended student teaching. A student doing unusually ineffective teaching in any of the competency areas may be required to pursue further academic study in that area(s) before being allowed to do extended student teaching.

*Time requirement*

All students must complete the full-semester time requirement for student teaching.

*Written requirements*

Student teachers must complete all written requirements connected with their final evaluations or receive an incomplete for the semester.

*On-campus activities*

For a student to be effective, total commitment to teaching is necessary. Students may not take an academic course, present recitals, perform in ensembles or take private lessons during student teaching.

*Graduate students*

Graduate students seeking teaching certification must meet all undergraduate 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. IV) 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 Chorale) (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 VII*
- Student teaching (first 10 weeks) (10)
- EDFI 402 (last 5-6 weeks only) (3)
- Group V requirement: EDFI 408 (last 5-6 weeks only) (3)

*Semester VIII*
- Group I requirement (3)
- Group III 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 music (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)
*Semester V*
- Junior 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 V 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)

## Classroom Option-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 (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)
MUED 251 (offered fall only) (1)
MUED 240 (3)
Small ensemble (1)
Applied study (2)
Voice class or studio voice (1)
Elective in music (1)
MUS 099 (0)

*Semester IV*
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 V: EDFI 408 (first 5-6 weeks only) (3)

## Classroom 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)
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 V: 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 II*
MUCH 131 (4)
MUCH 142 (2)
IPCO 102 or ENG 112 (3)
Applied study (2)
Large 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/Percussion 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)
EDFI 402 (last 5-6 weeks only) (3)
Group V: EDFI 408 (last 5-6 weeks only) (3)
*Semester VIII*
String class (2)
Group I requirements (3)
Group III requirement (3)
Electives in music as required (4)

### Instrumental-Wind/String/ Guitar Percussion Emphasis

**First year** (32-34 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 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 others-spring 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 DURING 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 I 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 V: EDFI 408 (first 5-6 weeks only) (3)

## Music History and Literature

(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; Non-Western Music and MUCH 236; MUCH 141, 142 and 241. Students with an average of 2.5 to 2.9 may be accepted as majors on probationary status. Students accepted on this status must achieve a 3.0 average in major area courses within 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 credit 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 issues and basic research techniques. This is accomplished through MUCH 406, Problems in Music History.

## DEGREE REQUIREMENTS

The Bachelor of Music degree in music history and literature requires 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 Education 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

**I. 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 general education list. 6 hours.

**III. Social Sciences**
Students must complete at least two courses from the approved general education list. 6 hours.

**IV. Foreign Language and Cultures**
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. 16 hours.

**V. Cultural Diversity**
Students must complete at least one course from the approved general education list. 3 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 (Early Music Ensemble) 4 hours; major instrument/voice 4 hours; MUSP 305 and 306 4 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 (2)
- Applied music (2)
- Large ensembles (2)
- Humanities and arts general education requirements (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, and 407 (4)
- Music literature electives (6)
- Natural science general education requirements (6)
- Cultural diversity general education requirements (3)
- Electives in/out of music (6)
- Early Music Ensemble (1)

**Fourth year** (33 hours)
- MUCH 408 and 412 (4)
- MUCH 406 (6)
- MUSP 305 and 306 (4)
- Music literature electives (4)

Foreign language (8)
Social science general education requirements (6)
Early Music Ensemble (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 Performance

(courses coded MUSP)
1031 Moore Musical Arts Center, 372-2181

The Department of Music 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

At least one 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 theater; 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 Requirements

Students must complete a total of at least eight courses from the five 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: Humanities and Arts**
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**
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 Cultures**
Students 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.

**V. Cultural Diversity**
Students must complete at least one course.

## 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 four-year period.

## Specific Requirements for Performance Program Options

**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 program of a church of his or her choice.

**Guitar Option** (127 hours)
**Jazz Emphasis**
MUCH 211 Jazz Improvisation and Repertoire I (2)
MUCH 212 Jazz Improvisation and Repertoire II (2)
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 Small Ensembles (16)
MUSP 261/461 Applied Piano (2)
MUSP 286/486 Applied Guitar (28)
MUSP 495 Senior Recital (2)

**Harpsichord Option** (126 hours)
MUCH 100/300 Early Music Ensemble (4)
MUCH 308 Keyboard Harmony I (2)
MUCH 309 Keyboard Harmony II (2)
MUCH 315 Orchestration (2)
MUCH 403 Counterpoint I (2)
MUCH 404 Counterpoint II (2)
MUCH 406 Problems in Music History (3)
MUCH 407 Performance Practice (2)
MUCH 408 Chamber Music Literature (2)
MUSP 238-239, 277-279, 288-289, 438-439, 477-479, 488-489 Large Ensembles (4)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 367 Piano Pedagogy I (3)
MUSP 410 Harpsichord Repertoire I (3)
MUSP 411 Harpsichord Repertoire II (3)
MUSP 262/462 Applied Harpsichord (30)
MUSP 495 Senior Recital (2)

**Instrumental Option** (124-125 hours)
MUCH 320 Band Scoring or 315 Orchestration (2)
MUCH 318 Symphonic Literature (2)
MUCH 408 Chamber Music Literature (2)
MUSP 305 Conducting I (2)
MUSP 453, 454, or 458 Pedagogy (2)
MUSP 238-39/438-39, 288-89/488-89 Large Ensemble (16)
MUSP 100/300 Small Ensemble (4)
MUSP 261/461 Applied Piano (2)
MUSP 221/421, 231-35/431-35, 241-45/441-45, 281-85/481-85 Applied Major Instrument (32)
MUSP 495 Senior Recital (2)

**Organ Option** (122 hours)
MUCH 315 Orchestration (2)
MUCH 403 Counterpoint I (2)
MUCH 404 Counterpoint II (2)
MUCH 407 Performance Practice (2)
MUSP 305 Conducting I (2)
MUSP 306 Conducting II (2)
MUSP 215 Organ Repertoire I (2)
MUSP 216 Organ Repertoire II (2)
MUSP 396 Service Playing I (2)
MUSP 397 Service Playing II (2)
MUSP 415 Organ Construction (2)
MUSP 459 Organ Pedagogy (2)
MUSP 100/300 Small Ensembles (4)
MUSP 263/463 Applied Organ (32)
MUSP 238-39/438-39, 277-79/477-79, 288-89/488-89 Large Ensembles (4)
MUSP 495 Senior Recital (2)

**Piano Accompanying Option** (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 II (3)
MUSP 264 Accompanying Techniques I (1)
MUSP 265 Piano Four-Hand Class (1)
MUSP 100/300R Accompanying Practicum (2)
MUSP 100/300S Mixed Chamber Ensemble (2)
MUSP 100/300R or 100/300S Accompanying Practicum or Mixed Chamber Ensemble (1)
MUSP 305 Conducting I (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)
[redacted]117 Dance: Jazz (1)
[redacted]119 Dance: Modern (1)
PEG 122 Dance: Tap (1)
DANC 120 Classical Ballet I (2)
DANC 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 I (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)
[redacted]H 320 Band Scoring or 315 [redacted]chestration (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 I*
Arts and humanities (3)
MUCH 141 (2)
[redacted]P 100, 277-79 (1)
[redacted]P 263 or 272 (2)
ENG 112 (3)
FREN 101 (4)
PEG 100 (1)
MUS 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 (4)
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)
Cultural diversity (3)
MUS 099 (0)
*Semester VI*
MUSP 463 and 472 (3)
MUSP 300, 477-79 (1)
MUSP 216 or 312 (2)
MUSP 306 (2)
MUSP 397 (2)
MUSP 459, if organ emphasis (2)
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)
MUCH 312 (3)
Foreign language and cultures (3)
Cultural diversity (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)
*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)
*Semester VI*
MUCH 300 (Early Music Ensemble) (1)
MUCH 309 (2)
MUSP 306 (2)
MUSP 462 (4)
Cultural diversity (3)
Electives (3)
MUS 099 (0)
*Semester VII*
MUCH 403 (2)
MUCH 406 (3)
MUCH 407 (2)
MUSP 410 (3)
MUSP 462 (4)
Electives (2)
*Semester VIII*
MUCH 404 (2)
MUCH 408 (2)
MUSP 411 (3)
MUSP 462 (2)
MUSP 495 (2)
Electives (3)

## Instrumental Option

*Semester I*
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (1)
MUSP 221, 231-35, 241-45, 281-85 (4)
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)
PEG 100 (1)
English literature (3)
MUSP 238-39, 288-89 (2)
MUS 099 (0)
*Semester III*
MUCH 132 (4)
MUCH 241 (2)
MUSP 100 (1)
MUSP 221, 231-35, 241-45, 281-85 (4)
MUSP 238-39, 288-89 (2)
MUCH 236 or 237 (2-3)
MUSP 099 (0)
*Semester IV*
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 221, 231-35, 241-45, 281-85 (4)
MUSP 238-39, 288-89 (2)
Social science (3)
MUSP 261 (1)
MUS 099 (0)
*Semester V*
MUSP 461 and proficiency (1)
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 442-45, 481-85 (4)
MUCH 315 or 320 (2)
MUSP 305 (2)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
*Semester VI*
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUCH 318 (2)
MUSP 300 (1)
Foreign languages and culturess (3)
Electives (3)
MUS 099 (0)
*Semester VII*
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUSP 453, 454, 458 (2)
MUSP 300 (1)
Electives (6)
*Semester VIII*
MUSP 438-39, 488-89 (2)
MUSP 421, 431-35, 441-45, 481-85 (4)
MUCH 408 (2)
MUSP 495 (2)
Electives (3)

## Organ Option

*Semester I*
Arts and humanities (3)
MUCH 141 (2)
MUSP 100 (1)
MUSP 263 (4)
MUSP 238-39, 277-79, 288-89 (1)
ENG 112 (3)
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)
English literature (3)
PEG 100 (1)
MUS 099 (0)
*Semester III*
MUCH 132 (4)
MUCH 241 (2)
MUSP 100 (1)
MUSP 263 (4)
MUSP 238-39, 277-79, 288-89 (1)
MUSP 215 (2)
Social science (3)
MUS 099 (0)
*Semester IV*
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 100 (1)
MUSP 238-39, 277-79, 288-89 (1)
MUSP 263 (4)
MUSP 216 (2)
MUS 099 (0)
*Semester V*
MUCH 315 (2)
MUSP 305 (2)
MUSP 463 (4)
MUSP 396 (2)
Natural science (3)
Cultural diversity (3)
MUS 099 (0)
*Semester VI*
MUSP 306 (2)
MUSP 397 (2)
MUSP 463 (4)
Foreign language and cultures(3)
Electives (3)
MUSP 459 (2)
MUS 099 (0)
*Semester VII*
MUCH 403 (2)
MUCH 407 (2)
MUSP 415 (2)
MUSP 463 (4)
Electives (5)
*Semester VIII*
MUCH 404 (2)
MUSP 463 (4)
MUSP 495 (2)
Electives (4)

## Piano Accompanying Option

*Semester I*
Arts and humanities (3)
MUCH 141 (2)
MUSP 160 (1)
MUSP 261 (4)
MUSP 100R (1)
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)
MUS 099 (0)
*Semester IV*
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 315 (2)
MUSP 300R (1)
MUSP 300S (1)
MUSP 305 (2)
MUSP 461 (4)
Natural science (3)
MUCH 300/400 literature (2)
Foreign language and culturess (3)
MUS 099 (0)
*Semester VI*
MUSP 300R (1)
MUSP 300S (1)
MUSP 361 (1)
MUSP 364 (1)
MUSP 461 (4)
Cultural diversity (3)
Electives (5)
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 (2)
MUSP 495 (2)
Electives (4)

### [redacted] Literature Option

*[redacted]mester 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 II*
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)
*[redacted]ester V*
[redacted]CH 315 (2)
MUCH 300/400 literature (2)
MUSP 361 (1)
MUSP 300S (1)
MUSP 305 (2)
MUSP 461 (4)
Electives (3)
Foreign language/*s* and cultures (3)
MUS 099 (0)
*Semester VI*
MUSP 300S (1)
MUSP 461 (4)
Social science (3)
Cultural diversity (3)
Electives (3)
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 I*
Arts and humanities (3)
[redacted]H 141 (2)
[redacted] 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)
Cultural diversity (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 languages and cultures (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 300S (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 IV*
MUCH 231 (3)
MUCH 232 (2)
MUCH 242 (2)
MUSP 272 (4)
MUSP 277 (1)
MUSP 261 (1)
FREN 102 (4)
MUS 099 (0)
*Semester V*
MUSP 472 (4)
MUSP 477 (1)
MUSP 275 (2)
MUSP 305 (2)
MUSP 311 (2)
GERM 101 (4)
MUSP 461 (1)
MUS 099 (0)
*Semester VI*
MUSP 472 (2)
MUSP 477 (1)
MUSP 461 and proficiency (1)
MUSP 312 (2)
MUSP 378 (2)
GERM 102 (4)
Natural science (3)
MUS 099 (0)
Cultural diversity (3)
*Semester VII*
MUSP 370 (3)
MUSP 472 (4)
MUSP 477 (1)
MUCH 412 (2)
MUSP 378 (2)
Arts and humanities (3)
*Semester VIII*
MUSP 472 (4)
MUSP 495 (2)
MUSP 477 (1)
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)
Cultural diversity (3)
*Semester V*
MUSP 472 (2)
MUCH 232 (2)
MUSP 305 (2)
MUSP 311 (2)
GERM 101 (4)
THEA 344 (3)
RED 120 (2)
MUS 099 (0)
*Semester VI*
MUSP 472 (2)
MUSP 300 (1)
MUSP 312 (2)
MUSP 378 (2)
MUSP 477 (1)
THEA 345 (3)
RED 220 (2)
THEA 352 (3)
MUS 099 (0)
*Semester VII*
MUSP 370 (3)
MUSP 472 (2)
MUSP 378 (2)
MUCH 412 (2)
Natural science (3)
PEG 122 (1)
Electives (1)
*Semester VIII*
MUSP 477 (1)
MUSP 472 (4)
MUSP 495 (2)
Electives (8)

### Vocal Pedagogy Option

*Semester I*
MUCH 141 (2)
MUSP 272 (2)
ENG 112 (3)
PEG 100 (1)
MUSP 214 (2)
FREN 101 (4)
MUS 099 (0)
*Semester II*
MUCH 142 (2)
MUCH 131 (4)
English Literature (3)
MUSP 272 (2)
PEG 100 (1)
FREN 102 (4)
MUS 099 (0)
*Semester III*
MUCH 132 (4)
MUCH 241 (2)
MUCH 236 or 237 (2-3)
MUSP 272 (2)
MUSP 261 (1)
GERM 101 (4)
MUSP 277 (1)
MUS 099 (0)
*Semester IV*
MUCH 231 (3)
MUCH 242 (2)
MUSP 272 (2)
MUSP 277 (1)
MUSP 261 (1)
GERM 102 (4)
MUS 099 (0)
Math/Natural science (3)
Elective (1)
*Semester V*
MUSP 472 (2)
MUSP 477 (1)
MUSP 275 (2)
MUSP 305 (2)
MUSP 311 (2)
MUSP 461 (1)
MUSP 264 (1)
MUSP 370 (3)
MUCH 232 (2)
MUS 099 (0)
*Semester VI*
MUSP 472 (2)
MUSP 477 (1)
MUSP 461 and proficiency (1)
MUSP 312 (2)
MUSP 378 (2)
PSYC 201 (4)
MUSP 473 (1)
MUS 099 (0)
Cultural diversity (3)
*Semester VII*
MUSP 472 (2)
MUSP 473 (1)
MUSP 378 (2)
Arts and humanities (3)
MUSP 300 (1)
MUCH 412 (2)
EDFI 302 (3)
Electives (2)
*Semester VIII*
MUSP 472 (2)
MUSP 473 (1)
MUSP 300 (1)
MUSP 495 (2)
Electives (8)

### Woodwind Specialist Option

*Semester I*
Arts and humanities (3)
MUCH 141 (2)
MUSP 241-45 (major) (2)
MUSP 238-39, 288-89 (2)
MUED 140 (1)
MUSP 100 (1)
ENG 112 (3)
PEG 100 (1)
MUS 099 (0)
*Semester II*
MUCH 131 (4)
MUCH 142 (2)
MUSP 241-45 (major) (2)
MUSP 241-45 (first minor) (2)
MUSP 238-39, 288-89 (2)
MUED 145 (1)
English literature (3)
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 IV*
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 recite
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 languages and cultures (3)
Social science (3)
Cultural diversity (3)
MUS 099 (0)
*Semester VII*
MUCH 315 or 320 (2)
MUSP 441-45 (major) (2)
MUSP 441-45 (second minor and half recital) (2)
MUSP 454 (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
John W. Sinn, Acting 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
Ernest Savage, Director, 207 Technology Building, 372-7613

### Office of Technology Research Services
102 Technology Building, 372-2600

### Departments
Technology Systems, Sudershan K. Jetley, 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 professional education including a strong general education component. Students acquire the competencies, attitudes and understandings to function as qualified professionals in business, industry, government and education. The programs are based on the exciting and evolving dimensions of several specialties in industrial technology. The college's faculty accept and conscientiously contribute to the achievement of excellence in the cultural, citizenship, communication and general education goals of the University.

The college and departmental goals and 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, and, 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 co-op 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 S/U beyond the specified deadline. The dean of the college reserves the right to final decision.

Appeals regarding the issuance of a grade are processed through the specific instructor(s) of the course(s). Grade appeals are not processed through the college's Program Services Office, but must be processed through appropriate departments. In cases related to academic honesty or other disciplinary action, students are referred to the Student 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.

## Intercollege 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 complete 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 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.

## BACHELOR OF SCIENCE IN TECHNOLOGY

Bachelor of science in technology programs are designed for the student interested in the application of arts and sciences to the technologies of industry. Career opportunities exist in a growing area of service. Emphasis is placed on industrial control and supervision, technical processes and personnel leadership with such employment classifications as: construction supervision, production management, technical sales, product design, quality control,

chnical service training, graphic dinator, 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 well-prepared individuals in technology.

A unique strength of this curriculum is its flexibility. During the second year of study, the student, in cooperation with the adviser, selects courses from the appropriate technology concentration, management, marketing, the physical sciences, communications and the humanities. Industrial experience is gained through 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 iors are required to participate in e semester-long co-op work signments 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 requirements for graduation as listed elsewhere in this catalog (General Requirements 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/204 Technology Annex, 372-2439/8950

The aerotechnology major is designed to prepare students for responsible positions in commercial aviation. The program is organized around two options: Airport Operations/Aircraft Maintenance Management, and Professional Pilot. All instruction leading toward Federal Aviation Administration (FAA) certification is conducted in accordance with the appropriate Federal Aviation Regulations.

## Airport Operations/Aircraft Maintenance Management Option

The student chooses two of three sequences to develop a specialized course of study. The student's choices are: Airport Operations, Aircraft Maintenance Management, and Flight Technology. The Flight Technology sequence prepares the student for the FAA Commercial Pilot: Airplane Single Engine Land and Instrument certificate and is intended to give students a general flight background while specializing in either Airport Operations or Maintenance Management.

All students are also required to complete course work in areas of science and mathematics, general education and business. Supervised cooperative education experiences with or related to the sequences selected are required.

Students who have obtained an associate degree in this or a closely related field may pursue a bachelor's degree by enrolling in the curriculum for 2+2 transfer students. Refer to 2+2 transfer statement following this section.

***First year*** (34 hours)
- AERT 220 (3)
- AERT 240 (3)
- ENG 112 (3)
- MIS 200 or CS 100 (3)
- PHYS 201 (5)
- TECH 101 (3)
- TECH 102 (3)
- Math sequence (5)
- Aert sequence (6)

***Second year*** (34 hours)
- Aert sequence (9)
- ENG 200 or A&S 200 (3)
- Humanities & arts elective (3)
- IPCO 102 (3)
- Cultural diversity in U.S. elective (3)
- PEG 100 (2)
- PSYC 201 (4)
- Social science elective (3)
- TECH 289 (4)

***Third year*** (34 hours)
- Aert sequences (15)
- Business elective (3)
- General elective (3)
- LEGS 301 (3)
- Foreign languages and cultures elective (3)
- TECH 302 (3)
- TECH 389 (4)

***Fourth year*** (28 hours)
- Aert sequences (9)
- Business elective (3)
- General elective (3)
- GEOG 303 (3)
- HED 313 (3)
- MGMT 305 (3)
- TECH 489 (4)

## Professional Pilot Option

This option prepares the student for a career as a commercial pilot. All flight and ground school training is conducted in strict accordance with Federal Aviation Administration (FAA) Part 141 requirements and other applicable regulations. Upon successful completion of this option, the student will hold the following FAA certificates and ratings: Commercial Pilot: Airplane single and multiengine land and instrument, Flight Instructor: Airplane single engine land and instrument.

***First year*** (29 hours)
- AERT 220 (3)
- AERT 221 (3)
- AERT 240 (3)
- AERT 344 (3)
- AERT 345 (1)
- Math sequence (5)
- PHYS 201 (5)
- TECH 101 (3)
- TECH 102 (3)

***Second year*** (42 hours)
- AERT 224 (3)
- AERT 346 (2)
- AERT 350 (1)
- AERT 401 (2)
- AERT 402 (3)
- AERT 403 (1)
- AERT 443 (2)
- CS elective (3)
- Cultural diversity in U.S. (3)
- ENG 112 (3)
- ENG 200/203 or A&S 250 (3)
- GEOG 213 (3)
- IPCO 102 (3)
- Math sequence (5)
- Foreign languages and cultures elective (3)
- PEG 100 (1)
- PEG 100 (1)

***Third year*** (23 hours)
- AERT 404 (3)
- AERT 445 (3)
- Professional pilot elective (3)
- MGMT 305 (3)
- TECH 289 (4)
- TECH 302 (3)
- TECH 389 (4)

*Fourth year* (33 hours)
AERT 349 (3)
AERT 352 (3)
AERT 354 (3)
AERT 405 (3)
AERT 407 (1)
General education elective (6)
HED 313 (3)
Professional pilot elective (3)
PSYC 201 (4)
TECH 489 (4)

## 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 Association 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.

Students may emphasize general contracting, residential contracting, mechanical and electrical contracting or professional design.

*First year* (33 hours)
ENG 112 (3)
Natural science elective (3)
Social science elective (3)
PEG (2 activities) (2)
Math requirement (10)
TECH 101 (3)
TECH 102 (3)
DESN 105 (3)
CONS 235 (3)

*Second year* (37 hours)
ECON 200 or 202 (3)
PSYC 201 (4)
PHYS 201 or 211 (5)
STAT 200 (3)
Foreign languages and cultures elective (3)
CONS 320 (3)
DESN 243 (3)
TECH 289 (4)
CONS 318 (3)
Cultural diversity in U.S. elective (3)
Humanities elective (3)

*Third year* (28 hours)
TECH 389 (4)
LEGS 301 (3)
CONS 335 (3)
Construction option (6)
TECH 302 (3)
ACCT 325 (3)
BA 203 or ENG 388 (3)
CONS 336 (3)

*Fourth year* (28 hours)
MGMT 305 (3)
CONS 439 (3)
CONS 440 (3)
TECH 489 (4)
Construction option (6)
CONS 435 (3)
Business elective (3)
CONS 442 (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 are 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 design-related position in industry which is supervised by College of Technology faculty.

Students who have obtained an associate degree in an area of design or a closely related field may pursue a bachelor's degree in this program by enrolling in the curriculum for 2+2 transfer students. Refer to 2+2 transfer statement following this section.

### Architectural/Environmental Design

The Architecture/Environmental Design option is a pre-professional degree program that prepares students to enter the environmental design occupations or continue in higher education to pursue professional degrees in architecture, landscape architecture, urban planning, or construction. The focus of the program is to enhance the student's problem solving ability and produce critical thinkers, not technicians.

Students who have obtained an associate degree in this or a closely related field may pursue a bachelor's degree in this program by enrolling in the curriculum for 2+2 transfer students. Refer to 2+2 transfer statement following this section.

*First year* (30 hours)
CONS 235 (3)
DESN 105 (3)
ENG 112 (3)
MATH 128 (5)
PEG 100 (2)
PHYS 201 (5)
TECH 101(3)
TECH 102 (3)
University Core elective (3)

*Second year* (35 hours)
DESN 205 (3)
DESN 236 (3)
DESN 237 (3)
DESN 243 (3)
DESN 250 (3)
ECON 200 (3)
PHYS 202 (5)
MATH (By advisement) (5)
TECH 289 (4)
University Core elective (3)

*Third year* (31)
ARTH 440 (3)
CONS 335 (3)
CONS 336 (3)
DESN 301 (3)
DESN 307 (3)
DESN elective (3)
DESN 450 (3)
LEGS 301 (3)
University Core elective (3)
TECH 389 (4)

*Fourth year* (31 hours)
CONS 439 (3)
DESN electives (9)
ENG 388 (3)
MGMT 305 (3)
TECH 302 (3)
TECH 489 (4)
University Core elective (6)

### 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* (31 hours)
ENG 112 (3)
PEG 100 (2)
MATH requirement (5)
IPCO 102 (3)
Social science elective (3)
CS 101 (3)
MFG 112 (3)
DESN 104 (3)
TECH 101 (3)
TECH 102 (3)

*Second year* (34 hours)
ENG 200/203 (3)
DESN 204 (3)

MATH requirement (5)
ECH 289 (4)
ECH 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)
PYSC 201 (4)
STAT 211 (3)
Cultural diversity elective (3)
Foreign languages and cultures 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
FG 229, 323, 329, 426, 428, and 438
TECH 391
Other technical courses by advisement

## Product Design

This 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 200/203 (3)
PSYC 201 (4)
STAT 200 (3)
TECH 289 (4)
Foreign languages and culturesl elective (3)
Prod. Design Concentration (6)
ECH 302 (3)
PHYS 201 (5)
***Third year*** (31 hours)
Cultural diversity elective (3)
TECH 389 (4)
ECON 202 (3)
ACCT 221 (3)
Prod. Design Concentration (9)
Technology electives (6)
Natural science elective (3)
***Fourth year*** (31 hours)
TECH 489 (4)
Technology electives (6)
Prod. Design Concentration (12)
MKT 300 (3)
MKT 410 (3)
ENG 388 (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, 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

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, 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)
Foreign languages and cultures elective (3)
TECH 101 (3)
TECH 102 (3)
ET 191 (3)
DESN 104 (3)
Math requirement (10)
Cultural diversity in U.S. elective (3)
PEG (2 activities) (2)
***Second year*** (33 hours)
ENG 200/203 or A&S 250 (3)
CS 101 (3)
IPCO requirement (3)
MFG 112 (3)
ET 240 (4)
ET 241 (4)
PHYS 201 (5)
STAT 200 (3)
TECH 289 (4)
***Third year*** (31 hours)
Business electives (6)
ET 344 (3)
TECH 302 (3)
TECH 389 (4)
ET 300 (3)
ET 358 (4)
ET 442 (3)
PHYS 202 (5)
***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 interdisciplinary 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 program 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 100 (2)
ENG 200/203 (3)
IPCO 102 (3)
DESN 104 (3)
MFG 112 (3)
TECH 101 (3)
MATH requirement (5)
VCT 203 (3)
CONS 235 (3)

*Second year* (33-34 hours)
PSYC 201 (4)
PHYS 201, or CHEM 109/110 (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* (31 hours)
EDFI 302 (3)
MGMT 305 (3)
TE 352 (3)
TECH 302 (3)
Cultural Diversity 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)
Foreign languages and cultures elective (3)

# Manufacturing Technology

264 Technology Building, 372-2439

This field of study applies the principles of mathematics and the physical sciences to industrial problems related to manufacturing systems. Computer usage in designing, monitoring and controlling manufacturing processes, including robotics and automated work cells, is an important part of this program. An important component of this technology program and its options is the required cooperative eduction experiences in industry which is University supervised. In addition to these technical studies, the program offers excellent opportunities for studies in management and science. Three options are offered under this specialization: manufacturing, industrial environment, and physical plant and energy utilization technology.

Students who have obtained an associate degree in manufacturing or a closely related area may pursue a bachelor's degree in this technology by enrolling in the curriculum for 2+2 transfer students. Refer to 2+2 transfer statement preceeding this section.

## Manufacturing option

*First year* (30 hours)
CS 101 or MIS 200 (3)
DESN 104 (3)
ET 191 (3)
ENG 112 (3)
MFG 112 (3)
MATH 128 (5)
TECH 101 (3)
TECH 102 (3)
PEG 100 (1)
Social science elective (3)
*Second year* (32 hours)
DESN 204 or 243 (3)
MFG 222 (3)
MFG 229 (3)
MATH 126 (5)
PHYS 201 (5)
STAT 200 (3)
TECH 289 (4)
Foreign languages and cultures elective (3)
Cultural diversity in the U.S. elective (3)
*Third year* (32 hours)
IPCO 102 (3)
ECON 200 (3)
MGMT 300 (3)
MFG 322 (3)
MFG 326 (3)
MFG 329 (3)
PEG 100 (1)
TECH 389 (4)
Technology elective (3)
Natural science elective (3)
Humanities and art elective (3)
*Fourth year* (31 hours)
DESN 404 (3)
ENG 388 (3)
MFG 327 (3)
MFG 424 (3)
MFG 428 (3)
MGMT 305 (3)
TECH 302 (3)
TECH 489 (4)
MFG 438 (3)
Business elective (3)

## Industrial environment technology option

This program consists of studies in industrial technology, business and the sciences. The technical component concentrates on industrial pollution control applied to manufacturing and process control. Study in business emphasize consideration of the organizational, legal and financial principles involved. The sciences, primarily chemistry and biology, provide students with knowledge on the chemical nature of pollutants and their effect on the ecological system.

*First year* (32 hours)
CS 101 or MIS 200 (3)
PEG 100 (2 activities) (2)
CHEM 125 (5)
ENG 112 (3)
MFG 112 (3)
MATH 128 (5)
CHEM 127 (3)
CHEM 128 (2)
TECH 101 (3)
TECH 102 (3)
*Second year* (35 hours)
Cultural diversity in the U.S. electiv (3)
ECON 200 (3)
MATS & PROC CHOICE (3)
MATS & PROC CHOICE (3)
MATH 126 (5)
Foreign languages and cultures elective (3)
BIOL 204 (5)
STAT 200 (3)
TECH 289 (4)
ENVT 223 (3)
*Third year* (30 hours)
Technology elective (3)
Humanities and art elective (3)
MGMT 300 (prereq. STAT 200) (3)
Technology elective (3)
MATS & PROC CHOICE (3)
BIOL 205 (5)
MFG 338 (3)
TECH 389 (4)
IPCO 102 (3)
*Fourth year* (31 hours)
LEGS 301 (3)
Technology electives (3)
ENG 388 (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

Specifically, the physical plant technologist may be employed in the following areas: plant layout and design, construction and installation of equipment, maintenance, repairs and replacement, operation of utilities, and plant and industrial engineering roles.

## Energy Utilization Technology Sequence

In general, the energy utilization technologist may be employed in commercial or industrial areas and responsible for efficient, proper and economical use of the mechanical, electrical, thermal nuclear, chemical, and radiant sources of energy. 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 requirements (5)
TECH 101 (3)
IPCO requirement (3)
ET 191 (3)
DESN 105 (3)
TECH 102 (3)
Humanities and arts elective (3)
BIOL 101 (3)

***Second year*** (34 hours)
ECON 200 or 202 (3)
MIS 200 (3)
PHYS 201 (5)
CONS 235 (3)
CHEM 109 (3)
CHEM 110 (1)
MATH requirement (2)
TECH 289 (4)
STAT 200 (3)
ENVS 101 (2)
PP or EU sequence (5)

***Third year*** (31 hours)
MGMT 300 (3)
DESN 404 (3)
CONS 337 (3)
Cultural diversity in the U.S. elective (3)
PP or EU option (12)
TECH 389 (4)
Foreign languages and cultures elective (3)

***Fourth year*** (31 hours)
Business electives (3)
ENG 388 (3)
DESN 436 (3)
MGMT 305 (3)
ET 357 (3)
PP and EU Option (9)
TECH 489 (4)
TECH 302 (3)

## Advanced Technical Teaching

260 Technology Building, 372-2437

This major prepares students for teaching positions at post-secondary technical institutions where no requirement for teaching certification exists. 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 this 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 127 &128 (5)
Tech. Concentration (9)
TECH 101 and 102 (6)

***Second year*** (34 hours)
ENG 200/203 (3)
PSYC 201 (4)
CS 100 (3) or MIS 200 (3)
Tech. Concentration (9)
TE 252 (3)
TECH 289 (4)
MATH (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)
Hum. & Arts Elective (3)
ENG 388 (3)

***Fourth year*** (32 hours)
EDFI 408 (cultural diversity) (3)
Multicultural elective (3)
Math requirement (5)
TECH 489 (4)
TE 449 (3)
TE 428 (3)
Tech. Concentration (11)

## Visual Communication Technology

260 Technology Building, 372-2437

The Visual Communication program prepares students in the processes used to transmit ideas and concepts through visual media. The program offers theory and practice in computer applications of visual media, print, video, display, and photography. These careers require technical competencies in printing, video, display and photography. With help from an advisor, each student selects an occupational option for specialization from numerous career options. The program proceeds through a framework of analyzing and applying the many methods of creating, reproducing and distributing visual communication materials. Students ultimately combine concepts, theories and principles with critical and creative-technical problem solving abilities to generate solutions for visual communication problems.

By developing the ability to solve communication problems, students will be prepared for such technological production and management positions as graphic coordinator, video producer or editor, electronic publisher, multimedia producer, print/video/photo sales representative, or printing/publishing plant manager. Supervised cooperative work experience provides students with "real world" practice in their area of interest.

Students who have obtained an associate degree in an allied area may pursue a bachelor's degree in Visual Communication by enrolling in the curriculum for 2+2 transfer students. Refer to 2+2 transfer statement following this section.

***First year*** (32-35 hours)
TECH 101 (3)
VCT 203 (3)
ENG 112 (3)
Cultural Diversity elective (3)
ARTD 211 (3)
MATH requirement (5-7)
PHYS 201 or CHEM 109 &110 (4-5)
PEG (2 electives) (2)
Humanities and arts elective (3)
DESN 104 (3)
TECH 102 (3)

***Second year*** (32-34 hours)
PSYC 201 (4)
MIS 200 OR CS 100 or 101 (3)
ECON 200 or higher (3)
IPCO 102/306 (3)
VCT 208 (3)
VCT 282 (3)
General education elective (3)
TECH 289 (4)
STAT 200 (3)
Science elective (3-5)

***Third year*** (31 hours)
MKT 300 (3)
VCT cluster (15)
TECH 389 (4)
TECH 302 (3)
ACCT 221 (3)
Foreign languages and cultures elective (3)

***Fourth year*** (28 hours)
VCT cluster (12)
VCT 467 (3)
MGMT 305 (3)
TECH 489 (4)
VCT 468 (3)
ENG 388 (3)

# BACHELOR OF SCIENCE IN EDUCATION

The College of Education and Allied Professions in cooperation with the College of Technology offers a program in technology education which leads to the bachelor of science in education. This program includes an option for a major and a minor.

Professional education and general education requirements are specified elsewhere in this catalog. For admittance to the Bachelor of Science in Education program the student must meet all program matriculation requirements as determined by the College of Education and Allied Profession's matriculation standards and the Faculty of Technology Education.

## Technology Education

260 Technology Building, 372-2437
365 Education Building, 372-7372

**Major**-Industrial Technology Education (meets special certification, kindergarten-twelfth grade)

The College of Education and Allied Professions offers the teacher certifica-

tion program through both a minor and major in industrial technology education which leads to the bachelor of science in education.

***First year*** (31 hours)
ENG 112 (3)
PEG (2 activities) (2)
IPCO 102 (3)
ENG 200 or 203 (3)
EDFI 202 or EDCI 202 (2)
DESN 104 or 204 (3)
MFG 112 (3)
TECH 101 (3)
ET 191 (3)
CONS 235 (3)
TECH 102 (3)
***Second year*** (34-35 hours)
PSYC 201 (4)
PHYS 201 or CHEM 109 &110 (4-5)
CS 100, 101, or MIS 200 (3)
VCT 203 (3)
MATH 128 (5)
MFG 222 or 229 (3)
MFG 322 (3)
TE 252 (3)
TECH Elective (3)
HUM & ART Elective (3)
***Third year*** (33 hours)
NAT Science Elective (3)
EDFI 302 (3)
TE 462 (3)
TE 352 (3)
MFG 329 (3)
TECH 391 (3)
CONS 306 (3)
EDFI 402 (3)
DESN 301 or 404 (3)
TECH 302 (3)
Foreign languages and cultures elective (3)
***Fourth year*** (31 hours)
SOC SCI Elective (3)
TE 497 Student Teaching (10)
EDAS 409 (3)
EDFI 408 (meets cultural diversity req.) (3)
TE 449 (3)
TE 447 (3)
TECH Electives (6)

**Minor**-Industrial Technology Education (meets high school certification) (36 hours)

This minor in technology education is restricted to teacher education majors and practicing teachers in the following areas: comprehensive science, physics, chemistry, biology, earth science, social studies, environmental science, or computer science. Alternatively, students and practicing teachers from other areas may petition for admission through the technology education faculty. This minor leads to high school certification for industrial technology education.

TECH 101 or TECH 102 or TECH 302 (by advisement) (3)
DESN Electives (by advisement) (6)
TE 352 (3)
TE 447 (3)
TE 449 (3)
MFG 112 (3)
MFG 222 or MFG 229 (3)
MFG 329 (3)
ET 191 (3)
CONS 235 or CONS 306 (3)
VCT 203 (3)
(36 hours)

# Firelands College

Telephone: (419) 433-5560
(800) 322-4787

Robert DeBard, dean, 122 East Building
Mary Jane Hahler, associate dean/ assistant professor of romance languages, 112 East Building/321 West Building
Georgeanna Belfiore, director of student services, 139 North Building
Margie A. Brodrick, director of learning achievement center, 230 North Building
Linda S. Faber, associate director for admissions, 114 East Building
John P. Hartung, director of enrollment services, 114 East Building
Arlene Hazlett, academic adviser, 138 North Building
[illegible]nis S. Horan, instructional media coordinator/director of Firelands knowledge network, 320c West Building
Holly H. Kepple, director of college relations, 110 East Building
Joseph J. Nayduciak, director of personal and professional development, 131 West Building
Penny L. Nemitz, director of academic services, 136 North Building
Joseph O'Loughlin III, director of computer services, 234 North Building
Charles C. Stocker, director of budget operations, 106 East Building

## The College

Firelands College is a regional branch campus and one of seven undergraduate colleges 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 Firelands College and BGSU is a close one and the courses and programs offered by the College are carefully coordinated to ensure a smooth transition for students [illegible]e wish to begin their baccalaureate [illegible]grees at Firelands and then transfer to other colleges and universities.

Firelands offers 23 programs for students who wish to transfer to the baccalaureate (four-year) programs at BGSU or other colleges, or who plan to enter the job market in a technical or paraprofessional area.

In continuing to meet the variety of educational needs of area residents, a variety of junior, senior and graduate courses are offered, as well as non-credit courses, workshops and seminars.

Members 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 Library

Firelands College Library functions as an integral part of the educational process. The collection of more than 27,000 volumes, 214 current periodical and newspaper titles and a wide variety of audiovisual 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 audiovisual and telecommunications support. Services are available during regular class hours throughout the academic year.

Services include provision of equipment and software necessary for in-class 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 eight 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 any time 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 24 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 or call (419) 433-5560 or (800) 322-4787, extension 255.

## Housing

A wide variety of reasonably priced housing is available throughout the Firelands area. The Firelands Admissions Office maintains a list of available housing which includes rooms, apartments, houses and motels.

Because the population in the area increases in the summer, many housing options in the local community are available 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 Enrollment Services at Firelands is responsible for the coordination of all registration and bursar-related functions for Firelands students. Student concerns relative to academic policies, registration for classes, payment of fees and academic records should be addressed to this office, 114 East Building or call (419) 433-5560 or (800) 322-4787, extension 251.

## 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 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.

## Student/Academic Services

Firelands College provides a variety of student services which include career development and placement, counseling, program advisement, and developmental education opportunities. The Student Services/Academic 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. A variety of printed materials can be found in the Student Services Office Career Library. The Strong Campbell Interest Inventory and the SIGI Plus assist students in making career decisions. They are computer-administered and offer immediate feedback.

Courses entitled Career Planning (CAO 129) and Job Search (CAO 130) are offered each semester. Career-related interest and values inventories are also available to students as an aid for career planning.

The College Level Examination Program (CLEP) and the Career Planning Profile (CPP) are administered monthly by the office.

**The Placement Service**, located in the North Building in room 138, 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 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 Academic Services office. EDCI 121, a course which helps students make the transition from work, home or high school to college, is offered each semester.

Advisers from the University's main campus are available at specific times each semester to provide information on four-year baccalaureate degree programs.

**Cooperative education** integrates classroom theory with on-the-job training, whether in business, government, industry or the nonprofit sector.

Every effort is made to place students in assignments compatible with their academic programs and career 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 self-government is afforded students through elected representatives or by election to office. Many academic departments and student groups provide additional opportunities for learning through lectures, seminars and activity programs. A committee composed of students and faculty advisers develops a calendar of activities and events each year. Chartered clubs and organizations include:

Business Club
Campus Choir
Campus Fellowship
Firelands College Theatre
Firelands Writing Center
Intramurals
Minority Student Union
More Mature Element
Respiratory Club
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 Center

The Learning Center is located on the second floor in room 230 North. Students who want to improve their learning skills and become more effective and efficient in college use the center.

Support services include:

1. Free tutoring in numerous subject areas. Study groups led by a tutor are also developed for certain classes.
2. Computer-assisted instruction and videotapes in many subject areas provide reinforcement and alternate methods of instruction.
3. Word processing for writing and printing papers.

4. Computer instructional programs to improve students' learning skills, speed-reading 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 Enrollment Services Office, 114 East Building, provides counseling services to all students who are interested in applying for federal, state and campus-based financial aid. A variety of printed and videotape materials are maintained by this office for student use. Additionally, the Financial Aid Office provides enrollment certification services for students who are eligible for Veterans Administration educational benefits.

## Scholarships

Numerous annual scholarships are administered by Firelands College. Applications for these scholarships are available from the Admissions Office and must be filed by April 1 to be considered for the next academic year. Special need analysis forms are not required for scholarships administered directly by Firelands College, which include:

BGSU Alumni Association
Derek E. Carney Memorial
James E. Cole Memorial
Alta M. Croll Memorial
Leon and Susan Cross Book Scholarship
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
Harlequins Founders'
William Randolph Hearst
Holiday Challenge Tournament
Huron Lions Club
Huron Rotary Club
Kiwanis Club of Sandusky Bay
Milan Chamber of Commerce
Milan Mothers Club
Steven G. Mruk Memorial
Mylander Scholarships
William J. Parker Family
William J. Parker Memorial
[illegible] A. Printy Memorial
Recycling
Respiratory Care Technology
Sandusky Exchange Club
Sandusky Exchange Club-Dr. Henry W. Lehrer Memorial
Third and Fourth Degrees of Sandusky Knights of Columbus, Firelands Shrine Club and Singara Grotto
Sandusky Register
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 determined by the person administering the loan 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 established by the Ohio State Loan Commission prior to the beginning of each calendar quarter.

**Late Payment**
Students who fail to repay emergency loans by the date due are charged a late payment fine. Fines are assessed at a rate of $.50 per day (including Saturdays and Sundays), but will not exceed $25. Students are granted a three-day grace period. If payment is not made during the grace period, the fine on the fourth day is $2.

**Non-payment**
Students not repaying loans by the end of the grace period (three days after the due date) will have their class registrations for that semester canceled and all records in the Office of the Registrar frozen. Also, they will be denied registration for any future semesters until the loan and penalty are repaid.

## Other Loans

**Harry G. Beare Memorial Loan Fund**
This loan is available to Firelands College students who are graduates, or candidates for graduation, from Edison High School in Milan. The loan is based on proven financial 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
- Humanities
- Interpersonal and Public Communications
- Journalism
- Music
- 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 Work

## Pre-baccalaureate Courses

Students who are interested in completing a baccalaureate degree at Bowling Green should consult the appropriate section of this catalog for a complete program description. These students should work closely with their academic advisers at Firelands and the main campus to ensure completion of appropriate general education requirements for the degree sought.

## General Education Requirements

A university education is more than the learning of skills appropriate to a career or job. The acquisition of knowledge from such areas as the humanities and the natural and social sciences contribute to the foundation of the well-educated person. Through the courses of the general education requirements, students discover their values and gain insight into the challenges of the future.

Designed to contribute to the foundation of the baccalaureate degree programs, these requirements add breadth to the major field selected by the student. The requirements are grouped into five areas: language, humanities, social science, mathematics-physical sciences, foreign languages and cultures and cultural diversity in the United States.

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.

## Upper-division 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 also offered in many topical areas, such as management, education, computers, industrial education and technology and environmental quality control.

Lifelong learning courses, workshops, seminars and in-service training programs may be customized for a particular firm, school, organization or interest group. Inquiries relative to the offering of such specific programs should be directed to the Office for Personal and Professional Development at Firelands College.

## Lake Erie 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.

# Associate Degree Programs

Five associate degrees are offered by Firelands College: associate of arts; associate of applied science; associate of applied business; associate of technical study; and associate of science. A candidate for an associate degree must earn a minimum of 62 semester hours; some degrees require more than 62 credit hours. The associate of arts and associate of science programs are designed to fulfill the first two years of a baccalaureate degree, but may also serve as terminal programs for students who do not plan to complete a 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 8 of this catalog.

No more than six credit hours of basic writing from ENG 110, 111 and 112 may be applied toward graduation.

## Graduation Requirements

A candidate for a certificate or associate's degree must complete the requirements listed below and any other

requirements set by the colleges for the specific degrees sought. Check appropriate sections of this catalog for additional degree requirements. The general requirements are:

1. Satisfy all University entrance requirements.
2. Earn a minimum of 30 hours for a certificate and 62 hours for an associate's degree. For an associate's degree at least 15 hours must be completed at BGSU immediately before graduation (some degrees require more than 62 hours of credit).
3. Complete the freshman English composition sequence.
4. Satisfy all course requirements for the degree as listed in the appropriate sections of this catalog.
5. A student who wishes to graduate with a certificate or associate degree must file for graduation according to the following schedule:

a. For graduation in December or May, the deadline for filing an application is the end of the second week of the semester one plans on graduating.

b. For graduation in August, the deadline for filing an application is the end of the first week of the summer session.

An application form and information may be obtained in 129 West, Academic Services, where completed forms are to be returned.

# Associate of Arts

Firelands College offers two years of general education courses leading to the associate of arts degree. Students who complete the associate of arts degree have reached the half-way point in the progression toward a baccalaureate degree.

The associate of arts degree program is designed to provide pre-baccalaureate students with a sound academic background in a number of academic disciplines. Credits earned may be transferred to four-year programs. The intent is to provide a liberal background within a two-year program. General education programs have been developed in the following areas:

Criminal Justice
Elementary education
Gerontology
Humanities
Human services
Liberal studies
Pre-business administration
Pre-Management Information Systems
Secondary education
Social science

## Associate of Arts Requirements

This degree is awarded to a student who completes one of the prescribed curricula, including the general education requirements listed below and complies with general degree requirements cited previously.

**Communication**
Each student is required to acquire proficiency in written expression and oral communication. 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 seven credit hours in mathematics and science.

**Social sciences**
Each student must complete a minimum of 10 credit hours in courses designated social science.

**Humanities and arts**
Each student must complete a minimum of 10 credit hours in courses designated fine and applied arts including at least one course in ENG literature.

**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. A student who continues his or her education at BGSU must complete two (2) physical education courses (PEG 100) no matter what age unless he or she has a written statement from a personal physician or is a veteran of the military service.

**Electives**
Each student must select a sufficient number of electives to earn a minimum of 62 hours. A student planning to pursue a baccalaureate degree in arts and sciences is encouraged to take a foreign language.

# Criminal Justice

The 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 Office of Academic Services 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 required. Students without a passing score on Math Placement Test B will take MATH 095 or 098 before MATH 115.

CS 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.

**Foreign languages and cultures/U.S. cultural diversity**
Each student must choose one course from the following: ACS 250, ETHN 101, GEOG 230, SOC 231 or 316, and SPAN 101, 102, 201 or 202.

**Humanities and arts**
Each student must complete a minimum of 10 hours. PHIL 102 and a literature elective are required. The other courses can be chosen from the list of acceptable requirements from the College of Health and Human Services.

**Professional requirements**
Each student must complete a minimum of 9 hours. The required courses are CRJU 210, CRJU 220 and CRJU 230.

**Core electives**
Each student must complete five courses from the following: IPCO 306, POLS 221, SOC 301, SOC 316, SOC 341; SOC 342, PSYC 405, POLS 347,

POLS 417, SOC 441, CRJU 340 and CRJU 395 (may be taken only once).

**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 an 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:

**Communication**
See general education requirements for associate of arts programs. Six hours minimum.

**Mathematics and science**
MATH 241 and 242 and select one course from at least three (3) of the following groups: BIOL 101 OR 104; CHEM 100 or 104 or 109 and 110; PHYS 100 or 104; GEOL 100 or 101 or 104. (13 hours minimum)

**Social and behavioral sciences**
PSYC 201 (4)
HIST 151 or 152 or 205 or 206 (3)
ECON 200 or 202 or 203 or POLS 201 or 271 (3)
(10 hours minimum)

**Humanities and arts**
ART 101
ENG literature
Additional courses from ART, ARTH, ENG, POPC, MUSIC, THEA, PHIL (10 hours minimum)

**Foreign languages and cultures**
GEOG 121 or 122
FREN 101 or 102 or 201 or 202 or GEOG 230 or SOC 231 or SPAN 101 or 102 or 201 or 202
OR other courses approved for multicultural studies credit
(6 hours minimum)

**Other requirements**
EDCI/EDFI 202 (3)
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:

**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. Seven (7) hours minimum.
A. One of the following:
1. Three and one-half years of high school college preparatory mathematics.
2. Three years of high school college preparatory mathematics and CS 100 or CS 101.
3. MATH 120 and one of the following: PHIL 103 or CS 100 or CS 101.
4. MATH 115 or 126 or 128 or 129 or 130.
B. At least one course selected from BIOL, CHEM, GEOL, PHYS, or GEOG 125. At least one course must be approved for laboratory credit.

**Social and behavioral science**
Each student must complete a minimum of 10 hours from at least two disciplines including a minimum of six hours in one discipline. Eligible disciplines include: economics, geography, history, political science, psychology, social geography and sociology.

**Humanities and arts**
Each student must complete HUM 101 and HUM 200 and a minimum of 16 hours from at least three of the following disciplines: 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.

**Foreign languages and cultures**
Each student must complete a minimum of three (3) hours from the following:
FREN 101, 102, 201, 202
GEOG 121, 122, 230
HIST 151, 152
POLS 271
SOC 231
SPAN 101, 102, 201, 202
OR any other courses listed for foreign languages and cultures credit

**Other requirements**
PEG 100 (2)

# 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 trains the student to deal with a broad range of human service issues, populations and agencies. However, the student may opt for a special gerontology emphasis which focuses on the needs and programs of the elderly. In addition to the associate of arts general requirements, students must complete the following:

**Communication**
See general education requirements for associate of arts programs. Nine credit hours minimum. Students who do not need ENG 110/111 should substitute IPCO 203.

**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 and 240 or 303; SOC 101 and 202 or 316 or 361; SOWK 110 and 220; SOSC 289. Gerontology emphasis requires 25 credits, including PSYC 240 and GERO 101.

**Humanities and arts**
Ten credit hours minimum. PHIL 102, PHIL 103 or 319; and ENG literature are required. PHIL 319 is recommended for gerontology emphasis.

**Foreign languages and cultures/U.S. cultural diversity**
One course from the following: ACS 250, ETHN 101, SOC 231 OR 316, GEOG 230,or SPAN 101, 102, 201 or 202. (SOC 231 or 316 are recommended.)

**Other requirements**
PEG 100 (2)

**Core electives**
Six credit hours from the following (PSYC 405 is recommended): BUSE 335; GERO 101; IPCO 203, 306; PHIL 319; POLS 201, 221; PSYC 305, 311, 405; or SOC 301, 316, 361, 441. Three credit hours required for gerontology emphasis, with BIOL 220 as an additional option.

**Field 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 college-approved 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 developing a well-rounded background. In addition to the associate of arts general requirements, students must complete the following:

**Communication**
See general education requirements for associate of arts programs. Six hours minimum.

**Mathematics and science**
A minimum of 7 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.

**Humanities and arts**
Each student must complete HUM 101 and a minimum of seven hours from at least two of the following:
Art, English, music, philosophy, popular culture, theatre and American studies. (One course in English literature must be included.)

**Applied arts**
Each student must complete a minimum of two hours from the following: ACCT, AHE, BA, BAT, BUSE (except 101), CRJU, CS, CST, DESN, ENVT, ET, HED, JOUR, MFG, MIS, MRT, RT, SOWK.

**Foreign languages and cultures**
Each student must complete a minimum of three hours from the following:
FREN 101, 102, 201, 202
GEOG 121, 122, 230
HIST 151, 152
POLS 271
SOC 231
SPAN 101, 102, 201, 202
OR any other courses approved for multicultural studies credit.

**Other requirements**
PEG 100 (2)

# Pre-Business

This program provides the foundation for a bachelor's degree in business. In addition to the associate of arts general requirements, the curriculum includes business principles in accounting, communication, economics, statistics, finance, marketing and management.

This program is ideally suited for the individual wanting to pursue a bachelor's degree in business, but who first desires an associate degree for purposes such as securing an entry level position, gaining a job promotion or refining skills in business principles.

**Communication**
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 geography, history, political science, psychology and sociology.

**Humanities and 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.

**Foreign languages and cultures/U.S. cultural diversity**
Each student must complete a minimun of one course (3 hours) selected from FREN 101, 102, 201,or 202; GEOG 121 or 230; SPAN 101, 102, 201 or 202; or any other course approved by the College of Business to fulfill the "world-wide dimensions" or the "cultural diversity in the United States" requirements.

**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:

**Communication**
See general education requirements for associate of arts programs. Six hours minimum.

**Mathematics and science**
Each student must complete a minimum of ten (10) hours, including A, B, and C:
A. Three years of high school preparatory mathematics or MATH 115, 120, 126, 128, 129, or 130
B. Select one: ASTR 201, 212; BIOL 101, 104, 204, 205; CHEM 100, 109, 110, 117, 118, 125, 127, 128; GEOG 125; GEOL 100, 104, 105; PHYS 101, 201, 202, 211, 212.
C. Select another course, if needed, from A or B or CS 100 or 101 or any other courses in ASTR, BIOL, CHEM, GEOL, PHYS.

**Social and behavioral sciences**
Each student must complete a minimum of ten (10) hours, including PSYC 201 and two (2) of the following: ECON 200, 202, 203; GEOG 121, 122, 230; HIST 151, 152, 205, 206; POLS 201, 271; SOC 101, 202, 231.

**Humanities and arts**
Each student must complete a minimum of ten (10) hours, including A, B, and C.
A. Select one: ENG 150, 200, 261, 262, 264, 265, 266, 267
B. Select one: ART 101; ARTH 145, 146; PHIL 101, 102, 103, 204, 212; POPC 220; THEA 141, 202.
C. Select courses from A or B or any other courses in ART, ARTH, MUSIC, PHIL, POPC, THEA.

**Foreign languages and cultures/U.S. cultural diversity**
Each student must complete a minimum of three (3) hours from the following:
FREN 101, 102, 201, 202; GEOG 121, 122, 230; HIST 151, 152; POLS 271; SOC 231; SPAN 101, 102, 201, 202 or any other courses approved for multicultural studies credit.

**Other requirements**
Each student should consult an adviser for information concerning courses required in various secondary teaching fields.
EDCI/EDFI 202 (3)
PEG 100 (2)

## 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 addition to the associate of arts general requirements, students must complete the following:

**Communication**
See 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**
A minimum of 10 hours from at least two of the following: art, film, literature, music, philosophy (except PHIL 103 when used to apply to mathematics/science requirements), popular culture, speech and theatre. One course in literature must be included; a course in the fine arts (art, film, music, or theatre) is highly recommended. (See College of Arts and Sciences listings for Group V courses.)

**Foreign languages and cultures/U.S. cultural diversity**
Each student must complete a minimum of one course (3 hours) from the following: ACS 230, ETHN 101, FREN 101, 102, 201, 202, GEOG 121, 122, 230, HIST 151, 152, POLS 372, SOC 231, 316, SPAN 101, 102, 201, 202, WS 200 or any other course approved by the College of Arts and Sciences in either of these categories. Students are well advised to take one course in each area.

# 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:

Business Management Technology
Computer 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 6.

## General Business Management Technology

Russell Panas, program adviser
235 North Building

Majors within this program are accounting and general business management, with a specialization possible in industrial management and retail 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 or BUSE 321 (3)
MATH 120 or 126 (5)

*Core courses*
ACCT 221 and 222 (6)
ACCT 231* (3)
BAT 102 (3)

***Second year***
*General education*
ECON 202 (3)
Humanities elective (3)
Social/behavioral science elective (3)

*Basic courses*
STAT 211 and 212, or STAT 200 and BUSE 101 (6)
BA 203 (3)

*Core courses*
ACCT 241* and 251* (6)
BAT 201, 205, 207 (9)
CS 180 (3)

*Designed only for the associate degree in accounting.

### Bookkeeping Option

This one-year program is designed for the part-time evening student. The program will prepare students for clerical positions in industrial, governmental, public accounting. All of the courses in this certificate program are applicable to the associate of applied business degree.

***First year***
*General education*
ENG 110, 111 and/or 112 (3-8)

*Basic courses*
MATH 120 (4)

*Core courses*
ACCT 221 and 222 (6)
BAT 102 (4)

***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 program**
Business management technology (BMT) at Firelands College is a chal-

lenging two-year degree program [illegible]igned for students who have an [illegible]rest 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 motivate 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 may earn college credit for working in a business environment for one semester.

The BMT program serves the needs of many students who are interested in:

1. beginning a career in business;
2. updating their present job skills;
3. learning new management techniques; and/or
4. advancing with their present employer.

[illegible]lso, the flexibility of the program [illegible]ws 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 part-time student.

Graduates of the BMT program will have the skills and knowledge to manage and operate their own business. Those students not interested in business ownership may be employed in mid-management positions as supervisors, managers or department managers in businesses such as 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 120 or MATH 126 (5)
MIS 200 or BUSE 321 (3)

*Core courses*
BAT 102, 201, 209 (9)
Technical elective (3-4)

**Second year**
*[illegible]neral education*
[illegible]CON 202 (3)
Humanities Elective (3)
Social/behavioral science (3)

*Basic courses*
STAT 200 and BUSE 101, or STAT 211 and STAT 212 (6)
BA 203 (3)

*Core courses*
Finance elective (3)
ACCT 221 (3)
BAT 204, 205 and 208 (9)
Technical elective (3-4)

## Retail Management Specialization

**Planned program**

The retail management specialization, under the general business management technology program, prepares an individual to serve at mid-management levels in retailing organizations and to provide sales and marketing services appropriate to the needs of the ultimate consumer.

A sequence of courses in total quality leadership and resources management, business economics, word processing of business communications, accounting spreadsheet utilization, marketing and retail management, psychology and professional selling, together with an optional field 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*
MATH 120 or MATH 126 (5)
MIS 200 or BUSE 321 (3)

*Core courses*
BAT 102, 201, 205 and 209 (12)
ECON 202 (3)

***Second year***
*General education*
Science elective (3)
Social/behavioral science (3-4)
Humanities elective (3)

*Basic courses*
STAT 200 and BUSE 101, or STAT 211 and 212 (6)
BA 203 (3)

*Core courses*
ACCT 221 (3)
BAT 204 and 208 (6)
BAT 280 (3)
Finance elective (3)

## Industrial Management Specialization

**Planned Program**

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 total quality leadership and resources management, business finance and economics, production management, occupational safety and hygiene, statistical process control, word processing of business communications, accounting spreadsheet utilization and psychology provide students with specialized knowledge and practical skills in industrial management.

***First year***
*General education*
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)

*Basic courses*
MATH 120 or MATH 126 (5)
Science elective (3)

*Core courses*
BAT 102, 201, 209 (9)
ENVT 270 (3)
MFG 112 (3)

***Second year***
*General education*
ECON 202 (3)
Science elective (3-4) BIOL 101 or CHEM 100 or PHYS 100 or 101
Humanities elective (3)

*Basic courses*
STAT 200 and BUSE 101, or STAT 211 and 212 (6)
BA 203 (3)
MIS 200 or BUSE 321 (3)

*Core courses*
ACCT 221 (3)
BAT 203 or MGMT 300 (3)
BAT 205 (3) and MFG 243 (3)
Finance elective (3)

# Computer Programming Technology

Ronald Lehr, program director
235 North Building

**Planned program**

Computer programming technicians are two-year college graduates with an associate of applied business degree. This program will prepare students for employment as microcomputer specialists, application programmers, or programmer/analysts. The emphasis of the program is the microcomputer environment. Graduates will have learned principles of computer logic and decision making, computer languages

(BASIC, Pascal, dBase (FoxPro), COBOL, Assembler), selection and implementation of microcomputer hardware and software, use of popular microcomputer software packages (Lotus 1-2-3, Wordperfect). Advanced programming skills such as structured design, system implementation, basic system architecture and techniques of systems analysis. Career opportunities exist in business, industry, education, government or public service.

***First year***

*General education*
ENG 110, 111 and/or 112 (3-8)
Social sciences or humanities and arts or 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*
CS 180, CST 260, CS 260 (10)

***Second year***

*General education*
IPCO 102 (3)
Social sciences or humanities and art or foreign languages and cultures 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)

# Secretarial Administrative Sciences

Dr. 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 information processing skills (word processing, spreadsheet, database, and desktop publishing) and with knowledge of business and communication theory to enhance their opportunities for career advancement. The program can meet the needs of both beginning and advanced secretarial students, and credits received may be applied toward a four-year baccalaureate degree in a related field.

In addition to the two-year program, one-year certificate programs are offered in administrative support secretary, desktop publishing specialist, information processor, and medical transcriber.

***First year***

*General education*
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)

*Basic courses*
BUSE 101 (3)
MIS 200 (3)

*Core courses*
BUSE 111, 204, 207, 210, 213, 217 (14)

***Second year***

*General education*
Humanities or natural sciences or foreign languages and cultures elective(s) (5-8)

*Basic courses*
ECON 200/202 (3)
ACCT 220/221 (3)
LEGS 301 or BAT 102 (3)

*Core courses*
BA 203 (3)
BUSE 304, 305, 306, 307, 335, 401 (18)
BUSE 314 (2)

## Administrative Support Secretary Option

The one-year administrative support secretary option prepares students for entry-level 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 course*
MIS 200 (3)
BUSE 101 (3)

*Core courses*
BA 203 (3)
BUSE 111, 204, 210, 213, 217, 335 (16)

## Desktop Publishing Specialist

The one-year desktop publishing specialist program prepares students to integrate basic design principles with desktop publishing skills. Students receive training with word processing, spreadsheet, and database software and the integration of these software programs with desktop publishing.

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 desktop publishing specialist 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 course*
BUSE 101 (3)
MIS 200 (3)

*Core courses*
BUSE 111, 204, 207, 210, 304, 306, 307, 335, 401 (20)

## Information Processor Option

The one-year information processor option prepares students for positions working with computers. Students receive training with word processing, spreadsheet, and database software and develop skills in preparing documents through the use of transcription equipment.

The program is arranged so that credits received in a one-year program may be transferred if a student decides to pursue a two- or four-year degree in a related field. To receive the information processor certificate, the student must have at least a 2.0 grade point average for all work attempted.

**One-year certificate**

*General education*
ENG 110, 111, and/or 112 (3-8)
IPCO 102 (3)

*Basic course*
BUSE 101 (3)

*Core courses*
BUSE 111, 204, 207, 210, 217, 304, 305, 306, 335 (19)
MIS 200 (3)

### Medical Transcriber Option

A medical transcriber is responsible for transcribing medical information and reports from transcription equipment onto paper in a complete and accurate manner. Career opportunities exist in the medical record departments of hospitals, physicians' offices, private clinics and other settings.

The program consists of selected courses from both the secretarial administrative sciences program and the health information technology program, and students may continue in either program for an associate degree. To receive the medical processor certificate, the student must have at least a 2.0 grade point average for all work completed.

**One-year certificate**

*General education*
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)

*Basic course*
BUSE 101 (3)
MIS 200 (3)

*Core courses*
BUSE 111, 204, 210, 304 and 335 (13)
MRT 101, 102 (5)

## Associate of Applied Science

Two-year, career-oriented curricula exist leading to the associate of applied science degree. These programs prepare students for immediate employment in area communities and elsewhere, and also may be transferred to similarly oriented baccalaureate degree programs.

General education requirements are part of the curriculum and are taken in some related general education field (such as English, speech, psychology), in appropriately related disciplines (such as mathematics and science, physical science) and in specific major areas.

Applied science programs offered at Firelands include:

World Class Manufacturing Technology
Electrical/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 career-oriented programs listed below and the general associate degree requirements listed on page 8 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 basic electricity and electronics circuits, instrumentation and measurements, power and energy, materials processing and computer-aided design. The program prepares students for positions as engineering assistants, engineering technologists, production technicians, instrument calibration and repair technicians, field service technicians, customer service representatives and other entry-level positions in electronic engineering technology. Students who complete the associate degree have also reached the halfway point in progress toward a baccalaureate degree.

***First year***

*General Education*
ENG 110, 111 and/or 112 (3-8)

*Basic Courses*
MATH 126, 128 or 131 (5)
PHYS 201 (5)

*Core courses*
ET 191, 240 and 249 (11)
DESN 104 and 131 (5)

***Second year***

*General education*
IPCO 102 (3)
ECON 200 (3)
PSYC 201 (4)

*Basic courses*
CS 101 (3)
ENVT 270 or PHYS 202 (3-5)

*Core courses*
ET 241, 244, 250, 290, 442 (16)
MFG 112 and 223 (6)

## World Class Manufacturing Technology

Richard Kepple, program director
150 North Building

**Planned Program**

Industrial technicians trained in "World Class" manufacturing are employed in business and 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 in assignments in computer-assisted drafting, operating computer controlled equipment, statistical process control, robotics, programmable controllers, and total quality management.

***First year***

*General education*
ENG 110, 111, and/or 112 (3-8)
Elective (3)

*Basic courses*
MATH 128 or MATH 120 and MATH 129 (5-8)
MIS 200 or CS 101 (3)

*Core courses*
MFG 112 and 223 (6)
DESN 104 and 131 (5)
ENVT 270 (3)
BAT 209 (3)

***Second year***

*General education*
IPCO 102 (3)
Electives (3)

*Basic courses*
STAT 200 (3)
PHYS 201 (5)

*Core courses*
MFG 243 and 245 (6)
DESN 132 (2)
DESN 133 or MFG 225 (2-3)
BAT 205 (3)
ET 191 (3)

## Health Information Technology

Mona M. Jackson, RRA, 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 Technician (ART) specializes in evaluating, controlling and maintaining the information contained in all types of health records. Career opportunities include positions in group practices, long-term care facilities, hospital 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 non-compulsory, 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 curriculum is based on written goals and standards, consistent with and responsive to the demonstrated needs and expectations of the health care community serving 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 Entry-Level 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 personnel.
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 health care.
6. Information Retention and Retrieval - 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, 101, 102, 112, 204, and RT 101.
2. GPA of at least 2.5 or better in all MRT coursework attempted with an overall GPA of 2.0 or better.
3. Permission of instructor.

Before clinical assignments can be made, the student must have a physical exam on file with the HIT program director, show evidence of auto insurance policy, apply for liability insurance through BGSU and receive permission from the program director for clinical assignment.

***First year***

*General education*
ENG 110, 111 and/or 112 (3-8)

*Basic courses*
BUSE 111 (3)
CS 180 (1)
BAT 209 (3)
RT 101 (5)

*Core courses*
MRT 100, 101, 102, 112, 204 (17)
*Technical Elective (2-3)

***Second year***

*General education*
IPCO 102 (3)
PSYC 201 (4)

*General studies*
Electives (6)

*Basic courses*
MIS 200 (3)
MATH 115 or STAT 200 (3)

*Core courses*
MRT 201, 202, 211, 212, 213 (13)

# Respiratory Care Technology

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/extended care 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 are often called upon to perform arterial blood gas analysis, oximetry, measurement of ventilatory volumes, pressures, and flows, and analysis of exhaled gases in order to evaluate and monitor cardiorespiratory function.

Program graduates are eligible to sit for the Entry Level Examination for certification through the National Board for Respiratory Care (NBRC) to become a Certified Respiratory Therapy Technician (CRTT). Those who pass this credentialing examination also qualify for a state license, provided all other requirements for licensure are met. Upon successful completion of this examination, the CRTT is eligible to take the registry Written Advanced Practitioner and Clinical Simulation 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:

**[redacted]gram Accreditation**
[redacted] program is fully accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) through the Joint Review Committee for Respiratory Therapy Education (JRCRTE).

**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 or any of the required MATH/STAT courses. In addition, those without high school chemistry or equivalent are strongly advised to take CHEM 100 or its equivalent prior to enrolling in CHEM 115. This remedial coursework, in addition to any other preparatory or developmental coursework the student may need, may serve to extend the time needed for completion of program requirements.

**Program Entrance Requirements**
Students wishing to pursue the program must meet the following minimum requirements prior to enrolling in any RT technical courses:
1. Be a graduate of an accredited [redacted]or high school AND have attained an overall GPA of 2.0 or a C average in high school, OR, have completed a minimum of twelve (12) semester hours or equivalent of college work with an overall GPA of 2.0 or higher, OR, have earned high school equivalency through GED testing program AND have completed at least twelve (12) semester hours or equivalent of college work with an overall GPA of 2.0 or higher.
2. Meet with the program faculty to discuss his/her professional goals as they relate to the respiratory care field and the program.
3. Visit a local hospital to tour the respiratory care department and observe respiratory care being administered (not required for those with experience in the field).

**Matriculation standards**
The student must meet certain matriculation standards for initial entrance into the clinical 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 [redacted]A of 2.25 for all CHEM, MRT, ENVT [redacted]d RT courses attempted.
3. The student must repeat any RT course in which a grade of D, F or WF is received.

**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 for Clinical Training**
The student is responsible for the following expenses incurred as a result of participation in clinical training:
•Textbooks and/or clinical training manuals
•Transportation to and from clinical training sites
•Meals while at clinical sites (students receive any employee cafeteria discounts, if applicable),
•Professional liability insurance (obtainable through the University, $15 for $1,000,000/$3,000,000 coverage, renewable once)
•Lab coats and/or uniforms
•Stethoscopes
•Other supplies (e.g. bandages, scissors, calculators)
The following are generally provided at no cost to the student:
•BGSU/Firelands student nametags (small deposit required)
•Hospital ID/nametags
•Health screening
•Parking at clinical sites
•Locker facilities

**Advanced Standing**
Certified and certification-eligible individuals, as well as on-the-job-trained respiratory care practitioners with significant work experience, may be eligible for some form of advanced standing in the program. This may serve to shorten the program of study or otherwise facilitate the pursuit of the associate degree and registry eligibility.

**Scholarships**
Hospital-sponsored scholarships are available for deserving respiratory care students through the Firelands College Scholarship Program.

***First year***
*General education*
ENG 110 or 111 (3-5)
PHIL 342 or PSYC 201 (3-4)

*Basic courses*
STAT 200 (3) or MATH 115 (3) or MATH 120 (5)
MRT 101 (3)
RT 101 (5)
CHEM 109 and 110 (4)
ENVT 110 (3)

*Core courses*
RT 102 (3)
RT 120 (3)
RT 200 (3)

***Summer session***
*Core courses*
RT 150 (4)
RT 151 (2)

***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 (4)
RT 250 (4)
RT 251 (4)

# Associate of Science

Firelands 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.

**Math/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 131is 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 Study

The Associate of Technical Study is designed to help students to prepare individually for specialized technical occupations. The program is a two-year curriculum which enables students to devote their particular talents and training to occupational areas not otherwise addressed by existing college programs. Specifically it is intended to afford the following potentials:

•Provide a coherent combination of existing degree programs and interdisciplinary flexible options to students.

•Provide flexibility and responsiveness to adult learning related to employment by developing close integration of degree and non-degree instruction components to 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 Study program. At that point students will be informed of available resources, faculty and staff to assist them in designing their individualized degree.

The student will work with an adviser to complete the application and develop a proposed program. The application then will be forwarded to a committee. The committee will evaluate the application and if it is acceptable the student will be requested to consult appropriate faculty members. Students unable or unwilling to meet the college degree requirements, or who have submitted a proposal which is deemed unacceptable, will be denied admission to the program.

**Program Planning**
Each student entering the program will be assigned to the director of academic services at Firelands College as well as to a faculty member within the primary area of interest. The further development of the educational plan will be done jointly by the student, the director of academic services and the faculty member each semester.

Any changes in the educational plan will require the signature of both faculty member and the adviser and concurrence by the ATS Committee. Students beginning at Firelands College will be required to submit a plan of action prior to having earned 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 Study degree will be adhered to. This will include the fact that following approval of the application, each candidate will be required to complete no less than 33 semester credit hours of course work under the supervision of the college. It is further understood that a maximum of 30 semester hours can be recognized by our college for approved college level course work completed in other public, private or proprietary post-secondary institutions, and schools conducted by business and industry, prior to the declaration of candidacy for this degree. This means that students transferring from other institutions will be required to complete a minimum of 33 semester hours at Firelands College.

*First year*
*General education*
ENG 110, 111 and/or 112 (3-8)
IPCO 102 (3)

*Basic courses*
Computation/math elective (3-5)
Computer literacy elective (3)
Science/math/computer science elective (3-5)
*Core courses*
Technical electives (16)

*Second year*
*General education*
Social/behavioral science elective (3)
Humanities/fine arts elective (3)

*Basic courses*
Computation/math elective or science/math/computer science elective (6)

*Core courses*
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 Nursing

Students interested in earning this degree from Bowling Green State University can complete the first two years of this four-year program at Firelands College. The professional nursing courses are offered at the Medical College of Ohio at Toledo.

Successful completion of the preprofessional requirements is a prerequisite for admission to the professional nursing program which is limited by the 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 109, 110, 117, 118
BIOL 205
PSYC 201

2. A minimum accumulative grade point average of 2.5 in the preprofessional program.

3. Completion of 29 semester hours of credit.

Admission applications are available from the nursing office in December of each year.

**Suggested preprofessional program**

***First year***

CHEM 109, 110, 117, 118 (8)
MATH-demonstrated competency above 095 level
SOC 101 (3)
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 languages and cultures 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. 50th 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 28 hours in the nursing major. Typically students take the 28 hours part-time spread out over two years.

The nursing courses are offered at Firelands College.

# Course Descriptions

A Δ preceding a course number indicates that the course is offered both at Firelands and on the main campus.

A † preceding a course number indicates that the course is offered only at Firelands.

A ¶ preceding a course number indicates that the course may be used to fulfill a general education requirement.

The Arabic number in parentheses following the title of the course indicates the number of semester hours of credit.

Courses numbered from 100 to 199 are ordinarily for freshmen or sophomores.

Courses numbered from 200 to 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 student upon the recommendation of his or her adviser and with the written approval of the instructor of the course or the chair of the department concerned.

## Accounting (ACCT)

**ΔACCT 220. Administrative Accounting** (3) Spring. Practice and procedures of accounting for office personnel. No credit allowed toward baccalaureate degree programs.

**ΔACCT 221. Introduction to Accounting I** (3) Fall, Spring, Summer. Financial accounting concepts and methodology for accumulating data on the results of economic 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.

**ΔACCT 222. Introduction to Accounting II** (3) Fall, Spring, Summer. 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 capital expenditure evaluation are introduced. Prerequisite: ACCT 221.

**ACCT 321. Intermediate Financial Accounting I** (3) Fall, Spring, Summer. Development and application of financial accounting concepts and generally accepted accounting principles. Preparation of financial statements and accounting for changes in accounting principles. Emphasis on valuation and cost allocation methods for assets and related effects on income statements. Prerequisite: admission to the accounting program or consent of department.

**ACCT 322. Intermediate Financial Accounting II** (3) Fall, Spring, Summer. 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 Non-business Students** (3) Fall, Spring, Summer. Accounting concepts and procedures and their contribution to administrative processes. Enterprise analysis, relevant data, its uses and limitations. Not applicable to pre-professional core requirements in the College of Business. No credit allowed toward BSBA degree. Prerequisite: junior standing.

**ACCT 327. Financial Accounting for Non-majors** (3) Fall. 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) Fall, Spring, Summer. Cost determination and cost accounting systems. Cost analysis using regression methods. Job order, process, standards and variable cost systems. Accounting for spoilage, service departments and joint products. Prerequisite: admission to degree program in accounting and STAT 212, or consent of department.

**ACCT 332. Intermediate Managerial Accounting** (3) Fall, Spring, Summer.Accounting's relationship to planning and control function. Budgeting, corporate planning models, cost-volume-profit analysis, relevant data, capital budgeting, data for operations research models, behavioral considerations, enriched variance systems, evaluation of performance and transfer pricing. Prerequisite: grade of C or better in ACCT 331.

**ACCT 337. Management Accounting for Non-majors** (3) Spring. 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) Fall, Spring, Summer. General systems concepts and theory. The collection and processing of accounting information. Internal control aspects of accounting systems. Systems life cycle in an accounting framework. The interface of accounting systems and computer technology. Prerequisite: Admission to the accounting program or better in ACCT 221, 222 or consent of the department.

**ACCT 421. Advanced Financial Accounting** (3) Fall. 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) Spring, 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) Spring, 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.

**ACCT 424. Financial Reporting for Multinationals** (3) Spring, 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 429. Problems in Accounting Practice** (3) Spring. 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) Spring. 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) Fall, Spring, Summer. History, assumptions, objectives of federal tax system. Determination of an entity's taxable and nontaxable incomes, capital gains and losses, deductions and exemptions, and special provisions. Reporting requirements and determination of tax liability. Introduction to federal tax research methodology. Prerequisite: 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) Spring. Determination of taxable income and reporting requirements unique to corporations, partnerships and Subchapter S corporations. Application of federal tax laws to special problems of corporations including stock redemptions, capital structure, liquidation and corporate accumulation. Overview of federal taxation of gifts, estates and trusts. Prerequisite: grade of C or better in ACCT 441.

**ACCT 451. Auditing I** (3) Fall, Spring, Summer. Auditing principles and procedures for 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) Spring. 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) Fall. To be completed at first opportunity following suitable internship experience. Work experience to be preceded by at least 70 hours of academic credit and advance approval by program coordinator. No credit for students with other internship credit in College of Business Administration. Graded S/U.

**ACCT 491. Studies in Accounting** (1-3) 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

**†ACCT T231. Financial Accounting** (3) Fall or spring. 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.

**†ACCT T241. Cost Accounting** (3) Fall or spring. 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.

**†ACCT T251. Federal Income Tax** (3) Fall or spring. Theory and application of federal income taxes as applied to the individual, sole proprietorship, partnership and corporation. Designed for the associate of applied business 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) Fall. Organization of the United States Air Force. Focus on U.S. defense policies, military balance between U.S. and Soiviet forces as well as capabilities of Army, Navy and Reserve/Guard forces. Officership/professionalism and introduction to flight. Leadership Laboratory activities.

**AERO 112. Air Force Organization** (1) Spring. 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 211. Air Force History** (1) Fall. Development of air power from the first lighter-than-air vehicles through to the establishment of the Department of the Air Force as an independent military force. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities.

**AERO 212. Air Force History** (1) Spring. Development of air power since the establishment of the independent Air Force to the present. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities.

**AERO 311. Air Force Management** (3) Fall. Integrated management course emphasizing individual as a leader in the Air Force. Human behavior, individual and in groups, historical development of management thought, discussion of classical leadership theory; oral and written communication, military writing, and briefing formats. Leadership laboratory activities. Prerequisite: departmental approval.

**AERO 312. Air Force Management** (3) Spring. AERO 311 continued. Air Force leadership, planning, organizing, coordinating, directing and controlling functions of management with emphasis on Air Force application, concept of command and staff, junior officer as administrative leader, Air Force personnel system, management of change, managerial strategy in changing environment. Leadership laboratory activities. Prerequisite: departmental approval.

**AERO 411. American National Security** (3) Fall. Role of the President, the Congress and National Security Council in national security policy making; American defense strategy; alliances; regional security; arms control. Leadership Laboratory activities. Prerequisite: departmental approval.

**AERO 412. American National Security** (3) Spring. Air Force officer as part of national security forces; military law; laws of armed confict; the military profession; transition to military life; relations with civilian community. Leadership Laboratory activities. Prerequisite: departmental approval.

## Aerotechnology (AERT)

**AERT 099. Flight Evaluation** (0) On Demand. Student flight competency evaluation. Prerequisite: Consent of Instructor. Lab Fee.

**AERT 220. Private Ground School** (3) Fall, Spring, Summer. (Formerly AERT 342 Flight Instruction I & II). Aerodynamics, aircraft systems, charts, airports, communication procedures, meteorology, regulations, aviation publications, flight computer, medical facts, radio navigation and cross country flight planning. Upon successful completion of the course students will be qualified to take the FAA Private Pilot - Airplane written exam. Prerequisite: None.

**AERT 221. Private Pilot Flight Instruction** (3) Fall, Spring, Summer. (Formerly Aert 343 Flight Instruction III). To achieve the necessary flight hours and airmanship competencies required to earn an FAA Private Pilot certificate. To receive credit for this course the FAA Private Pilot certificate must be obtained. Prerequisite: Passing grade on FAA Private Pilot written exam. Lab Fee.

**AERT 224. Air Traffic Control & the National Airspace System** (3) Fall. A study of the nation's air traffic control system with emphasis on basic air traffic control procedures; the role of centers, approach control, towers, and Flight Service Stations; communications, navigation procedures, radar operations, and facilities. Covers problems encountered in implementing the system, airspace allocation, safety considerations and new developments. Prerequisite: None.

**AERT 240. Air Transportation** (3) Fall, Spring, Summer. History, regulation and administration of air transportation system. Emphasis on air carrier, air taxi, corporate and general aviation. Prerequisite: None.

**AERT 344. Commercial Ground School** (3) Fall, Spring. Aerodynamics, aircraft systems, commercial pilot operations, weight and balance, complex operation. Upon successful completion of course the student will be qualified to take FAA Commercial Pilot - Airplane written exam. Prerequisite: AERT 220 or consent of instructor.

**AERT 345. Commercial Flight Instruction I** (1) Fall, Spring, Summer. Advanced flight maneuvers, night flight instruction, cross country flight training. First of two flight sequences leading to the Commercial Pilot - Airplane certificate. Prerequisite: AERT 221 or consent of Chief Flight Instructor. Lab fee.

**AERT 346. Commercial Flight Instruction II** (2) Fall, Spring, Summer. AERT 345 continued to include commercial pilot flight maneuvers and complex aircraft flight training. Commercial Pilot-Airplane license must be obtained to receive credit for course. Prerequisite: AERT 345. Lab fee.

**AERT 348. Airport Operation** (3) Spring. General aviation airport operations planning including airport environment, airport security, legal aspects, deregulation, airport finance and airport master plans. Prerequisite: None.

**AERT 349. Aviation Law** (3) Spring. 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: None.

**AERT 350. Multiengine Ground School** (1) Spring. Theory of multiengine airplane operation including the ground instruction necessary for preparation for the FAA multiengine rating. Covers transition to multiengine aircraft, multiengine aircraft systems, operational considerations and emergency procedures. Prerequisite: AERT 344.

**AERT 352. Flight Safety** (3) Spring. Presentation and analysis of factors and procedures relating to aviation safety; techniques for accident prevention, development of safety programs, procedures used in accident investigation, the human factor (physiological and psychological), the effect of weather. Prerequisite: GEOG 213.

**AERT 354. Aviation Management** (3) Fall. Management techniques and administrative functions as applied to the aviation industry. Includes problems, current issues, and future trends related to aviation operations, planning, and economic and resource consideration. Prerequisite: MGMT 305.

**AERT 401. Aviation Instructor Ground School** (2) Spring. Learning theory in an aviation setting, instructor responsibility, lesson planning, and advance aviation problems. Upon completion student is qualified for FAA written exam Fundamentals of Instructing and either Basic Ground Instructor or Flight Instructor - Airplane. Prerequisite: AERT 344.

**AERT 402. Instrument Ground School** (3) Fall, Spring. Instrument flight planning, meteorology, approach procedures, approach chart interpretation and instrument flight communication. Upon successful completion of the course the student is qualified to take the FAA Instrument - Airplane written exam. Prerequisite: AERT 220 or Consent of Instructor.

**AERT 403. Instrument Flight Instruction** (1) Fall, Spring, Summer. Dual flight instruction required for the FAR Part 141 Instrument rating. Prerequisite: AERT 345 or Consent of Instructor. Lab Fee.

**AERT 404. Advanced Aerodynamics & Aircraft Performance** (3) Fall. Advanced flight theories including airfoil shape, drag, velocity, lift and thrust, stability and control; advanced principles of performance including capabilities, limitations, design criteria, weight and balance charts, comparative analysis of aircraft, and certification of aircraft. Prerequisites: MATH 120 and AERT 344.

**AERT 405. Advanced Aircraft Systems** (3) Spring. In depth discussion of electrical, mechanical and hydraulic systems on aircraft, design and performance standards, capabilities and limitations, conformance to FAA specification. Prerequisites: PHYS 201 and AERT 344.

**AERT 407. Multiengine Flight Instruction** (1) Fall, Spring, Summer. Flight instruction in preparation for the FAA multiengine rating. Covers transition to multiengine aircraft and all normal, abnormal and emergency operating procedures. Prerequisites: FAA Commercial Pilot Certificate with Instrument Rating or consent of instructor. Lab fee.

**AERT 443. Flight Instructor - Airplane** (2) Fall, Spring, Summer. Flight instruction preparing the student for FAA flight instructor certification. The course includes comprehensive coverage of flight maneuvers necessary for instructing private and commercial students. Prerequisites: AERT 401 and FAA Commercial Pilot Certificate. Lab fee.

**AERT 445. Flight Instructor - Instrument** (3) Fall, Spring, Summer. Covers ground and flight instruction necessary to complete requirements for a flight instructor instrument rating. The course includes presentation of methodology used in teaching instrument flight. Prerequisites: Instrument rating, and an FAA flight Instructor - Airplane rating. Lab fee.

**AERT 447. Flight Instructor - Multiengine** (2) On demand. Principles and methodology of teaching multiengine flight. The course includes ground and flight instruction required by the FAA in preparation for a flight instructor multiengine rating. Prerequisites: FAA Flight Instructor - Airplane & Instruments, and AERT 350 and 407 or consent of instructor. Lab fee.

**AERT 482. Flight Proficiency** (1) On Demand. Provides a specialized dual flight instruction course permitting the student and flight instructor to work on mutually agreed areas of proficiency. Prerequisite: consent of instructor. Lab fee.

**AERT 490. Problems in Aerotechnology** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in aerotechnology. Prerequisite: consent of College.

## American Culture Studies (ACS)

**¶ΔACS 200. Introduction to American Culture Studies** (3) Fall. Regional, ethnic and economic aspects of American national experience as reflected in verbal, visual and material artifacts. Culture theory and models used to examine selected topics and problems. Required of all American culture studies majors.

**¶ΔACS 230. Issues in American Civilization** (3) Fall, Spring. Characteristically American themes, issues or problems reflecting relationships among ideas, values, traditions, events and personalities. Subject matter designated in time schedule; may be repeated once if topics differ.

**ACS 240. Historical Perspectives on American Culture** (3) Fall, Spring. Interdisciplinary study of a theme, issue or problem as it relates to historical development of American culture. Designed for non-majors; meets requirement for Group IV.

**ACS 250. Cultural Pluralism in the United States** (3) Fall, Spring. Interdisciplinary exploration of race, ethnicity, class, gender, and sexual orientation in the United States, emphasizing imaginative expressive forms, such as fiction, poetry, film, and the visual arts.

**ACS 300. Interpretations of American Culture** (3) Fall, Spring. Such theories as frontier thesis, melting pot, cultural pluralism, regionalism, and technocracy and their imaginative expression. Prerequisite: junior standing or consent of instructor. May be repeated if subject differs.

**ACS 400. The Literature of American Culture Studies** (3) Spring. Interdisciplinary approach to study of American culture. Required of American culture studies majors, but of interest to students who focus on American culture, society, institutions or economics in their particular disciplines. May be repeated once if topics differ. Prerequisite: senior or permission of instructor.

**ACS 490. Tutorial in American Culture Studies** (1-3) Fall, Spring. Independent study in special interdisciplinary subject not covered by existing courses. Prerequisite: junior standing; proposal, signed by proposed tutor, must be submitted for approval by undergraduate adviser in American culture studies prior to semester in which tutorial begins.

## Apparel, Merchandising and Interior Design (AMID)

**AMID 101. Clothing Design and Construction** (3) Fall, Spring. Aesthetic principles of design and analysis of clothing construction methods. Evaluation of basic techniques and their application to construction of garments. Consumer buying of clothing analyzed. Lab fee.

**AMID 103. Textiles** (3) Fall, Spring. Fiber, yarn and fabric structures; finishes; color and design. Selection and care of fabrics for personal and household uses. Lab fee.

**AMID 116. Introduction to Interior Design** (3) Fall. Overview of the interior design profession; examination of the design process with emphasis on creative problem solving and development of competencies in space planning and presentations.

**AMID 117. Interior Design I** (3) Fall, Spring. Color drawing techniques used in the simulation of materials in interior and exterior renderings. Experiments with various media, their uses and limitations as applicable to visual presentations by designers, renderers and illustrators. Lab fee. Two one-hour lectures, one two-hour studio.

**AMID 202. Designing with Flat Pattern** (3) Fall, Spring. Apparel design techniques using basic flat pattern methods. Create patterns for apparel in various styles of bodices, necklines, collars, sleeves and skirts. Development of original design and production of the designs in muslin and fashion fabric. Prerequisites: AMID 101 and 103. Lab fee.

**AMID 204. Introduction to the Fashion Industry** (3) Fall. 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. Interior Design II** (3) Fall, Spring. Programming, conceptualization and problem solving for residential and nonresidential environments. Historic preservation and special population projects also included. Prerequisites: AMID 116, 117, 223. Six studio hours. Lab fee.

**AMID 223. Space Planning** (3) Fall. Awareness and understanding of human perception and behavior in defined environments, including anthropometrics, observations and post occupancy evaluations.

**AMID 303. Contemporary Interiors** (3) Fall, Spring. Design elements, principles and color theory used to create the human environment. Finish and material selection for furnishings and other surface treatments. Lab fee.

**AMID 313. Textile Analysis** (3) Fall, Spring. Economic, political and cultural forces related to production and use of historic and modern textiles; emphasis on recent technical developments and consumer textiles. Prerequisite: AMID 103.

**AMID 319. Interior Design III** (3) Fall. Small residential design with emphasis on space planning, furniture selection and layout in children and special populations projects. Prerequisites: AMID 219, 303, CONS 235, DESN 236, 237. Lab fee.

**AMID 329. Interior Design IV** (3) Spring. Large residential projects incorporating kitchen and bath detailing and visual presentation. Complete design concept and presentation with special attention to low income, energy conservation and specialized construction details. Prerequisites: AMID 219, 303, CONS 235, DESN 236, 237. Six studio hours. Lab fee.

**AMID 333. Codes and Specifications for Interior Design** (2) Spring. Specification, writing for interior finishes and furniture. Accessing local code information, fire safety and organizations that test product safety.

**AMID 345. Computers and Interior Design** (3) Fall, Spring. Microcomputer applications for the professional practice of interior design, includes computer aided design, spread sheets, specifications and estimations. Prerequisites: CS 100 and AMID 219. Lab fee.

**AMID 401. History of Costume** (3) Fall. 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) Fall, Spring. 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) Spring. 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) Fall, Spring. Specialized techniques of professional tailoring used in construction of a suit or coat. Analysis of quality in ready-to-wear tailored garments. Prerequisite: AMID 202 or consent of instructor. Lab fee.

**AMID 406. Housing the Family** (3) Spring. Selecting, financing and adapting housing for families with varying lifestyles and needs. Energy efficiency, government role in housing, renting and owning options, and psychological needs emphasized.

**AMID 412. Advanced Apparel Design** (3) Spring. Creative expression and application of principles of apparel design through the media of flat pattern and draping. Development of original design from sketch to finished garment. Prerequisite: AMID 202. Lab fee.

**AMID 414. Experimental Clothing Construction** (3) Fall. Experimental approach to factors influencing construction of apparel. Prerequisite: AMID 202 or consent of instructor. Lab fee.

**AMID 417. Interior Design V** (3) Fall. Small nonresidential design which incorporates programming, conceptualization, problem solving and evaluation for offices, retail and

other small institutions. Prerequisites: AMID 3198 or 329. Lab fee.

**AMID 418. History of Interiors** (3) Fall. 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. Interior Design VI** (3) Spring. Large nonresidential design incorporating building systems, custom cabinetry and open office systems in historic preservation and adaptive reuse projects. Prerequisites: AMID 319, 329, 333. Six studio hours. Lab fee.

**AMID 423. Professional Practice in Interior Design** (2) Spring. Ethics and business procedures for interior designers. Estimating, scheduling, budgeting and contract writing for installation of project. Preparation of resumes and portfolios for the profession.

## Applied Human Ecology (AHE)

**AHE 100. Professional Perspectives** (1) Spring. 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 (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 student-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 student-teacher interaction in groups or individually.

**AHE 389. Supervised Field Experience** (1-5) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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** (1-3) On demand. In-depth examination of topics in home economics not covered by existing course work. Repeatable once. Undergraduate credit only. Some seminars require transportation and/or lab fee.

**AHE 489. Internship** (5-12) Fall, Spring, Summer. Internship in a professional environment. Work settings are approved on an individual basis. May be repeated. Graded S/U.

## Applied Mathematics and Statistics (AMS)

**†AMS 100. Developmental Mathematics** (3) Fall, Spring, Summer. Review of basic mathematids such as equations, inequalities, exponents and radicals, logarithms, polynomial functions, graphs and applications. Graded S/U.

## Applied Statistics (STAT)**

**Δ*STAT 200. Using Statistics** (3) Fall, Spring. Descriptive statistics, probability distributions, estimation, hypothesis testing, regression, contingency tables. Interpretation and misinterpretation of statistical techniques. Does not count toward graduation credit for students receiving BSBA.

**Δ*STAT 211. Elementary Statistical Methods I** (3) Fall, Spring. Elementary probability, random variables, probability distributions, sampling, descriptive statistics, sampling distributions, estimation. Prerequisite: MATH 126 or MATH 131.

**Δ*STAT 212. Elementary Statistical Methods II** (3) Fall, Spring. Estimation, hypothesis testing, regression, correlation, analysis of variance and contingency tables. Prerequisite: STAT 211.

***STAT 311. Introduction to Regression and Design** (3) Fall, Spring. Regression analysis, analysis of variance, topics in design of experiments. Prerequisite: STAT 212 or consent of instructor.

***STAT 312. Topics in Applied Statistics** (3). Selected topics from time series, sample design, decision theory, nonparametrics or factor analysis. Prerequisite: STAT 212.

**STAT 315. Introduction to Statistical Inference** (3) Fall. 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) Fall. 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) Spring. Sampling as a tool of scientific inference in research and management. Planning surveys; sample size, stratified, systematic and cluster sampling; sources of error in surveys. Prerequisite: STAT 315 or MATH 441 or consent of instructor.

**STAT 410. Experimental Design** (3) Spring. 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) Fall. Introduction to modern standard Arabic. Four class periods and practice with tapes each week.

**ARAB 102. Beginning Arabic II** (4) Spring. ARAB 101 continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 101 or equivalent.

**ARAB 201. Intermediate Arabic I** (4) Fall. ARAB 101-102 continued. Conversation, writing, reading, grammar. Four class periods and practice with tapes each week. Prerequisite: ARAB 102 or equivalent.

**ARAB 202. Intermediate Arabic II** (4) Spring. ARAB 201 continued. Four class periods and practice with tapes each week. Prerequisite: ARAB 201 or equivalent.

## Art (ART)

**ΔART 101. Introduction to Art** (3) Fall, Spring, Summer. Historical and aesthetic components of art with laboratory experiences with basic elements of creative expression. Non-majors only. Two hours studio, two hours lecture. Lab fee.

**¶ΔART 102. Two-Dimensional Foundations** (3) Fall, Spring, Summer. Introduction to principles of art through a variety of concepts and media used in creative two-dimensional form organization. Required of art majors and minors. Can be taken with ART 103 or ART 112. Lab fee.

**ΔART 103. Drawing Foundations** (3) Fall, Spring. 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. Lab fee.

**ΔART 112. Three-Dimensional Foundations** (3) Fall, Spring, Summer. Creative principles of art in three-dimensional form emphasizing aesthetics, utilitarian concepts and tools in experimental studio experiences. Required of art majors and minors. Can be taken with ART 102 or 103. Lab fee.

**ΔART 205. Figure Drawing** (3) Fall, Spring. Principles and practices of creative and structural figure drawing; development of concepts and techniques for competent graphic expression related to drawing human forms. Six studio hours. Prerequisite: ART 103. Lab fee.

**ΔART 206. Figure Drawing II** (3) Fall, Spring. Further work on visual comprehension in figure drawing to improve perceptual judgment; move to a more personal and selective level of stylistic interpretation. Six studio hours. Prerequisite: ART 205. Lab fee.

**ART 261. Sculpture I** (3) Fall, Spring. Creative concepts, arrangements and techniques of three-dimensional sculptural forms. Six studio hours. Prerequisites: ART 101 or ART 102. Lab fee.

**ART 263. Ceramics I** (3) Fall, Spring. Clay as creative medium for functional forms. Handbuilding and wheel techniques; simple sculpture; glazing and firing; survey of clays, pottery types, kilns, pyrometry. Six studio hours. Prerequisite: ART 102, ART 112. Lab fee.

**ART 267. Stained Glass Compositions** (3) Fall. Techniques involved with creative two- and three-dimensional arrangements; emphasis on individual studio development. Six studio hours. Lab fee.

**ART 277. Printmaking I** (3) Fall, Spring. Basic techniques for woodcuts, silk screen, intaglio or lithography. Six studio hours. Prerequisite: ART 103. Lab fee.

**ART 305. Figure Drawing III** (3) Fall, Spring. Advanced experimentation using the figure in drawing composition with a graphic medium. Six studio hours. May be repeated to six hours. Prerequisite: ART 206. Lab fee.

**ART 315. Glassworking** (3) Fall, Spring. Free handblown glass formation; personal creative use of glass as an artistic medium for expression. Six studio hours. Lab fee.

**ΔART 320. Enameling on Metal** (3) Fall, Spring. Enameling techniques on copper; after initial 6 hours credit earned, choice of copper or jewelry techniques. Six studio hours. May be repeated to 9 credit hours. Prerequisite: ART 101 or ART 102, or consent of instructor. Lab fee.

**ART 321. Beginning Jewelry Design** (3) Fall, Spring. Design and fabrication techniques of metal jewelry—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) Fall, Spring. Centrifugal casting of silver, gold, tombac, brass and bronze jewelry and related objects, using wax and plastic models. Six studio hours. Prerequisite: ART 321. Lab fee.

**ART 325. Fine Art Photography I** (3) Fall, Spring. Photography as a fine art. Use of camera for creative expression: introduction to history and critical awareness. Black and white lab work. Prerequisites: ART 102 or consent of instructor. Lab fee.

**ART 326. Fine Art Photography II** (3) Fall, Spring. Introduction to view camera techniques, development of critical awareness of contemporary creative photography, personal imagery and perception. Six studio hours. Prerequisite: ART 325. Lab fee.

**ART 361. Sculpture II** (3) Fall, Spring. Three-dimensional development in techniques such as: casting, assembling, fabricating, manipulating and forming metal; plastic, plaster, etc.; welding with oxygen/acetylene, arc and MIG; and carving wood and stone. Six studio hours. May be repeated to six hours. Lab fee.

**Art 363. Ceramics II** (3) Fall, Spring. Development of throwing techniques, design concepts, surface decoration and sculptural forms. Laboratory development of simple glazes. Kiln stacking and firing. Six studio hours. Prerequisite: ART 263. Lab fee.

**ART 365. Weaving** (3) Fall, Spring. Techniques of weaving on a 4-harness loom. Emphasis on materials and creative interpretation of fiber forms. Six studio hours. Lab fee.

**ART 366. Fiber/Fabric Techniques** (3) Fall, Spring. Introduction 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.

**ΔART 371. Watercolor Painting I** (3) Fall, Spring. Introductory experimentation with painting techniques on paper; employment of the figure, still life and landscape as initial references. Six studio hours. Prerequisite: ART 103. Lab fee.

**ΔART 372. Watercolor Painting II** (3) Fall, Spring. Choice of specific compositional problems exploring the possibilities of design and expression in watercolor techniques; creation of foundational surfaces, mixed media and works in series. Six studio hours. May be repeated to six hours. Prerequisite: ART 371. Lab fee.

**ART 373. Oil/Acrylic Painting I** (3) Fall, Spring. Exploration of painting techniques from traditional and contemporary using oil and acrylic paint as a medium emphasizing individual artistic response. Six studio hours. Prerequisite: ART 103. Lab fee.

**ART 374. Oil/Acrylic Painting II** (3) Fall, Spring. Opportunity to experiment with varying media and techniques and to use fundamentals learned in introductory course. Six studio hours. May be repeated to six hours. Prerequisite: ART 373. Lab fee.

**ART 377. Printmaking II** (3) Fall, Spring. Development of additional techniques as related to woodcut, silk screen, intaglio or lithography. Six studio hours. May be repeated to six hours. Prerequisite: ART 277. Lab Fee.

**ART 390. Introduction to Computer Art** (3) Fall, Spring. Methods of producing original computer art, software and appropriate hardware. Prerequisites: ART 102, 103, 112, or consent of instructor. Lab fee.

**ART 391. Computer Art II** (3) Spring. Intermediate animation using computers, video equipment, software and languages in creation of original works of art. May be repeated to six hours. Prerequisite: ART 390 or consent of instructor. Lab fee.

**ART 392. Applications of Computer Art** (3) Fall, Spring. Computer art in specific disciplines such as design, painting, sculpture, etc. Topic to be announced. May be repeated to six 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) Fall, Spring. Conceptual imagery in drawings as completed visual statements; not exclusively

concerned with the human figure. Six studio hours. May be repeated to six hours. Prerequisite: ART 305. Lab fee.

**ART 415. Advanced Glassworking** (3) Fall, Spring. 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) Fall, Spring. Advanced problems in jewelry design, smithing and forging. Six studio hours. May be repeated to nine credit hours. Prerequisite: ART 321 and 322. Lab fee.

**ART 423. Jewelry Enameling** (3) Fall, Spring, Summer. 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 Creative Photography** (3) Fall, Spring. 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. Lab fee.

**ART 426. BFA Thesis Project in Fine art Photography** (3) Fall, Spring. Semester-long project emphasizing personal development of philosophy and style in creative photography. Six studio hours. Prerequisite: ART 425. Lab fee.

**ART 461. Sculpture III** (3) Fall, Spring. Advanced sculptural techniques and introduction to environmental and architectural scaling. Six studio hours. May be repeated to six credit hours. Prerequisite: ART 361. Lab fee.

**ART 463. Ceramics III** (3) Fall, Spring. Throwing of duplicate forms and functional ware. Glaze development through unity molecular formula. Triaxial glaze blending at various temperatures, continuation of ceramic sculptural forms. Individual projects determined upon consultation with instructor. Six studio hours. Prerequisitie: ART 363. Lab fee.

**ART 465. Advanced Weaving** (3) Fall, Spring. Conceptual and functional work leading to development of personal direction in tapestry, multiple harness, Ikat, rug or pattern weaving. Six studio hours. May be repeated to six hours. Prerequisite: ART 365 or consent of instructor. Lab fee.

**ART 466. Surface Design/Silkscreen Techniques** (3) Spring. Approaches to surface design leading to development of understanding of motifs, repeats and expanding pattern. Experiments with silkscreen printing, registration techniques and fiber reactive dyes. Various registration 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) Fall, Spring. Individual development in watercolor medium emphasizing personal style and presentation. Students are encouraged to find self-directions and motivation in consultation with instructor. Six studio hours. May be repeated to six hours. Prerequisite: ART 372. Lab fee.

**ART 473. Oil/Acrylic Painting III** (3) Fall, Spring. For advanced student to pursue personal style and to concentrate on elements most important to them. Emphasis placed on individuality and arranged critiques. Six studio hours. May be repeated to six hours. Prerequisite: ART 374. Lab fee.

**ART 477. Printmaking III** (3) Fall, Spring. Specialized advanced techniques in woodcuts, silk screen, intaglio or lithography. Six studio hours. May be repeated to six hours. Prerequisite: ART 377. Lab fee.

**ART 490. Problems Computer Art** (3) Fall, Spring. The computer and contemporary technology (i.e., video, robotics, light, etc.) in the creation of art forms. May be repeated to six hours. Prerequisites: ART 390, 391, 392 or consent of instructor. Lab fee.

**ART 491. Advanced Computer Art** (3) Spring. The creation of art through computer simulation. May be repeated to six hours. Prerequisites: ART 390, 391, 392, 490, advanced math, languages (BASIC and one structured language) or consent of the instructor. Lab fee.

**ART 495. Special Topics in Art** (1-3). Innovative and intensive group studies in selected studio research. Prerequisites announced for each offering. May be repeated.

## Art Design (ARTD)

**ARTD 211. Introduction to Graphic Design** (3) Fall, Spring. Exploration and application of design principles, layout and typography; tools, techniques and terminology of the discipline. Six studio hours. Prerequisite: ART 102 or consent of instructor. Lab fee.

**ARTD 213. Introduction to Environmental Design** (3) Fall, Spring. Fundamentals, terminology, methods of communication for the environmental profession. Use of illustration and three-dimensional models as means of exploring design and presentation. Six studio hours. Prerequisite: ART 112 or consent of instructor. Lab fee.

**ARTD 311. Intermediate Graphic Design** (3) Fall, Spring. Continued exploration in graphic design with an emphasis on typography and editorial and publication design. Prerequisite: ARTD 211 or consent of instructor. Lab fee.

**ARTD 312. Advertising Design** (3) Fall, Spring. Translating words and ideas into visual realities of mass communication; magazines, newspapers, billboards, direct-mail and TV. Use of felt markers, storyboards and videotape. Six studio hours. Prerequisite: ARTD 311 or consent of instructor. Lab fee.

**ARTD 313. Rendering** (3) Fall, Spring. 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) Fall, Spring. 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.

**ARTD 319. History of Design** (3) Fall, Spring. Slide survey of architectural, graphic and industrial design movements influencing western culture from 1850 to present.

**ARTD 411. Advanced Graphic Design** (3) Fall, Spring. Concentrated study and advanced level problems that allow senior level students to expand and refine their abilities in graphic design. Prerequisite: ARTD 311. Lab fee.

**ARTD 412. Packaging and Promotion Design** (3) Fall, Spring. The package as attractive, informative product vehicle, and its relationship to consumer purchase. Promotional and collateral advertising of product and package. Six studio hours. Prerequisite: ARTD 312 or consent of instructor. Lab fee.

**ARTD 413. Corporate Identity Design** (3) Fall, Spring. Professional presentation of corporate identity program for existing or fictitious company. Development and application of trademark and/or logotype based on compiled in-depth research. Six studio hours. Prerequisite: ARTD 412 or consent of instructor. Lab fee.

**ARTD 414. Senior Design Seminar** (3) Fall, Spring. Preparation for entrance into the profession. Emphasizes job related skills and practices. Each student prepares a portfolio and designs and prints a personal resume. Prerequisite: ARTD 412 or consent of instructor. Lab fee.

**ARTD 418. Senior Design Problems** (3) Fall, Spring. 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) Fall, Spring. Translating concepts, words and ideas into three-dimensional structures and environments for business and commerical communication. Six studio hours. Prerequisite: ARTD 314 or consent of instructor. Lab fee.

**ARTD 420. Graphic Design Synthesis** (3) Fall or Spring. 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. Museum Exhibit Design** (3) Fall, Spring. 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) Fall, Spring. 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 coursework. May be repeated. Prerequisite: consent of instructor.

**ARTD 489. Design Internship** (3-10) Fall, Spring, Summer. Studio experience in chosen area design firm. Credit approved upon submission of portfolio and written description of experience in consultation with firm; elective hours only. Prerequisites: 15 hours of design, consent of design staff.

**ARTD 495. Special Topics in Design** (1-3). Innovative and intensive group studies in selected design research. Prerequisites announced for each offering. May be repeated.

## Art Education (ARTE)

**ARTE 252. Foundations for Teaching Visual Arts** (3) Fall. Lecture, laboratory and field-based experiences for teaching art. Clinical analysis of art education settings. Prerequisite: sophomore standing.

**ARTE 343. Art in the Elementary Schools** (3) Fall, Spring, Summer. 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) Fall. Theories of creative development in lecture/laboratory and field 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) Spring. Planning and management of art programs; clinical experiences related to development of instructional units for art curricula. Not for arts and sciences credit. Prerequisites: ARTE 252 and 352. C/F hrs.: 20. Lab fee.

**ARTE 470. Independent Studies in Art Education** (1-3). Supervised individual problems in selected art education research for students who have shown proficiency and marked degree of independence in other art education coursework. May be repeated. Prerequisite: consent of instructor.

**ARTE 482. Art for Special Needs Children** (3) Fall, Spring. Art strategies and media adaptions for exceptional 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 487. Studio Teaching Practicum** (3) Fall, Spring. clinical teaching experience in School of Art Children's Program. Prerequisite: permission of program director. Lab fee.

**ARTE 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

**ARTE 495. Special Topics in Art Education** (1-3). Workshop topics and intensive group studies relative to special needs of visual arts teachers.

**ARTE 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program Required of students in secondary school or special certification program. Fee: $5 per credit hours. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Art History (ARTH)

**¶ΔARTH 145. Western Art I** (3) Fall, Spring. Ancient and Medieval art.

**¶ΔARTH 146. Western Art II** (3) Fall, Spring. Art from Renaissance to present. May be taken before ARTH 145.

**ARTH 440. Modern Architecture** (3) Alternate years. Architecture of 19th and 20th centuries in Europe and America.

**ARTH 441. American Art to the Civil War** (3) Fall. 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) Fall. 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 years. Art of Greece from Persian Wars and of Rome from Late Republic to Constantine.

**ARTH 448. Early Christian and Byzantine Art** (3). Alternate years. Christian art to the medievalization of the Roman empire in the west and Byzantine art to the fall of Constantinople in 1453.

**ARTH 449. Medieval Art** (3) 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 13th century through the 16th century and Mannerism.

**ARTH 453. Northern Renaissance Art** (3) Alternate years. Painting, sculpture and graphic arts of Flanders, France, Germany, England and Spain during the 15th and 16th 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) Fall. Painting and sculpture in the 19th century in Europe from neoclassicism through post-impressionism.

**ARTH 456. Art of the Early 20th Century** (3) Fall. Alternate years. Major movements in painting and sculpture in Europe and America from Fauvism to World War II; theoretical bases as well as formal innovations.

**ARTH 457. Art of the Later 20th Century** (3) Spring. Alternate years. Major movements in painting and sculpture in Europe and America from World War II to the present; traditional art forms as well as the more radical recent developments.

**ARTH 458. Art of India and S.E. Asia** (3) Fall. Art and architecture in India and S.E. Asia from the earliest times to present.

**ARTH 459. Art of China and Japan** (3) Spring. Art and architecture of China and Japan from earliest cultures to present.

**ARTH 460. Women and the Visual Arts** (3) Alternate years. Historical survey of the role of women in the fine arts, in their capacities as artists, critics, matrons (patrons), and audiences, from antiquity to the present. Emphasis on examing issues relevant to the contemporary situation in the arts and society.

**ARTH 470. Independent Studies in Art History** (1-3). Supervised individual problems in selected art history research for students who have shown proficiency and marked degree of independence in other art history course work. May be repeated. Prerequisite: consent of instructor.

**ARTH 495. Special Topics in Art History** (1-3). Innovative and intensive group studies in selected art historical research. Prerequisites announced for each offering. May be repeated.

## Art Therapy (ARTT)

**ARTT 230. Introduction to Art Therapy** (3) Fall, Spring. 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) Fall. Investigation of theoretical and practical applications of art therapy methods with specific populations. Exposure to the implementation of various treatment models within the field, the therapeutic uses of art materials, and development of communication skills for processing art work. Prerequisite: ARTT 230 (PSYC 403 recommended). Lab fee.

**ARTT 331. Art Therapy Methods and Theories II** (3) Spring. Increased exposure to art therapy in both theory and practice emphasizing the role of the art therapist, discussion of the art therapy treatment process, and ways to 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) Fall, Spring. 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)

**¶ΔA&S 100. Seminar in Arts and Sciences** (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.

**A&S 200. Seminar in Arts and Sciences** (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.

**A&S 210. Introduction to Aesthetic Perception** (3) Fall. Initial course of the fine arts specialization for elementary education majors, but open to all interested in the nature of aesthetic inquiry through experiences in specific arts events, discussion and reflection with faculty from different disciplines.

**A&S 250. Great Ideas** (3) Fall, Spring. Interdisciplinary seminar on some of the motivating ideas of Western culture: Judeo-Christian heritage, Greek humanism, science, democracy, feminism, etc. Emphasis on reading of primary texts and class discussion. Prerequisite: ENG 112.

**A&S 300. Seminar in Arts and Sciences** (1-5) On demand. Interdisciplinary studies in arts and sciences or area of study meeting new trends in arts and sciences. May be repeated by consent of dean of the College of Arts and Sciences. Prerequisite: consent of instructor.

**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 410. Making Aesthetic Judgments** (3) Spring. Capstone seminar for elementary education major completing the fine arts specialization, but open to all. Students will demonstrate and reflect upon the development of their aesthetic perception gained through other courses and apply it primarily in teaching situations. Prerequisite: A&S 210.

**A&S 489. Internship** (1-12) On demand. Applied experience for students in arts and sciences programs. Specific proposal and permission of undergraduate adviser as well as College of Arts and Sciences required prior to enrollment. Maximum internship credit is 12 hours. Guidelines available in College of Arts and Sciences office. Graded S/U.

## Astronomy (ASTR)

**ΔASTR 201. Modern Astronomy** (3) Fall, Spring, Summer. Recent astronomical discoveries, space travel among planets, birth and death of stars, supernovas, pulsars, black holes, x-ray stars, radio galaxies, quasars, extra-galactic phenomena, and origin of universe; some observational work.

**ΔASTR 212. The Solar System** (3) Fall, Summer. Planetary, solar and space science. The moon, solar interior and atmosphere, solar/terrestrial relations, planetary structure and atmospheres, comets, asteroids, meteoroids, space exploration, origin of solar system.

**ASTR 270. Independent Study** (1-3) On demand. Introduction to research in physics and astronomy; projects chosen in consultation with adviser. May include library and laboratory work. For lower division students only. Prerequisite: consent of instructor.

**ASTR 305. Life in the Universe** (3) Spring. 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.

**ΔASTR 307. Understanding the Cosmos** (3) Spring. Alternate years. The universe as a whole, gravity, black holes, structure of space; other galaxies and the universal redshift, clusters of galaxies and other large-scale structure; big bang and steady state models; the three degree background radiation; first moments of creation.

**ASTR 309. Astrophotography Laboratory** (1) Fall. 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) Fall. 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 MATH 232. Not open to students with credit for PHYS 321.

**ASTR 403. Stellar Structure and Evolution** (3) Spring. Alternate years. Basic data, stellar interiors, theoretical models; advanced evolutionary states; red giants, white dwarfs, neutron stars, supernovas, black holes. Prerequisites: PHYS 301 and consent of instructor. Not open to student with credit for PHYS 403.

**ASTR 470. Independent Study in Astronomy** (1-3). On demand. Introduction to research in astronomy; projects chosen in consultation with adviser, may include library and laboratory work. Prerequisite: consent of instructor.

## Biological Sciences (BIOL)

¶ΔBIOL 101. **Environment of Life** (3) Fall, Spring, Summer. Basic ecology and current environmental problems of air, water and land pollution; human reproduction and population dynamics. Two one-hour lectures and one two-hour laboratory. Not accepted toward biology major or minor. Lab fee.

¶ΔBIOL 104. **Introduction to Biology** (4) Fall, Spring, Summer. Basic concepts: the cell, metabolism, genetics, reproduction, development, evolution, ecology. Three one-hour lectures, one two-hour laboratory. Not accepted toward biology major or minor. Lab fee.

**BIOL 108. Life in the Sea** (3) Fall. Shore and ocean environments, variety and adaptations of marine life. Observations of marine organisms in marine laboratory. Three one-hour lectures. High school biology recommended. Not accepted toward biology major or minor.

**BIOL H109. Life in the Sea—Honors** (4) Fall. 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 instructor. Not accepted toward a biology major or minor.

¶ΔBIOL 204. **Concepts in Biology I** (5) Fall, Spring, Summer (on demand). Introduction to ecological and evolutionary biology, Mendelian and population genetics, and the major groups of plants, animals and microbes. Three one-hour lectures, one three-hour lab and one two-hour recitation. Field trips required. Lab fee.

¶ΔBIOL 205. **Concepts in Biology II** (5) Fall, Spring, Summer (on demand). Introduction to molecular and cellular 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) Fall. 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 fee.

**BIOL 270. Marine Closed Systems** (2) Fall. 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) Spring. 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 toward biology major or minor.

ΔBIOL 301. **Field Biology of the Vertebrates** (3) Fall. Evolution, systematics, physiology, ecology and identification of vertebrates. Required field trips emphasize collection techniques and quantitative sampling. Two one-hour lectures and one three-hour laboratory. Prerequisite: BIOL 204 or 205. Lab fee.

**BIOL 310. Biology of Aging** (2) Fall. Biological aspects of normal aging at the cellular, tissue and organismal levels. Two one-hour lectures. Prerequisites: BIOL 104 or BIOL 204 and 332 or BIOL 411, or consent of instructor.

**BIOL 313. Microbiology** (4) Fall, Spring, Summer (on demand). Methods of isolation, culture and identification; physiological, genetic and applied aspects of microorganisms. Two one-hour lectures, two two-hour laboratories. Prerequisites: BIOL 204 and 205 and one year of chemistry. Lab fee.

**BIOL 314. Microbiology for Health Professionals** (3) Fall. Microbiologic and epidemiologic 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 117/118 or 127/128 or 137/138; or consent of instructor.

**BIOL 315. Microbiology Laboratory for Health Professions** (1) Fall. 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) Fall. 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 Pests** (3) Spring. 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.

ΔBIOL 331. **Human Anatomy and Physiology I** (4) Fall, Spring, Summer. Anatomical and physiological aspects of cells and tissues and the integumentary, skeletal, muscular and nervous systems. Three one-hour lectures and one two-hour laboratory. Prerequisite: BIOL 104 or 205. Lab fee.

ΔBIOL 332. **Human Anatomy and Physiology II** (3) Fall, Spring, Summer. Anatomical and physiological aspects of circulation, respiration, digestion, excretion, endocrinology and reproduction. Three one-hour lectures and one two-hour laboratory. Prerequisite: BIOL 104 or BIOL 205 or consent of instructor. Lab fee.

**BIOL 343. General Botany** (3) Fall. 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) Fall, Spring. Theoretical and applied aspects of inheritance. Molecular, chromosomal and population levels of heredity in both prokaryotes and eukaryotes. Three one-hour lectures. Prerequisites: BIOL 204 and 205 or consent of instructor.

**BIOL 352. Laboratory in Genetics** (1) Fall, Spring. Materials, methods and terminology of genetics through experiments, problems and demonstrations. One three-hour laboratory. Prerequisite or corequisite: BIOL 350. Lab fee.

**BIOL 354. Population and Community Ecology** (3) Fall. Concepts of modern ecology. Fundamental 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) Fall, Spring, Summer. Selected topics or subject areas in life sciences. 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) Fall, Spring, Summer. For advanced student who has shown proficiency and marked degree of independence in work. Individual registration. Prerequisite: four semesters of biology and consent of instructor. 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) Fall, Spring, Summer. For students in the departmental honors program only. The thesis describes the student's independent research, previously conducted as BIOL 401H. An approved public presentation of the research is required.

**BIOL 404. Human Genetics** (3) Spring. Alternate years. Essential principles of modern genetics with special emphasis on humans. Methods of human genetic analysis; screening and counseling; genetic aspects of public health; genetics and cancer. Two one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 204, or permission of instructor.

**BIOL 405. General Parasitology** (4) Fall, Spring. 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) Spring. Biology and identification of disease-carrying, 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) Fall. Structure and physiology of cells, integrating the dynamics of cellular structures with metabolic functions and control. Two one-hour lectures and one four-hour laboratory. Prerequisites: BIOL 204, 205 and two years of chemistry or consent of instructor. Lab fee.

**BIOL 408. Molecular Biology** (3) Fall. Function and evolutionary conservation of genes and gene products, with emphasis on the applications of molecular biology to the diverse fields of biological research. Three one-hour lectures. Prerequisites: BIOL 350 or 407 or permission of instructor.

**BIOL 409. Invertebrate Zoology I** (3) Fall. 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.

**BIOL 410. Invertebrate Zoology II** (3) Spring. Classification, 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) Spring. General and comparative animal physiology with emphasis on vertebrate systems. Two one-hour lectures, one three-hour laboratory and one one-hour recitation. Prerequisites: BIOL 204 and 205; organic chemistry and BIOL 407 recommended; or consent of instructor. Lab fee.

**BIOL 412. Field Experience** (2-6) Spring 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 413. Vascular Plant Structure** (4) Spring. Comparative structure and evolutionary trends of the principal tissues of vascular plants. Three one-hour lectures, one two-hour laboratory. Prerequisite: BIOL 204 or 343 or consent of instructor. Lab fee.

**BIOL 414. Plant Systematics** (3) Spring. Principles of plant classification, evolutionary relationships and processes of plant evolution. Construction and use of keys, identification of local flora, use of classical and molecular techniques in plant evolutionary studies. Two one-hour lectures and one two-hour laboratory. Prerequisite: BIOL 204 or consent of instructor. BIOL 343 recommended.

**BIOL 417. Plant Physiology** (4) Spring. 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) Spring. Genetics, physiology, development and evolution of behavior from an ecological perspective. Two one-hour lectures and one two-hour laboratory. Prerequisites: BIOL 204 and 205 or consent of instructor. Lab fee.

**BIOL 421. Advanced Microbiology** (4) Spring. 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) Fall. Ecology of the growth, regulation and distributions of vascular plant populations. Two one-hour lecture/discussions and one three-hour laboratory. One weekend field trip required. Prerequisites: BIOL 204 and 205. Strongly recommended: BIOL 343, 354 or 451. Lab fee.

**BIOL 424. Algology** (4) Fall. Taxonomy, ecology and morphology of the algae; emphasis on fresh-water algae. One two-hour lecture and two two-hour laboratories. Prerequisites: BIOL 204 and 205. Lab fee.

**BIOL 425. Limnology** (3) Fall. Physical, chemical and biological aspects of aquatic habitats. One two-hour lecture and one three-hour lab, and one weekend field trip to upper Great Lakes. Prerequisites: BIOL 204 and 205. Lab fee and field trip fee.

**BIOL 426. Pathogenic Microbiology** (4) Spring. 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) Spring. 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) Fall. Comparative anatomy of representative chordates; evolutionary significance of structural and developmental changes and relationships of all organ systems. Three one-hour lectures and two two-hour laboratories. Prerequisites: BIOL 204, 205 or consent of instructor. Lab fee.

**BIOL 433. Human Cells and Systems Physiology** (4) Fall, Summer (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) Fall. 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) Fall. 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) Spring. Physiological, metabolic actions of selected endocrine secretions with emphasis on mammals. Three one-hour lectures and one three-hour laboratory. Prerequisites: BIOL 411 and organic chemistry or consent of instructor; biochemistry recommended. Lab fee.

**BIOL 439. Immunobiology** (4) Fall. Immune state in animals; laboratory work on detection and quantitation of antigens and antibodies. Two one-hour lectures, one three-hour 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) Fall. 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) Fall. Mechanisms of plasmid replication, copy number control and compatibility. Methods used to isolate and purify plasmid DNA. Procedures used to transfer plasmids to new hosts. Prerequisite: BIOL 313 or consent of instructor.

**BIOL 443. Microbial Physiology** (3) Spring. Chemical composition, nutrition, growth, metabolism and regulation in microbial cells. Three hours of lecture. Prerequisites: BIOL 313 and CHEM 308 or consent of instructor.

**BIOL 444. Microbial Physiology Laboratory** (2) Spring. Growth, nutrition, biochemical, metabolic and regulatory activities of microorganisms. Prerequisite: Previous or

concurrent enrollment in BIOL 443 or consent of instructor. Two two-hour laboratories. Lab fee.

**BIOL 446. Scanning Electron Microscopy** (4) Spring. Theory and practice of scanning electron microscopy applicable to structural/ compositional research. Critical point drying, sample coating techniques, backscattered, electron detection, energy-dispersive x-ray microanalysis and computational analysis of data. Two one-hour lectures and two three-hour laboratories. Prerequisites: one year of physics, two years of chemistry and consent of instructor. Lab fee.

**BIOL 447. Microbial Genetics** (3) Fall. Molecular biology and genetic phenomena of bacteria and bacteriophage; mutagenesis and recombination. Three one-hour lectures. Prerequisite: four semesters of biology and consent of instructor. BIOL 350 and biochemistry recommended.

**BIOL 449. Epidemiology** (3) Spring. Distribution and determinants of health and disease in humans. Methods of studying those factors that influence change in the determinants of disease. Three one-hour lectures. Prerequisite: Statistics course, at least junior standing and completion of two biology courses or consent of instructor.

**BIOL 451. Evolution** (3) Spring. Evidence for evolution. Modern evolutionary theory; modes of selection, speciation, complex adaptations, micro-evolutionary trends. Two one-hour lectures and one two-hour discussion. Prerequisite: BIOL 350.

**BIOL 470. Readings in Biological Sciences** (1) Fall, Spring, Summer. Independent readings on topics of current or specialized interest in biology. Not more than two hours may be applied to major or minor requirements. Prerequisite: consent of instructor. May be taken S/U for major credit.

**BIOL 472. Ichthyology** (3) Fall. Alternate years. Life histories, systematics, physiology, ecology, evolution and biogeography of major groups of freshwater and marine fishes. Two one-hour lectures and one three-hour laboratory. Saturday and/or weekend field trips required. Prerequisites: BIOL 204 and 205. Lab fee.

**BIOL 473. Mammalogy** (3) Fall. Alternate years. Identification, natural history, evolution, zoogeography, ecology, physiology, behavior, with emphasis on Ohio mammals. Two one-hour lectures and one three-hour laboratory; one weekend field trip. Prerequisites: BIOL 204 and 205. Lab fee.

**BIOL 474. Marine Biology** (4) Spring. Biological and oceanographic analysis of marine environemnt: ecology, populations, laboratory techniques. Three hours of lecture and three hours of laboratory arranged. Prerequisites: one year of chemistry, invertebrate zoology, and consent of instructor. Lab fee.

**BIOL 475. Marine Biology Field Trip** (1) Spring. Field trip to marine environment and research station with collection and study of living marine fauna and flora, oceanographic analysis of environments, study on sea-going vessel using trawl and dredge; discussions of marine research by laboratory staff; tour of fishery station. Prerequisite: BIOL 474. Consent of instructor and transportation fee required.

**BIOL 476. Herpetology** (3) Fall. Alternate years. Amphibian and reptile identification, habits, distribution, behavior. Two one-hour lectures and one three-hour laboratory or equivalent field work, all-day field trip. Prerequisites: BIOL 204 and 205. Lab fee.

**BIOL 477. Ornithology** (3) Spring. Structure, physiology, behavior, ecology and evolution of birds; identification in field and laboratory. Two one-hour lectures and one three-hour laboratory or equivalent field work, all-day or weekend field trip. Prerequisite: seven hours of biology. Lab fee.

**BIOL 478. Parasites of Marine Animals** (6) Summer. Study of parasites of marine animals. Prerequisite: sixteen hours of biology including parasitology. Taught at Gulf Coast Research Laboratory.

**BIOL 479. Marine Microbiology** (5) Summer. Role of microorganisms in the ecology of oceans and estuaries. Prerequisites: general microbiology or bacteriology and consent of instructor. Taught at Gulf Coast Research Laboratory.

**BIOL 480. Problems in Comparative Histology of Marine Organisms** (1-6) Summer. Histological preparation for light and electron microscopy studies of marine organisms including structural changes during life cycles and histopathology of diseased tissues. Prerequisites and credits to be set by instructor and Registrar at Gulf Coast Research Laboratory.

**BIOL 481. Marine Botany** (4) Summer. Survey based upon local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. Prerequisites: BIOL 204 and 205 or consent of instructor. Taught at Gulf Coast Research Laboratory.

**BIOL 482. Introduction to Marine Zoology** (4) Summer. 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) Summer. Anatomy, life history, distribution and phylogenetic relationships of free-living marine invertebrates with emphasis on fauna of the Carolinian Region. Laboratory and field work included. Prerequisites: sixteen semester hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

**BIOL 485. Marine Vertebrate Zoology and Ichthyology** (6) Summer. Marine Chordata, including lower groups and mammals and birds with emphasis on fishes. Prerequsites: sixteen semester hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

**BIOL 487. Special Problems in Marine Science** (1-6) Summer. 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) Summer. Various marine courses such as marine 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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 biology major. Prerequisite: ten hours of biology.

## Business Administration (BA)

**BA 102. Introduction to Business** (3) Fall, Spring. Market competition and change, nature and central role of management, our business environment. No credit allowed toward BSBA degree.

**ΔBA 203. Business Communications** (3) Fall, Spring, Summer. Principles of effective communication in writing business messages such as letters, memos, resumes and reports. Emphasis on written communication skills and word processing applications on the personal computer for use in business and public organizations. Prerequisite: ENG 112.

**BA 300. Executive Seminar** (2). Exposure to current issues in business administration via guest lecturers who are visiting executives-in-residence. Students have opportunity to examine a variety of career choices in business and current issues in business management.

**BA 305. Integrating Career and Family.** For description, see HDFS 305.

**BA 310. Introduction to Hospitality Management** (3) Fall. First course in hospitality management curriculum. Scope, structure and economic principles of service management. Operations management

considerations for hotels, restaurants and institutional food service. Uniform system of accounts and key operating ratios. Prerequisite: ACCT 221.

**BA 325. Organization and Structure of Health Care Services Industry** (3) Fall. Broad dimensions and areas of health care services organizations, internal administrative processes; perspectives on comprehensive health planning and policy administration; environmental linkages to community health services agencies.

**BA 390. Introduction to Multinational Business** (3). Environment encountered by U.S. enterprises engaged in businesses abroad; business practices and policies for foreign operations; international organizations.

**BA 405. Business Policy and Strategy** (3) Fall, Spring, Summer. Capstone course integrating functional areas of business. Strategic management planning process: decision making under uncertainty; external environment; internal strengths and weaknesses of the organization and its competitors; global competition; social responsibility; corporate culture; and values and ethics. Case analysis and simulations. Prerequisites: senior standing; FIN 300, MGMT 300, MGMT 360, MKT 300, and OR 360 and admission to the BSBA program. (May NOT be taken concurrently with any of the prerequisites).

**BA 406. New Enterprise Formation** (3). Entrepreneurship; systematic decision making in small companies.

**BA 420. Health Care Case Problems.** Principles of management in the health care organization are explored in depth through the use of case studies. Students have the opportunity to develop a clear understanding of the differences between management in for-profit/non-profit health services organizations versus other organizational models. Emphasis is provided concerning reimbursement, the roles of various health professions and the changes currently taking place in health care management. Prerequisite: BA 325.

**BA 429. Health Care Internship** (6) Fall, Spring, Summer. Specific internship in one of following areas of administration: hospital, nursing home, governmental health agency, voluntary health agency, health research project administration; and mental hospital administration; minimum of 20 credits of elective studies aimed at preparing for internship selected with advice and consent of adviser. Graded S/U.

**BA 440. Management of International Operations** (2). Accounting, finance, marketing, management and operational policies; practices and strategies appropriate for foreign operations. Selected case studies for special problems. Prerequisite: BA 390.

**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 experience must be completed within last year prior to graduation. Graded S/U.

**BA 491. Studies in Business Administration** (1-3) On demand. In-depth study of selected areas. Offered to individual student on lecture basis or in seminar depending on student needs and nature of material. May be repeated to 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 Administration** (1-3) Fall, Spring, Summer. Supervised, independent program of reading and study. Prerequisites: 3.0 accumulative GPA and consent of department.

## Business Education (BUSE)

**ΔBUSE 101. Business Mathematics** (3) Fall, Spring. Mathematics of finance, merchandising, and business ownership. Consumer application of business mathematics to banking, credit, interest, insurance, home ownership, wages, social security, and income taxes.

**ΔBUSE 111. Keyboarding** (3) Fall, Spring. Touch operation of alphanumeric and symbol keys with emphasis on keyboarding accuracy for microcomputers, word processors, and computer terminals. Four class periods. Lab fee. The student with two semesters of high school typewriting or keyboarding should enroll in BUSE 210. Those who choose to enroll in BUSE 111 will not receive credit toward graduation.

**ΔBUSE 204. Introduction to Word Processing Applications** (1) Fall, Spring, Summer. Introduction to word processing terminology and fundamental applications such as creating, editing, saving, and printing business documents using WordPerfect on IBM systems. Prerequisite: BUSE 111, one semester of high school keyboarding or equivalent. Lab fee.

**BUSE 205. Introduction to Database Applications** (1) Fall, Spring. Introduction to database terminology and fundamental applications such as creating database structures, appending, editing, deleting, and manipulating records to generate business reports using dBASE on IBM systems. Prerequisite: BUSE 111, one semester of high school keyboarding or equivalent. Lab fee. No credit allowed toward BSBA degree. GPA and class standing are affected.

**BUSE 206. Introduction to Spreadsheet Applications** (1) Fall, Spring, Summer. Introduction to spreadsheet terminology and fundamental applications such as creating, manipulating, and printing financial business data using Lotus 1-2-3 on IBM systems. Prerequisites: BUSE 111, one semester of high school keyboarding or equivalent. Lab fee. No credit allowed toward BSBA degree. GPA and class standing are affected.

**ΔBUSE 207. Introduction to Desktop Publishing Applications** (1) Fall, Spring. Introduction to the concepts of desktop publishing and applications using First Publisher, WordPerfect, and PageMaker on IBM systems. Prerequisite: BUSE 204 or equivalent. Lab fee.

**ΔBUSE 210. Advanced Typewriting** (3) Fall, Spring. Typewriting problems and projects; office production standards. Prerequisite: two semesters of high school typewriting or BUSE 111. Lab fee.

**ΔBUSE 213. Beginning Shorthand/Notetaking** (3) Fall. Alphabetic shorthand system. Introduction to theory, transcription and speed development, and personal use applications. Four class periods. prerequisite: BUSE 204 or knowledge of word processing for the IBM computer. With instructor's approval, students with one year of shorthand may take either BUSE 213 or BUSE 311. Lab fee.

**†BUSE 217. Machine Transcription** (3) Fall, Spring. 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 equivalent and BUSE 204.

**ΔBUSE 240. Business Problems of the Consumer** (3) Fall, Spring. Relationship of business practices to consumer activities. Developing consumer competencies in insurance, credit, savings, investments, housing, and estate planning. Basic economic principles underlying consumer decision making.

**ΔBUSE 304. Word/Information Processing Applications** (3) Fall, Spring. Advanced application techniques such as developing macros, creating graphics, designing mail merge, and generating reports using WordPerfect on IBM systems. Prerequisite: BUSE 204 or equivalent. Lab fee.

**ΔBUSE 305. Advanced Database Applications** (1) Fall, Spring. Advanced database functions such as generating reports, building relationships between databases, and writing simple programs using dBASE on IBM systems. Prerequisite: BUSE 205 or equivalent or MIS 200. Lab fee.

**ΔBUSE 306. Advanced Spreadsheet Applications** (1) Fall, Spring. Advanced spreadsheet applications such as creating graphs, constructing databases, and developing macros using Lotus 1-2-3 on IBM systems. Prerequisites: BUSE 206 or equivalent or MIS 200. Lab fee.

**ΔBUSE 307 Advanced Desktop Publishing Applications** (1) Fall, Spring. Advanced concepts of desktop publishing PageMaker on the IBM computer. Emphasis is on creating brochures, booklets, and using advanced graphics. Prerequisite: BUSE 207 or equivalent. Lab fee.

**ΔBUSE 311. Dictation and Transcription** (3) Spring. Dictation at speeds of 80 wpm; emphasis on rapid, accurate transcription. Open to students with a background in any shorthand/notetaking system. Three class periods and one hour lab. Prerequisite: BUSE 213 or equivalent. Lab fee.

**ΔBUSE 314. Internship in Business Education** (1-2) Fall, Spring. Supervised experience in local offices or businesses. Sixty clock hours of work required for each hour of college credit. May be repeated up to three hours. No more than one hour of credit may be granted for work in any one office or business. No credit for students with other internship credit in the College of Business Administration. Graded S/U.

**BUSE 321. Computer Data Processing** (3) Fall. Computer concepts utilizing BASIC programming language on personal computers with hands-on experiences.

**ΔBUSE 335. Office and Records Management Systems** (3) Fall, Spring. Procedures for control of information and business records. Analysis of office systems, work activities, and automation for improvement of office operations.

**BUSE 352. Basic Business in Secondary Schools** (2) Fall, Spring. Principles, objectives, and methods of teaching basic business subjects; resource unit development. C/F hrs: 32.

**BUSE 354. Accounting and Data Processing in Secondary Schools** (2) Fall, Spring. 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) Fall, Spring. Principles, objectives, and methods of teaching shorthand, transcription, and secretarial practice. C/F hrs: 30.

**BUSE 358. Typewriting and Clerical Practice in Secondary Schools** (1) Fall, Spring. Principles, objectives, and methods of teaching typewriting and clerical practice. C/F hrs: 30.

**BUSE 364. Marketing Education in Secondary Schools** (3) Fall, Spring. Principles, objectives, and methods of teaching vocational and relative subject matter in marketing education.

**BUSE 370. OWA Organization and Program Coordination** (3) On demand 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) Summer. 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, postsecondary programs, and technical programs.

**ΔBUSE 401. Secretarial Administration** (3) Spring. Intensive study of procedures, skills, and knowledges basic to secretarial administrative positions; refinement of secretarial-management operations, office simulations, and advanced word processing applications using the IBM PC. Prerequisites: BUSE 210, 215 and 304. Lab fee.

**BUSE 441. Consumer Economics in the Schools** (3) On demand. Need for consumer economics. Organization and integration of consumer economics in school programs. Consumer and business background information.

**BUSE 455. Administrative Management** (3) Fall, Spring. Principles and practices of managing office personnel and operations. Selecting, developing, motivating, and appraising office employees. Office layout and design, work measurement, and work standards.

**BUSE 461. Development of Instructional Materials in Marketing Education** (2) Fall. Methods of developing teaching materials in marketing education.

**BUSE 462. Coordination in Cooperative Marketing Education** (2) Spring. Coordination in high school, post-high school, and adult education programs for marketing education. Not open to student taking BUSE 468. C/F hrs: 14.

**BUSE 463. Community Planning in Adult Vocational Education** (3) Fall. 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) Spring. Vocational education as sponsored by federal, state, and local legislation.

**BUSE 468. Vocational Business and Office Education** (4) Spring. Program construction, organization, improvement, implementation, evaluation, and development of program guides for both intensive and cooperative vocational business education. C/F hrs: 28.

**BUSE 469. OWA Curriculum and Instructional Procedures** (3) Spring. 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) Fall, Spring. Offered on individual, seminar, or lecture basis. Treatment of selected areas in depth depending on student needs and nature of material. May be repeated up to four hours. Prerequisite: consent of instructor. Graded S/U.

**BUSE 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## Business Management Technology (BAT)

**†BAT 100. Introduction to Real Estate** (2) Spring, Summer. Foundation for further study and partial preparation for securing a salesperson's license. Contracts, financing, deed, title, escrow, closing estats, civil rights ethics, license law, leases, brokerage, total investment decision, appraisal fundamentals and commercial-investment properties.

**†BAT 101. Real Estate Law** (2) Fall, Spring, Summer. Basic legal framework for subject of real estate. The legal system, estates in land, contracts for the sale of land, deeds, agency relationship, regulations covering brokers and salespersons, evidence of title, mortgages and other liens, civil rights, landlord-tenant, public control of land use, organized forms of multiple ownership, wills and estates.

**†BAT 102. Introduction to Business Technology** (3) Fall, spring. Business technical process including structure of business and functions of marketing, production, finance, personnel, technical processes of control, and responsibilities of business.

**†BAT 201. Human Resource Management** (3) Fall. Basic concepts, principles and functions of management and personnel administration. Acquisition, development, utilization and maintenance of an effective work force; recruitment and selection, testing, interviewing, counseling, developing and compensating employees.

**†BAT 203. Production Management** (3) Spring. Analyze operations of the firm. Fundamentals of production, design of production systems, operations, coordination and control of production activity, major analytical tools for management. Three hours lecture. Prerequisite or corequisite: STAT 200 or 211.

†BAT 204. Marketing (3) Fall. Introduction of organization, management and practice of marketing by business firms. Two hours lecture, three hours field study.

†BAT 205. Total Quality Leadership (3) Introduction to "Managing for Quality," team building, graphical problem solving, how to use teams to improve quality, and continuing improvement techniques that optimize Just-in-Time production methods.

†BAT 207. Business Finance (3) Spring. Funds allocation and acquisition process of the firm, financial planning, capital budgeting, capital structure, longterm and shortterm financing. Two hours lecture, three hours field study.

†BAT 208. Advertising (3) Fall, Spring. Design, layout, production and placement of advertising, historical and cultural precedents of modern advertising. Prerequisite: MKT 204 or MKT 300 or permission of instructor.

†BAT 209. Management and Supervision (3) Fall, Spring. Principles of supervision and management techniques. Planning supervisory activities, motivating employees, delegation, leadership behavior, time management, managing performance, performance appraisal and management relations. Three hours lecture.

†BAT 210. Principles of Banking (2) Fall, Spring. Fundamentals of banking functions, language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping and bank loans and investments.

†BAT 211. Money and Banking (3) Fall, Spring. Basic monetary theory and policy, emphasis on function of the banking system in the economy; structure of commercial banking system, creation of bank deposits, Federal Reserve policy and operations. Treasury money market operations, the pricing of money and international financing problems.

†BAT 212. Installment Credit (2) Fall, Spring. 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.

†BAT 213. Real Estate Finance (3) Fall, Spring. 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) Fall, Spring. Consumer protection, real property, personal property and sales, the uniform commercial code, negotiable instruments and bank collections, and secured financing.

†BAT 215. Real Estate Appraisal (2) Fall, Spring, Summer. Three basic techniques of appraising--market comparison, cost of replacement and income capitalization. The appraising process, understanding value, basic valuation principles, general market analysis, sites and improvements analysis, market data approach, income approach, and reconciliation and the final value estimate. Prerequisites: BAT 100 and BAT 101 or permission of instructor.

†BAT 216. Real Estate Finance (2) Fall, Spring, Summer. Instruments of real estate finance such as mortgages, lien and title theories, leases and land contracts. Other topics including mortgage payment patterns, single family properties, mortgage market, major lenders, government and real estate, and special topics. Prerequisites: BAT 100 and BAT 102 or permission of instructor.

†BAT 217. Real Estate Brokerage (2) Spring alternate years. Operation of a brokerage business. Includes the opportunity to expand knowledge of broker-client relationship, office management, selection of sales personnel, training salespersons, and a policy and procedure manual for the brokerage office. Prerequisites: BAT 100 and BAT 101 or permission of instructor.

†BAT 218. Special Topics in Real Estate (2) Spring alternate years. A sample property case study is covered. Other subjects include single family housing design and construction, residential land development, condominiums and cooperatives, farm, rural, commercial and industrial real estate, federal taxation of real estate, and federal, state and local regulatory controls. Prerequisite: BAT 100, 101, 215, 216 or permission of instructor.

†BAT 250. Marketing Research (2) Summer. Secondary information sources and technique alternatives, sampling, response and interpretive problems. Computer analysis introduced. Prerequisite: BAT 204 or consent of instructor.

†BAT 280. Retail Management (3) Fall, Spring. Introduction to the principles and practices of retail management using a managerial approach. Topics emphasized include strategic planning, store operation, promotional strategy and computer applications.

†BAT 290. Studies in Business (1-3) Fall, Spring, Summer. Business study projects, seminars and other forums in the fields of marketing, personnnel, management, human relations, production, finance, computer science, law or economics. Prerequisites: sophomore standing and appropriate prior course work

†BAT 291. Field Experience (1-3) Fall, Spring,Summer. Ten weeks of work in an appropriate business field to be decided in consultation with student's adviser. Prerequisite: permission of work supervisor and adviser.

## Center for Academic Options (CAO)

CAO 124. State Government (1) Summer. Issues of government, governmental processes at local and state levels, societal and governmental influences on electoral process. For Boys State students.

†CAO 129. Career Search (1) Fall, Spring. Strategies developed for career and life planning decisions. Introduction to occupational choice theory, 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. Credit not given for both CAO 129 and 131.

†CAO 130. Job Search (1) Fall, Spring, Strategies developed for job search and preparation. Skills in preparing job applications, introduction to college placememtn procedures. Development of interview skills and resume plus cover letter preparation. Credit not given for both CAO 130 and 131.

CAO 131. Career Planning and Decision Making (2) Fall, Spring, Summer. Develop career and life planning decision making strategies. Assess personality, interests, needs, achievements, abilities and values, and study how to relate to occupational options. Explore world of work. Make appropriate occupational choices and set realistics career goals.

ΔCAO 201. Independent Studies (1-15) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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.

## Chemistry (CHEM)

No credit for two courses in any one of the following groups: CHEM 100, 109, 125, 135; CHEM 117, 127, 137; CHEM 117, 306, 341; CHEM 117, 308, 445; CHEM 321, 454; CHEM 352, 405.

¶ΔCHEM 100. Introduction to Chemistry (3) Fall. Examination of basic chemical concepts and role of chemistry in modern society. For students not majoring in sciences. Not counted toward chemistry major or minor. Can be taken concurrently with CHEM 110.

ΔCHEM 109. Elementary Chemistry (3) Fall, Spring, Summer. General chemistry and introduction to organic chemistry. Not accepted toward chemistry major or minor.

Three lectures. Corequisite: CHEM 110. Prerequisites: two years of high school science; high school algebra or its equivalent.

**ΔCHEM 110. Elementary Chemistry Laboratory** (1) Fall, Spring, Summer. Exploration of fundamental chemical principles and their application to the solution of environmental, health and economic problems. Not accepted toward chemistry major or minor. Corequisite: CHEM 100 or 109. Lab fee.

**ΔCHEM 117. Elementary Organic and Biochemistry** (3) Spring, Summer. CHEM 109 continued. Not accepted toward chemistry major or minor. Prerequisite: CHEM 109 and 110 or CHEM 125 and 199. Corequisite: CHEM 118.

**ΔCHEM 118. Elementary Organic and Biochemistry Laboratory.** (1) Spring, Summer. Not accepted toward chemistry major or minor. One three-hour laboratory. Corequisite: CHEM 117. Lab fee.

**¶ΔCHEM 125. General Chemistry** (5) Fall, Spring, Summer. Chemistry sequence for students majoring in sciences, the liberal arts or in premedical programs. Three lectures; one recitation, one three-hour laboratory. Prerequisite: high school chemistry, algebra, and geometry, or CHEM 115. (Credit for graduation for CHEM 115 or CHEM 125, but not both.) Lab fee.

**ΔCHEM 127. General Chemistry** (4) Fall, Spring, Summer. CHEM 125 continued. Three lectures, one recitation. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 128, or CHEM 138 with consent of instructor.

**ΔCHEM 128. General Chemistry Laboratory** (1) Fall, Spring, Summer. One three-hour laboratory. Includes some qualitative analysis. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 127 or CHEM 137. Lab fee.

**¶CHEM 135. General Chemistry** (5) Fall. General chemistry sequence for well-prepared students. Three lectures, one recitation, one three-hour laboratory. Prerequisites: high school chemistry and consent of instructor. Corequisite: MATH 130 or MATH 131. Lab fee.

**¶CHEM 137. General Chemistry** (4) Spring. CHEM 135 continued. Four lectures. Prerequisite: C or better in CHEM 135, or B or better in CHEM 125 and consent of instructor. Corequisite: CHEM 138 or 128.

**¶CHEM 138. General Chemistry Laboratory** (1) Spring. One three-hour laboratory. Emphasis on quantitative procedures. Prerequisite: C or better in CHEM 125 or CHEM 135. Corequisite: CHEM 137, or CHEM 127 with consent of instructor. Lab fee.

**CHEM 199. Introduction to Elementary Organic Chemistry** (1) Fall, Spring. Not accepted toward chemistry major or minor. Provides a link between the CHEM 125-127-128 sequence and CHEM 117-118; concurrent with the last one-third of CHEM 109. Three lectures, one three-hour laboratory. Prerequisite or co-requisite: CHEM 125 and consent of department.

**ΔCHEM 201. Quantitative Chemical Analysis** (3) Fall. Theory and practice of quantitative analytical procedures, volumetric and gravimetric methods. Two lectures, one three-hour laboratory. Prerequisite: CHEM 127 and 128. Lab fee.

**ΔCHEM 306. Organic Chemistry** (4) Fall, Spring, Summer. For students whose program does not require full-year course. Not accepted toward a chemistry major. Three lectures, one three-hour laboratory. Prerequisite: CHEM 127 and 128 or CHEM 137 and 138. Lab fee.

**ΔCHEM 308. Basic Biochemistry** (3) Fall, Spring. Structure, chemical, physical and metabolic properties of bioorganic molecules. For students whose program does not require full-year course. Prerequisite: CHEM 127 and 128 or CHEM 137 and 138 and CHEM 342 or C or better in CHEM 306; BIOL 104 and CHEM 201 recommended.

**ΔCHEM 309. Elementary Biochemistry Laboratory** (1) Fall, Spring. Basic biochemical techniques. One three-hour laboratory. Prerequisite or corequisite: CHEM 308 or CHEM 445. Lab fee.

**CHEM 313. Special Topics in Chemistry** (1-3) Fall, Spring, Summer. Specific topics of current interest in chemistry. Not applicable toward minimum 32-hour major or 20-hour minor. May be repeated with different topics.

**CHEM 321. Survey of Instrumental Analysis** (3) Spring. Elementary instrumental methods of analysis. Primarily for biology and med-tech majors. Two lectures, three hours of laboratory. Prerequisites: CHEM 137 and 138 or CHEM 201 and either PHYS 212 or PHYS 202. Lab fee.

**CHEM 341. Organic Chemistry** (5) Fall, Summer. Structure and reactivity of organic substances. Four lectures, one three-hour laboratory. Prerequisite: CHEM 127 and 128 or CHEM 137 and 138. Lab fee.

**CHEM 342. Organic Chemistry** (5) Spring, Summer. CHEM 341 continued. Three lectures, two three-hour laboratories. Prerequisite: C or better in CHEM 341. Lab fee.

**CHEM 352. Physical Chemistry** (3) Fall. For students whose program does not require full-year course. Prerequisites: CHEM 127-128 and CHEM 201 or CHEM 137-138. MATH 130. Prerequisite or corequisite: PHYS 202 or PHYS 212.

**CHEM 395. Workshop on Current Topics** (1-3) Intensive course on selected topics. May be repeated if topics differ. Does not apply toward first 20 hours of minor or first 32 hours of major.

**CHEM 402. Numerical Methods in Chemistry** (1) Spring. Use of computers and numerical methods in chemistry; survey of computer graphics and microcomputer-based instrumentation in chemical research. Prerequisite or corequisite: CHEM 405.

**CHEM 405. Physical Chemistry** (4) Fall. Thermodynamics and quantum chemistry. Prerequisite: CHEM 137-138 or CHEM 127-128 and CHEM 201. MATH 232 and either PHYS 212 or PHYS 202.

**CHEM 406. Physical Chemistry** (4) Spring. CHEM 405 continued. Electrochemistry, kinetics, spectroscopy and molecular structure. Prerequisite: CHEM 405.

**CHEM 407. Integrated Analytical and Physical Laboratory** (2) Fall. Principles of measurement; spectral, chromatographic and electroanalytical techniques; thermodynamic and kinetic measurements; computerized data acquisition. Two three-hour laboratories. Prerequisite or corequisite: CHEM 405. Lab fee.

**CHEM 408. Integrated Analytical and Physical Laboratory** (2) Spring. CHEM 407 continued. Prerequisite: CHEM 407; prerequisite or corequisite: CHEM 406. Lab fee.

**CHEM 413. Special Problems** (1-3) Fall, Spring, Summer. Independent study and research. Three to nine hours of laboratory, one half-hour conference each week. not applicable toward minimum requirements of major or minor. 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 hours credit may be applied toward degree.

**CHEM 442. Organic Reaction Mechanisms** (3) Spring. Fundamentals of organic reaction mechanisms and methods for their elucidation. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.

**CHEM 445. General Biochemistry** (3) Fall. Structure, function, chemical and physical properties of biological molecules and assemblies. Prerequisites: CHEM 342 and either CHEM 352 or CHEM 406, or permission of instructor.

**CHEM 446. Biochemistry Laboratory** (1) Fall. Experimental techniques in biochemistry. Three-hour laboratory. Prerequisite or corequisite: CHEM 445. Lab fee.

**CHEM 447. General Biochemistry** (3) Spring. Metabolism, energetics and regulation of biological molecules and assemblies. Prerequisite: CHEM 445.

**CHEM 449. Advanced Biochemistry Laboratory** (2) Spring. Research techniques in biochemistry. Two three-hour laboratories. Prerequisite: CHEM 446 or permission of instructor. Lab fee.

**CHEM 453. Environmental Chemistry** (2) Fall. Alternate years. Sources, reactions, transport and fates of chemical species in water, soil and air environments. Prerequisites: CHEM 127-128 and CHEM 201 or CHEM 137-138; CHEM 306 or 342, CHEM 405 or 352 and PHYS 202.

**CHEM 454. Instrumental Methods of Analysis** (3) Spring. Theory of instrumental methods of analysis including electroanalytical, spectroscopic and chromatographic methods. Prerequisite: CHEM 408 or consent of instructor.

**CHEM 463. Advanced Inorganic Chemistry** (4) Fall. Chemical bonding, stereochemistry, acid-base chemistry, periodicity, nonmetal and transition metal chemistry, organometalic and bioinorganic chemistry. Prerequisite: CHEM 342 or 406.

**CHEM 466. Spectroscopic Methods in Organic Chemistry** (2) Fall. Organic structure determination by spectroscopic techniques, with emphasis on infrared, ultraviolet and nuclear magnetic resonance spectroscopy, and mass spectrometry. Also includes a brief introduction to related spectroscopic methods. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.

**CHEM 483. Advanced Topics in Chemistry** (1-3) Fall, Spring, Summer. Rigorous study of specific topics of current interest. Not applicable toward minimum 32-hour major or 20-hour minor. May be repeated with different topics. Prerequisite: CHEM 342 or consent of instructor.

## Chinese (CHIN)

**CHIN 101. Beginning Chinese I** (4) Fall. Introduction to Mandarin Chinese, the official standard language of Mainland China and Taiwan. Development of the four skills: listening, speaking, reading and writing. Four class periods and laboratory practice each week.

**CHIN 102. Beginning Chinese II** (4) Spring. CHIN 101 continued. Four class periods and laboratory practice each week. Prerequisite: CHIN 101 or equivalent.

**CHIN 201. Intermediate Chinese I** (4) Fall. CHIN 102 continued. Grammar and character writing review; continued development of the four skills. Four class periods and laboratory practice weekly. Prerequisite: CHIN 102 or equivalent.

**CHIN 202. Intermediate Chinese II** (4) Spring. CHIN 201 continued. Four class periods and laboratory practice weekly. 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) Spring. Analysis of issues, practices, and trends in post-secondary student personnel work.

**CSP 481. Introduction to Residence Life for the Paraprofessional (1)** Spring. Philosophy, skills, competencies of program development and management of university residence units.

**CSP 482. Peer Advising Skills** (1) Fall, Spring. 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) Fall, Spring. 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)

**ΔCDIS 223. Introduction to Communication Disorders** (3) Fall, Spring, Summer. Normal speech and language development, description and etiology of various communication disorders, e.g., articulation, voice, stuttering, etc.

**CDIS 224. Phonetics** (3) Fall, Spring. Sounds of spoken English, their production and recognition. Applications to techniques in speech pathology and habilitations of the hearing handicapped. Prerequisite: CDIS 223 or 471 or concurrent with CDIS 223.

**CDIS 225. Language Acquistion and Development** (2) Fall, Spring. Language acquisition theories, developmental processes, and characteristics of syntax, semantics, morphology and pragmatics in preschool children. Prerequisites: CDIS 223, 224 and ENG 380. ENG 380 may be taken concurrently with CDIS 225.

**CDIS 301. Anatomy and Physiology of the Speech Mechanism** (4) Fall, Spring. Anatomical and physiological principles of the speech mechanism, including central and peripheral nervous systems. Prerequisites: CDIS 223, 224 and BIOL 101, 104, or 205.

**CDIS 302. Introduction to Hearing Science and Acoustics** (3) Fall, Spring. Physics of sound, decibel notation, anatomical and physiological principles of the hearing mechanism, and basic concepts in psychoacoustics. Prerequisites: CDIS 223, 224 and PHYS 101 or 201.

**CDIS 311. Articulation Development and Disorders** (3) Fall, Spring. Development, diagnosis and therapeutic techniques for problems of articulation. Prerequisite: CDIS 225, 301 and CDIS major or permission of instructor.

**CDIS 351. Language Assessment and Remediation** (3) Fall, Spring. Overview of language disorders, principles and techniques of language evaluation and treatment. Prerequisites: CDIS 225 and ENG 380.

**CDIS 361. Introduction to Diagnostic Audiology** (3) Fall, Spring. Audiometric puretone testing methods, immittance testing procedures, otologic pathologies, and associated hearing problems. Prerequisite: CDIS 302 and CDIS major or permission of instructor.

**CDIS 401. Prepracticum in Communication Disorders** (3) Fall, Spring. 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, and CDIS major.

**CDIS 421. Practicum in Communication Disorders** (3) Fall, Spring, Summer. Supervised clinical experience with children and adults. Prerequisites: CDIS 401, CDIS major, GPA in major of 2.7, nothing less than C in major and 25 observation hours.

**CDIS 451. Language Principles and Practices for the Special Education Professional** (4) Spring. Introduction to language patterns of normal children related to the acquisition of pragmatics, syntax and semantics. Relationship of these patterns to assessment and remediation procedures and strategies in atypical populations.

**CDIS 471. Introduction to Communication Disorders for the Classroom Teacher** (3) Fall, Spring, Summer. Identification, etiologies and characteristics of communication disorders. Suggestions for classroom management of communication disorders. Not open to student with credit for CDIS 223.

**CDIS 481. Organization and Management for School Speech-Language Programs** (3) Fall, Spring. 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) Fall, Spring, Summer. 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) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of

students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Computer Science (CS)

**¶ΔCS 100. Computer Basics** (3) Fall, Spring, Summer. Computer technology and related social issues. Hardware, software, applications in diverse areas. Problems concerning computerized services, data banks, governmental controls. Problem solving using 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.

**¶ΔCS 101. Introduction to Programming** (3) Fall, Spring, Summer. 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.

**ΔCS 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 205. Advanced Programming Techniques** (3) Fall, Spring, Summer. 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 207. Systems Programming I** (3) Fall, Spring. Introduction to systems programming concepts, data representation and storage, addressing techniques, subroutines and macros. Introduction to C++ and VAX-11 assembler programming languages. Prerequisite: CS 205.

**CS 208. Systems Programming II** (3) Spring. Advanced systems programming concepts. Design and implementation of assemblers, loaders and macroprocessors. Multiphase design and implementation of systems software is required. Object and macro libraries. Exceptions and interrupts. Advanced topics in C++ and VAX-11 assembler programming languages. Prerequisite: CS 207.

**ΔCS 260. Business Programming Principles** (3) Fall, Spring. Programming in a modern higher-level 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) Fall. Implementation and applications of commonly used data structures, including stacks, queues, trees and linked lists. Storage management; hashing techniques; searching and sorting. Prerequisites: Grade of C or better in CS 207.

**CS 306. Programming Languages** (3) Spring. BNF description of programming languages. Significant features of existing programming languages in their historical context. Structure and comparsion of languages which utilize various paradigms (imperative, declarative, functional, object-oriented). Prerequisite: CS 207.

**CS 307. Computer Organization** (3) Spring. Components of digital computer hardware: flip-flops, registers, adders, memory devices. Computer system organization: control structure, addressing, interrupts, I/O. Prerequisite: CS 207.

**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.

**ΔCS 360. COBOL Programming** (3) Fall, Spring, Summer. COBOL programming language and techniques for use; report generation; table handling; sorting; sequential and random-access 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 Science** (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 408. Operating Systems** (3) Spring. Structure of operating systems. Physical input-output, buffering, interrupt processing. Memory, processor, device, information management; resource management interdependencies. Job and processor scheduling. Prerequisites: CS 208.

**CS 409. Language Design and Implementation** (3) Fall. Fundamental concepts of languages. Processors, data, operations, sequence control, data control, storage management, syntax, translation. Prerequisites: CS 208 and CS 306.

**CS 410. Formal Language Theory** (3) Fall. 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 420. Artificial Intelligence Methods** (3) Summer, odd-numbered years. Intermediate AI programming with application to representative problems requiring searching, reasoning, planning, matching, deciding, parsing, seeing and learning. Prerequiste: elementary knowledge of Lisp.

**CS 425. Computer Graphics** (3) Fall every year; Summer even numbered years. Graphic I-O devices; 2-dimensional and 3-dimensional display techniques; display processors; clipping and windowing; hidden line removal; data structures for graphics. Prerequisites: CS 207 and MATH 222 or 322.

**CS 428. Microprocesser Systems** (3) Fall even numbered years; Summer 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 307.

**CS 429. Data Communication and Networks** (3) Spring. Communication equipment; device protocols; network configurations; encryption; data compression and security. Private, public, local and satellite networks. Prerequisite: CS 208. Prerequisite or corequisite: CS 307.

**CS 440. Optimization Techniques** (3) Spring odd-numbered 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) Spring even-numbered years. Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisites: CS 205 and MATH 247.

**CS 451. Numerical Analysis** (3) Fall. Study of numerical methods for interpolation and approximation, integration and differentiation, solution of non-linear equations and systems of linear and non-linear equations. Prerequisites: CS 101 and MATH 332. Not open to students with credit for MATH 451.

**CS 452. Numerical Analysis** (3) Spring. 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) Spring, Summer. 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) Fall. In-depth study of all aspects of software development process: user requirements, specifications, design, coding, testing, maintenance, documentation, management. Team development of large software project. Prerequisite: Grade of 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 science. May be repeated up to six hours. Graded S/U.

## Computer Science Technology (CST)

**†CST 171. Terminal Operations** (1) Fall, Spring, Summer. 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) Spring, Summer. 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 fee.

**†CST 232. Systems and Procedures** (4) Spring. 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 221 and CS 360, or consent of instructor. Lab fee.

**†CST 251. Microcomputer Assembly Language** (3) Fall. Microcomputer processor architecture. Machine language coding. Assembly language programming. Interfacing with operating system routines. Prerequisite: CST 260 or CS 260 or CS 205.

**†CST 260. Advanced Electronic Data Processing** (4) Fall, Spring, Summer. 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 or CS 104. Lab fee.

**†CST 261. Microcomputer Database Systems** (3) Fall, Spring. 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.

**†CST 275. Microcomputer Systems** (3) Spring. Microcomputer hardware selection and installation. Software selection and implementation. Discussion and implementation of communications and networking software. Microomputer issues. Prerequisite: Programming experience with files.

**†CST 290. Experimental Studies in Computer Science** (1-3) Fall, Spring. Contemporary computer topics, particularly software as it applies to microcomputer applications. Classroom and CAI materials used for instruction.

**†CST 291. Student Intern Program** (2) Fall, Spring, Summer. Ten weeks of paid field work in data processing applications under 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. All CONS courses are offered during evenings and summer on a five-year rotating plan.)

**CONS 235. Introduction to Construction** (3) Fall, Spring, Summer. 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) Spring. 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) Fall. Detailed study of surveying, including field work, with equipment such as transit, level and tape. Emphasis on closure. Four hours of lecture and laboratory. Prerequisites: CONS 235 and MATH 129 or equivalent.

**CONS 320. Computer Application in Construction** (3) Fall, Spring. 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) Fall. Materials and testing as used in commercial construction. Emphasis on foundation, sitework, soils, and concrete. Four hours of lecture and laboratory. Prerequisites: CONS 235 and DESN 243.

**CONS 336. Structural Design** (3) Spring. Standard methods utilizing 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) Spring. Mechanical systems for heating, ventilating, air conditioning cooling of buildings and in production processes. Experience with conventional and solar mechanical systems; determining losses, make-up, system sizing, control. Methods, materials and problems encountered in installing mechanical systems are stressed. Four hours of lecture and laboratory. Prerequisite: ET 191 or CONS 235 or permission of instructor.

**CONS 406. Temporary Structures** (3) Spring. Design, construction and performance, including field measurements, of temporary structures in building construction to include concrete formwork, scaffolding, shores and reshores, retaining walls and sheet piling. Prerequisites: Structural Analysis, Basic Calculus.

**CONS 425. Introduction to Construction** (3) Fall, Spring, Summer. 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. For transfer students only.

**CONS 435. Construction Methods and Practices** (3) Spring. 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) Fall. 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. Prerequisites: ET 191 and CONS 235.

**CONS 439. Estimating and Cost Control** (3) Fall. Take off and costing and pricing for typical construction project. Preparation of final bid document including all materials, labor, equipment and overhead costs, and profit margin. Four hours of lecture and laboratory. Prerequisite: CONS 235.

**CONS 440. Construction Contracting** (3) Spring. Project scheduling and control, bidding theories, safety in construction industry, construction contracts. Four hours of lecture and laboratory. Prerequisite: CONS 439.

**CONS 442. Construction Scheduling** (3) Fall. Application of construction management 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.

## Cooperative Education (COOP)

**COOP 050. \Work Block** (0) Fall, Spring, Summer. Work and study in business and industry, service or government agencynin a supervised position related to major. May be repeated. Prerequisite: consent of cooperative education program.

## Creative Writing

**ENG 205. Craft of Poetry** (2) Fall. 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) Spring. 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.

**ΔENG 208. Imaginative Writing** (3) Fall, Spring. Explorations of the creative process through the writing of poetry and fiction. Emphasis is on the means whereby private fantasy is transformed into artistic expression. Open to all students.

**ΔENG 209. Creative Writing Workshop** (3) Fall, Spring. Principles of poetic composition and fiction writing; analysis of contemporary models and group discussion of student's work. May be repeated once.

**ΔENG 308. Creative Writing** (3) Fall, Spring. Imaginative writing, fiction and poetry. Class discussion and individual conferences. Required for creative writing major. Prerequisite: B or better in ENG 209 or permission of instructor. May be repeated once.

**ENG 407. Writer's Workshop** (3) Fall, Spring. Original composition, analysis of contemporary creative writing models, emphasis on fiction and poetry. Creative writing seniors taking their second workshop, creation of Senior Thesis. Prerequisite: B or better in ENG 308 or approval of instructor. May be repeated once.

## Criminal Justice (CRJU)

**ΔCRJU 210. Introduction to Criminal Justice** 3) Fall, Spring. Philosophical, historical, operational aspects of criminal justice agencies and processes in a framework of social control in a democracy. Crime and corrections problems and response of criminal justice agencies to them.

**ΔCRJU 220. Law Enforcement in American Society** (3) Fall. An overview of the police role in modern American Society; emphasis on problems and issues confronting police and solutions within an organizational framework. Prerequisite: CRJU major.

**ΔCRJU 230. Investigations: Theory and Practice** (3) Spring. Investigator's role in various types of investigations—criminal, civil, personal history and liability. Techniques of evaluation and preservation of data, sources of information; processes of specialized investigations. Prerequisite: CRJU 210. CRJU major.

**CRJU 320. Crime Prevention and Security** (3) Spring. A critical examination of crime prevention and security practices and approaches; emphasis on evaluating the effectiveness and problems of various approaches. Prerequisite: CRJU major.

**CRJU 330. Juvenile Justice Subsystems** (3) Fall. Examination of the varied agencies, methods and techniques used in handling deviant youths (historic and contemporary); emphasis on agency effectiveness and perspectives. Prerequisite: CRJU major.

**CRJU 340. Drugs, Crime and Criminal Justice** (3) Spring. Explores the legal and social aspects of drug and alcohol use and the criminal justice response to that use. Topics include types and effects of drugs, relationship to crime, and treatment of drug users. Criminal Justice credit not given for both CRJU 340 and HED 340. 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 major.

**CRJU 410. Victimology** (3) Fall. An examination of the victim in the criminal justice system. The course covers the development of victimology, basic concepts and issues, specific types of victimization, and societal/system response to the victim. Prerequisite: CRJU major.

**CRJU 470. Independent Study in Criminal Justice** (1-3) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisite: consent of instructor. May be repeated. CRJU major.

**CRJU 480. Senior Seminar in Criminal Justice** (3) Fall, Spring, Summer. Consideration and evaluation of selected policies and practices in criminal justice field. Attempt to integrate criminal justice field and to focus on common problems and concerns. Problems of theoretical and practical nonconvergence. Individual research interests explored, formalized, reported. Required of all CRJU majors. Prerequisites: senior standing and completion of 25 hours of CRJU core courses.

**CRJU 491. Practicum** (12) Fall, Spring, Summer. 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) Spring. Basic skills and knowledges specific to social and ballroom styles; beginning teaching methods.

**DANC 111. Folk and Square Dance I** (2) Fall. Basic skills and knowledges specific to folk and square dance styles; beginning teaching methods.

**DANC 115. Modern Dance I** (2) Fall, Spring. The first in a series of progressions in modern dance, exploring basic movement skills and correct body alignment; may be repeated up to six hours.

**DANC 120. Classical Ballet I** (2) Fall, Spring. Studio instruction of classical ballet fundamentals with emphasis on correct body alignment, barre and basic center work; may be repeated up to six hours. Prerequisite: beginning competency and permission of instructor.

**DANC 215. Modern Dance II** (2) Fall, Spring. The second in a series of progressions, including studio instruction in modem dance with floor and center work in varying modern styles; may be repeated up to six hours. Prerequisite: DANC 115 or permission of instructor.

**DANC 220. Classical Ballet II** (2) Fall, Spring. The second of a graded series of progressions, including studio instruction in classical ballet techniques with emphasis on adagio and allegro enchainements; may be repeated up to six hours. Prerequisite: DANC 120 or permission of instructor.

**DANC 224. Dance Performance Workshop** (1) Fall, Spring. Experience in choreography and participation as members of the concert group; may be repeated up to six hours. Prerequisites: audition and permission of instructor.

**DANC 226. Perspectives in Dance** (1) Spring. 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) Fall, Spring. The third in a graded progression including studio instruction in varying styles of modern dance; emphasis will be placed on horizontal and oblique design, turns, falls, jumps, leaps and complicated rhythms; may be repeated up to six times. Prerequisite: DANC 215 or permission of instructor.

**DANC 320. Classical Ballet III** (1) Fall, Spring. 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) Fall alternate years. 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) Spring. Basic principles of form and flow of movement and their application to compositions in dance. Prerequisites: DANC 215, DANC 220 or permission of instructor.

**DANC 327. Choreography Workshop** (1) Fall. Studio analysis of the elements of choreography; development of dance 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) Fall. 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) Spring alternate years. 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)

**ΔDESN 104. Design and Engineering Graphics I** (3) Fall, Spring, Summer. Design as process and engineering graphics as vehicle to communicate problem solutions. Documented design analysis, free hand sketching, orthographic projection; shape, size and position dimensioning; isometric and oblique drawing, and auxiliary and section views as applied to technical design problems. Four hours of lecture and laboratory.

**DESN 105. Design Representation I** (3) Fall, Spring, on demand. Fundamental freehand and machine assisted drawing principles necessary to the investigation, visualization and presentation of design ideas. Drafting methods and techniques including the principles of orthographic projection, paraline and perspective drawing. Four hours of lecture and laboratory.

**†DESN 131. CAD I: Basic Computer Assisted Drafting** (2) Fall. Introduction to the construction of two-dimensional objects using a Computer-Assisted Drafting System. Prerequisites: DESN 104 or equivalent.

**†DESN 132. CAD II: Intermediate Computer-Assisted Drafting** (2) Spring. Intermediate computer-assisted drafting which instructs how to use a three-dimensional system to create and edit two-dimensional drawings. Prerequisites: DESN 131 or instructor's permission.

**†DESN 133. CAD III: Advanced Compuer-Assisted Drafting (2) Spring.** Advanced course in computer assisted drafting which instructs how to use three-dimensional system to create three-dimensional drawings. Prerequisites: DESN 132 or instructor's permission.

**†DESN 202. Mechanical Design** (5) Spring alternate years. Design and selection of mechanical elements, fasteners, power transmission devices, hydraulics systems, manuals, catalogs and publications utilized. Consideration of economy, loading conditions, stresses, deformation, fits and finishes in design. Three hours lecture, six hours laboratory. Prerequisites: DESN 104 and PHYS 201.

**ΔDESN 204. Design and Engineering Graphics II** (3) Fall, Spring, Summer. Application of design analysis and engineering graphics for design solutions in a variety of technical desciplines. Analysis of point, line and plane problems 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.

**DESN 205. Design Representation II** (3) Fall, on demand. DESN 105 continued. Freehand and machine assisted drawing principles necessary to the investigation, visualization and presentation of design ideas. Paraline and perspective drawings methods, shade and shadow, rendition of value and context, sketching and architectural presentation techniques. Four hours of lecture and laboratory. Prerequisite: DESN 105 or permission of instructor.

**†DESN T205. Tool, Die, Jig and Fixture Design** (4) Spring alternate years. Importance and economics of tooling desinged for mass production; topics include jigs, dies, design and construction, emphasis placed on die design problems and solutions. Field visits to die stamping plants. Two hours lecture, six hours laboratory. Prerequisite: DESN 104. Lab fee.

**DESN 236. Building Systems Technology I** (3) Fall. Building systems approach to understanding mechanical and electric equipment for buildings. Topics inlcude water distribution, storm water and sanitary drainage, plumbing, environmental comfort, electricity, communication and transportation systems. Three hours of lecture.

**DESN 237. Building Systems Technology II** (3) Spring. DESN 236 continued. Systems approach to understanding mechanical and electrical equipment for buildings. Topics include solar energy and conservation, light and lighting systems, the physics of sound, human hearing, noise control, factors in acoustical design, life safety and building signal systems. Three hours lecture. Prerequisite: DESN 236.

**ΔDESN 243. Statics and Strength of Materials** (3) Fall, Spring. 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 an laboratory. Prerequisite: Good math background in algebra and trigonometry or MATH 128.

**DESN 250. Architectural Design I** (3) Spring. Introduction to architectural/environmental design problem solving. Topics include anthropometrics, human-environment interaction, principles of form, style, order, proportion, scale and balance; concepts of programming and diagramming. Four hours of lecture and laboratory. Prerequisite: DESN 205 or permission of instructor.

**†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 Design II** (3) Fall. Architectural design with residential building focus; development and use of schematics, sketches, elevations, plan detail and perspective drawings in planning and designing residential, business and industrial structures. Four hours of lecture and laboratory. Prerequisite: DESN 250 or permission of instructor.

**DESN 304. Mechanical Design** (3) Spring 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. Prerequisites: DESN 204 and 243.

**DESN 305. Technical Illustration** (3) Spring. 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) Fall. Technical apsects of site planning and land development. Topics include theories of site design, economic considerations for development; governmental regulation, the effect of environmental forces and human activity in site design, principles of grading, drainage, and utility distribution. Four hours of lecture and laboratory. Prerequisites: DESN 250 and junior standing.

**DESN 314. Design and Engineering Graphics I** (3) Fall, Spring, Summer. 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 transfer students only. Obtain permission of department.

**DESN 404. Computer Aided Design** (3) Fall, Spring, Summer. Study and application of computer graphics systems to the design process. Use of interactive methods using computers and commercial CAD software for design purposes. Development of two and three dimensional views and complex surface generation. Emphasis on learning to draw with the computer and applying computer graphics technology to engineering graphics and design. Prerequisites: DESN 104 or DESN 105, 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 III** (3) Spring. Architectural design, focus on commercial and industrial buildings; 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) Fall on demand. Systems approach applied to solution of one and two dimensional product design problems; emphasis of feasibility in production and use. Prerequisites: DESN 304 and 404.

**DESN 455. Engineering Design** (3) Spring, even numbered years. Problems in design requiring advanced engineering graphics and computation for solution. Emphasis on kinematics of mechanism, human factors, strength of materials and the design process. Four hours of lecture and laboratory. Prerequisite: DESN 304.

**DESN 490. Problems in Design Technology** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in design technology. Prerequisite: junior standing and consent of adviser. Graded S/U.

## Economics (ECON)

**ECON 100. Development of the American Economy** (3) Fall, Spring. Study from colonial times to present to provide perspective for understanding current economic problems. How Americans lived, changes in population and income distribution, agriculture, industry, technological change, labor, transportation, money and banking, foreign trade, role of government.

**ΔECON 200. Introduction to Economics** (3) Fall, Spring. Alternative economic goals; economic growth, full employment, price stability, fair income distribution, economic security, economic freedom, consumer sovereignty, efficiency. Recommended for students taking only one ECON course. Does not count toward graduation credit for students receiving a BSBA, BS in Economics or BA in Economics.

**ΔECON 202. Principles of Economics** (3) Fall, Spring. 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.

**ΔECON 203. Principles of Economics** (3) Fall, Spring. 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) Fall, Spring. 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.

**ECON 303. Intermediate Macroeconomic Theory** (3) Fall, Spring. 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) Fall, Spring. Application of economic theory to decision-making problems of the firm; demand analysis and sales forecasting; theory of production and cost analysis; pricing practices and policies; capital 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) Fall, Spring. 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) Fall, Spring. Economics of manpower employment and labor market; labor organizations, collective bargaining, regulation of labor by government, wage determination, unemployment and social security. Prerequisites: ECON 202 and ECON 203.

**ECON 323. Inequality, Unemployment and Discrimination** (3) Spring. Structural and cyclical unemployment; causes of and alternative responses to poverty and discrimination; treatment of nonwhites and women in labor markets. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

**ECON 331. Public Finance** (3) Fall, Spring. Survey of government finance. Public expenditures, taxation, and debt; emphasis on federal level. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

**ECON 332. State and Local Government Finance** (3) Fall or Spring. Economic functions of state and local governments; revenue sources, expenditures, debt and intergovernmental fiscal relations. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

**ECON 351. International Trade and Finance** (3) Fall. Structure and regulation of foreign trade, mechanics of international finance, new elements in U.S. foreign trade. Prerequisites: ECON 202 and ECON 203.

**ECON 400. Mathematics for Economists** (3) Fall. 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) Spring. Economic theory in mathematical context; microeconomic and macroeconomic models, their structure and analysis. Constrained optimization. Prerequisites: ECON 400 or equivalent of calculus, and ECON 302 or ECON 303.

**ECON 402. Econometrics** (3) Spring. Statistical techniques used to measure economic data and to test validity of theoretical models. Prerequisites: STAT 212 and ECON 400, or equivalent; or consent of instructor.

**ECON 404. Business Conditions** (3) Spring. 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) Spring. Objectives, means and analysis of monetary and fiscal control; efect on total economics activity. Prerequisite: ECON 303 or ECON 311.

**ECON 422. Labor Relations Policy** (3) Fall. 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) Spring. 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) Fall. Purposes and economic effects of governmental expenditures; budgeting techniques and their effect on resource allocation. Prerequisites: ECON 202 and ECON 203.

**ECON 441. Real Estate Finance and Capital Markets** (3) Spring. Market factors affecting residential property values, private sources of funds, role of governmental agencies in residential markets. Prerequisites: ECON 202 and ECON 203. Not for arts and sciences credit.

**ECON 447. Economics of Regulated Industries** (3) Spring. 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) Fall. 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) Spring. Alternative international monetary systems; emphasis on present system. Prerequisites: ECON 311 and ECON 351, or consent of instructor.

**ECON 454. Economic Development** (3) Fall. Obstacles to and current efforts for promotion of economic growth in emerging nations. Prerequisite: ECON 202 or consent of instructor.

**ECON 460. Regional Economics** (3) Fall. 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) Spring. Urban spatial theory and analysis, economic analysis of urban problems including poverty, housing, transportation, the environment and public finance. Prerequisites: ECON 202 and ECON 203.

**ECON 471. Industrial Organization: Study of Business Size and Competition** (3) Spring. 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) Spring. Economic structures, conditions, problems and policies in a selection of countries. Prerequisites: ECON 202 and ECON 203 or consent of instructor.

**ECON 473. History of Economic Thought** (3) Fall. Development of economics and economic analysis from Adam Smith to J.M. Keynes. Prerequisites: ECON 202 and ECON 203.

**ECON 476. Seminar in Contemporary Economic Problems** (3) On demand. Interested students should consult with chair of department.

**ECON 491. Studies in Economics** (1-3) On demand. Treatment of selected areas in depth. Offered to individual on lecture basis or in seminar depending on student needs and material. May be repeated to six hours.

**ECON 495. Readings for Honors in Economics** (3-6) Fall, Spring. 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)

**ΔEDCI 100. College Reading/Learning Skills** (2-3) Fall, Spring, Summer. Designed to improve basic reading/learning habits of college students—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.

**ΔEDCI 101. Speed Reading** (2) Fall, Spring. Designed to improve study-type reading speed; leisure reading speed; adjusting reading speeds to purposes, material difficulty and background experience of reader. (Minimum score of 260 words per minute with 60th percentile comprehension on reading speed test is necessary to receive C in course.) Prerequisite: departmental testing or successful completion of EDCI 100. Clinic/lab required: 15 hrs. Lab fee: $15.

**ΔEDCI 121. Transition Course** (1) Summer. Transition to University life through orientation to University facilities and options; activities stressing study skills and personal growth.

**ΔEDCI 202. Introduction to Teaching** (3) Fall, Spring. 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 expereiences 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 coursework. 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) Fall, Spring, Summer. Young child's acquisition of oral and written language, emphasis on roles of child development, social interaction, culture and environment. Prerequisites: EDFI 302 or consent of instructor. C/F hours: 30.

**ΔEDCI 349. Fundamentals of Reading** (3) Fall, Spring, Summer. 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) Fall, Spring. Course demonstrates interdisciplinary nature of media, methodology 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. Must obtain a grade of C prior to student teaching. Prerequisite: Admission to elementary education program. C/F hrs.: 30.

**EDCI 351. Social Studies in the Elementary School** (3) Fall, Spring, Summer. The teaching of social studies in K-8. Objectives, content learning experiences, instructional resources, evaluation of teaching, learning in the classroom. Must obtain a minimum grade of C prior to student teaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.

**EDCI 352. Mathematics Methods for the Elementary School** (3) Fall, Spring, Summer. 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 hrs.: 30.

**EDCI 353. Science in Elementary Schools** (3) Fall, Spring, Summer. Teaching of science in grades K-8. Objectives, curriculum, materials of instruction, methods of teaching and evaluation. Must obtain a minimum grade of C prior to student teaching. Prerequisite: admission to elementary education program. C/F hrs.: 30.

**EDCI 355. The Teaching of Reading in the Elementary School** (3) Fall, Spring, Summer. The basic theory of developmental reading including teaching procedures, setting objectives, designing curriculum, utilizing instructional materials and evaluation. Prerequisite: admission to elementary education program and EDCI 349. Must obtain a minimum grade of C prior to student teaching. C/F hrs.: 30.

**EDCI 356. Language Arts in the Elementary School** (3) Fall, Spring, Summer. 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) Fall, Spring, Summer. Objectives, curriculum, instructional and resource materials, methods. Laboratory experience in kindergarten-primary education. Should precede semester of student teaching. Prerequisite: EDFI 302 or EDFI 342 and EDCI 348. C/F hrs: 30.

**EDCI 359. Individualization of Reading Instruction in Classroom** (3) Fall, Spring, Summer. 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: EDCI 355. C/F hrs: 25.

**EDCI 360. Content Reading for Specialized Subject Areas** (2) Fall, Spring. 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) Fall, Spring, Summer. 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** (3) Fall, Spring, Summer. 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 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) Fall, Spring. 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) Fall, Spring. 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) Fall, Spring. Principles of second language learning; theory and practice of K-12 curriculum, development of fundamental skills and abilities in teaching listening, speaking, reading, writing in foreign language; techniques of instruction planning; concepts of teaching culture. Prerequisites: EDCI/FI 202, EDFI 302 and junior standing. C/F hrs: 30.

**EDCI 374: Mathematics in Secondary Schools** (3) Fall, Spring. 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) Fall, Spring. Principles, objectives, curriculum, instructional and resource materials, and methods of teaching science in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. C/F hrs: 40.

**EDCI 376. Social Studies in Secondary Schools** (3) Fall, Spring. 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) Fall, Spring. Principles, objectives, curriculum, materials, methods of teaching mass media in secondary schools. Prerequisites: EDCI 370, EDFI 302 and senior standing. Grade of C or better required. C/F hrs: 40.

**EDCI 395. Workshop on Current Topics** (1-3) On demand. Intensive education experience on selected topics related to skill development, content update or materials development. Typically, an all-day or similar concentrated time format. Requirements usually completed within time format. May be repeated on approval of adviser.

**EDCI 420. Developmental Reading in the Content Areas** (3) Fall, Spring, Summer. Orients the teacher to the developmental reading process as it applies to the various subject matter areas, 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) Spring, Summer. 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 Language Arts** (3) On demand. Investigation of language arts in the elementary school, the nature and interrelationships of the various components, objectives for teaching, and development and evaluation of language learnings, materials and methodology. Prerequisite: EDCI 356.

**EDCI 426. Investigations in the Teaching of Elementary Science** (3) On demand. Analysis of the science concepts and principles which are developed; nature of materials and methodology and designs of evaluation procedures. Prerequisite: EDCI 353 recommended.

**EDCI 429. Teaching Foreign Language Skills in the Schools II** (3) Spring. 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) Summer. 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. Problems in Education** (1-3). On demand. For advanced student wanting to conduct intensive study of selected problems in education. May be repeated to six hours; undergraduate credit only. Prerequisite: consent of department. C/F hrs: 20.

**EDCI 4xx. Effective Teaching/Classroom Management** (3) Fall, Spring, Summer. Effective teaching principles dealing with techniques, organization, planning and management combined with strategies used to facilitate learning and to reduce behavior problems.

**EDCI 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

**EDCI 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## 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.

**ΔEDAS 409. Organization and Adminstration of Education in American Society** (3) Fall, Spring, Summer. 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) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

**EDAS 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

**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)

**ΔEDFI 202. Introduction to Teaching** (3) Fall, Spring. 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 coursework. 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 EDCI. C/F hours: 50.

**ΔEDFI 302. Educational Psychology** (3) Fall, Spring, Summer. Theory and research on learning, development, personality and motivation applied to educational processes in various learning environments. Some field or clinical work. Prerequisites: PSYC 201 and sophomore status. C/F hrs: 20.

**EDFI 342. Psychology of Childhood** (3) Fall, Spring, Summer. Behavior and development of children through elementary school age. Prerequisite: PSYC 201. EDFI 302 recommended.

**EDFI 395. Workshop on Current Topics** (1-3) On demand. Intensive educational experience on selected topics related to skill development, content update or materials development. Typically, an all-day or similar concentrated time format used. Requirements usually met within time format. May be repeated on approval of adviser.

**ΔEDFI 402. Assessment and Evaluation in Education** (3) Fall, Spring, Summer. Assessment and evaluation applied to instructional procedures; construction of assessment tools; interpretations of assessment results. Prerequisites: EDFI 302. C/F hrs: 20.

**ΔEDFI 408. Education in a Pluralistic Society** (3) Fall, Spring, Summer. 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.

**EDFI 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 people used. Library and field research required. Prerequisite: commitment to, or at least serious interest in, urban education.

**EDFI 429. Assessment of Young and Atypical Children** (3) Fall. Concepts and principles of measurement and instruments used in assessing young and atypical children; integration of measurement and 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 equity in education.

**EDFI 480. Seminar in Educational Foundations** (3) Fall, Spring, Summer. In-depth study of selected topics, offered on demand. May be repeated once if subject matter is different.

**EDFI 481. Leadership Training in Behavior Analysis Program** (1-5) On demand. Prepares individuals to function as group leaders in academic, year-long, inservice behavior analysis program. Prerequisite: permission of instructor and enrollment in behavior analysis program.

**EDFI 482. Direct Study of the Child** (1-5) On demand. Part of behavior analysis program. A child studied using predetermined framework.

**EDFI 490. Problems in Education** (1-3) On demand. For advanced student wanting to conduct intensive study of selected problems in education. May be repeated to 6 hours; undergraduate credit only. Prerequisite: permission of instructor.

**EDFI 4xx. The Psychological Foundations of Classroom Management** (3) On demand. A survey of major approaches to classroom management with particular emphasis upon the applications of different approaches to case studies, to field observations, and to personal attitudes and values. Prerequisites: PSYC 201 and either EDFI/CI 202 or EDFI 302.

**EDFI 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

**EDFI 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## Electronic Technology (ET)

(Additional costs for materials in all laboratory courses)

**ET 191. Energy, Power, Instrumentation and Control** (3) Fall, Spring, Summer on demand. Principles of automated systems, how machines work and emphasizing energy, power, measurement and controlling devices. Four hours lecture and laboratory.

**ΔET 240. Electricity** (4) Fall, Summer on demand. Electron theory; DC and AC units and theory; circuit component; circuit analysis techniques; RLC circuits; power concepts; use of test instruments. Two-and-one-half hours of lecture and three hours of laboratory. Three hours of lecture at Firelands. Prerequisite: MATH 120 or equivalent.

**ΔET 241. Electronics** (4) Spring, Summer on demand. Analog and digital, electronic circuits and semiconductors. Design and application of power supplies, amplifiers, oscillators and digital gates to communication, instrumentation and process control. Two-and-one-half hours of lecture and three hours of laboratory. (Three hours of lecture at Firelands.) Prerequisite: ET 240 or permission of instructor. Lab fee at Firelands.

**†ET 244. Communication Circuits** (3) Spring odd numbered years. Communication circuits including telecommunications and amplifiers; amplifier design, components and applications, oscillators, communication components and principles of receivers and transmitters. Four hours of lecture and laboratory. (Six hours of lecture and laboratory at Firelands; course is worth 4 hours.) Prerequisite: ET 241 or permission of instructor.

**†ET 245. Communications Systems** (3) Fall even numbered years. Applications of principles of communications circuits to large and complex systems including telecommunications. Techniques of transmission and radiation of electromagnetic energy applied to pulse, television and micro-wave systems. Four hours of lecture and laboratory. (Six hours of lecture and laboratory at Firelands; course is worth four hours.) Prerequisite: ET 241.

**†ET 247. Electrical Measurement (3) Spring.** Electrical Measurement and instrumentation desvices, trasnducers 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) Fall. Automation and industrial control principles. Study and appliction of typical devices such as time control switches, motor controls, servo-mechanisms, photoelectric swithces. Two hours of lecture, three hours of laboratory. Prerequisite: ET 241. Lab fee.

**†ET 249. Digital Electronic Components and Systems** (4) Fall. Basic digital system logic analysis and synthesis techniques; number systems and codes; Boolean algebra and circuit minimization techniques. Characteristics of modern digital integrated circuit components. Three hours of lecture, three hours of laboratory. Prerequisite: ET 191. Lab fee.

**†ET 250. Real Time Microcomputer Systems for Industrial Control** (4) Fall. Principles and practices of interfacing microcomputers in the real time environment of industrial process control. Organization and operation of computers, various process control modules (A/D and D/A), signal conditioning and converting, and design of process control systems. Three hours of lecture, three hours of laboratory. Prerequisite: ET 442 and CS 101 or equivalent. Lab fee.

**†ET 290. Experimental Studies in Industrial Education and Technology** (1-3) Fall, Spring, Summer. Experimental study projects, seminars and workshops dealing with topics in industrial technology.

**ET 300. Electric Machinery and Controls** (3) Fall or Spring, Summer 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 344. Electronic Communication Circuits** (3) Fall even years and Summer odd years on demand. The principles of electronic circuits as applied to large and complex telecommunication systems. Prerequisite: ET 241

**ET 345. Electronic Communication Systems** (3) Spring odd years and Summer even years on demand. A study of the concepts of transmission, radiation and reception of electromagnetic energy in communication systems, with forcus on waveguide, television and complex telecommunication systems. Prerequisite: ET 241

**ET 357. Electrical Power Transmission** (3) Spring. 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 electrical construction work. Four hours of lecture and laboratory. Prerequisite: ET 191.

**ET 358. Digital Electronics** (4) Fall, Summer on demand. Digital integrated circuit devices with medium and large scale applications. Digital families, their functions, use of specification sheets, discussion of digital system. Five hours of lecture and laboratory. Prerequisite: ET 241 or PHYS 202.

**ET 392. Energy, Power, Instrumentation and Control** (3) Fall, Spring, Summer on demand. Principles of automated systems, how machines work and emphasizing energy, power, measurement and controlling devices. Four hours lecture and laboratory.

**ET 441. Instrumentation** (3) Fall, Summer on demand. Industrial instrumentation, measuring mechanical, fluid and electric phenomenon, transducers, recorders, indicators and controlers. Principles underlying their design and applications. Four hours of lecture and laboratory. Prerequisite: ET 241 or consent of instructor.

**ΔET 442. Digital Computer Analysis** (3) Spring, Summer on demand. Organization and construction of mini-micro computers, machine language programming, interfacing, including developing logic design, selection of integrated circuits, assembly, testing, and system diagnostic testing procedures. Four hours of lecture and laboratory. Prerequisite: ET 358 or consent of instructor.

**ET 443. Solid State Devices** (3) Fall, Summer 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.

**ET 453. Digital Computer for Process Control** (3) Spring, Summer on demand. Basic concepts, terminology, evaluation and types of control systems as they apply to industrial process control and positioning systems. These systems will be subdivided into measurement, controllers and final control elements. Four hours of lecture and laboratory. Prerequisite: ET 358 or CS 307, CS 101, MATH 126.

**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) Fall, Spring. 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.

**ΔENG 110S. Developmental Writing** (3) Summer only. Development of skills in sentence structure, edited American English usage, mechanics, paragraph and short essay construction. Placement through departmental pretesting. Students must complete course and departmental 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 more than 6 hours from ENG 110S, ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.

**ΔENG 110. Developmental Writing** (5) Fall. Development of skills in sentence structure, edited American English usage, mechanics, paragraph construction; basic expository writing; emphasis on organizing and developing coherent essay of approximately 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 than 6 hours from ENG 110, ENG 111 and ENG 112 may be applied toward graduation. Graded S/No Record.

**ΔENG 111. Introductory Writing** (3) Fall, Spring. 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.

**ΔENG 112. Varieties of Writing** (3) Fall, Spring. Expository writing including research paper, emphasis on analytical writing based on critical reading. Placement through departmental pretesting or successful completion of ENG 110 or ENG 111. Student must complete course and departmental proficiency examination successfully to receive passing grade. Graded A, B, C/No Record.

**¶ΔENG 150. Response to Literature** (3) Fall, Spring. A general education course emphasizing discussion of humanistic themes based on student responses to readings in fiction, drama, poetry and nonfiction. Not accepted toward English major or minor. Prerequisite: enrollment in or completion of ENG 111.

**¶ΔENG 200. Introduction to Literature: various topics—Short Story, Literature and Film, Science Fiction, Fantasy, Women in Literature, Black Literature** (2,3) Fall, Spring. 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: enrollment in or completion of ENG 112.

**ΔENG 201. Literature and Writing** (4) Fall, Spring. 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 203. Introduction to Literature: various topics—Literature of Laughter, Literature of Growing Up, Literature of Romantic Love, Literature and Art, Literature and Religion, Literature and Science, Literature of War, Literature and the Natural World** (3) Fall, Spring. A general education course with emphasis on humanistic themes and basic literary concepts. Can be repeated once if topics differ; no more than six hours of ENG 200/203 may count toward graduation. Not accepted for English major or minor. Prerequisite: enrollment in or completion of ENG 112.

**ΔENG 205. Craft of Poetry** (2) Fall. 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.

**ΔENG 206. Craft of Fiction** (2) Spring. 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.

**ΔENG 207. Intermediate Writing** (3) Fall, Spring. Work on developing mastery of the rhetorical principles of planning, executing and revising prose. Emphasis on strengthening analytical writing, both expository and argumentative; valuable for writing on the job. Prerequisite: ENG 112.

**ΔENG 208. Imaginative Writing** (3) Fall, Spring. 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.

**ΔENG 209. Creative Writing Workshop** (3) Fall, Spring. Principles of poetic composition and fiction writing; analysis of contemporary models and group discussion of students' work. May be repeated once.

**ΔENG 251. Writing About Films** (3) Spring. Same amount of writing as in ENG 207; deals entirely with film theory, films, film scripts, novels on which films are based and film reviews. Equivalent of ENG 207. Prerequisite: ENG 112.

**¶ΔENG 261. Masterpieces of World Literature** (3) Fall. Major works of world literature to 1400, including such authors as Homer, Confucius, Aeschylus, Sophocles, Plato, Aristophanes, Virgil and Dante. Prerequisites: any ENG literature course or ENG 112.

**¶ΔENG 262. Masterpieces of World Literature** (3) Fall, Spring. Major works of world literature since 1400, including such authors as Montaigne, Cervantes, Goethe, Hugo, Balzac, Dostoevski and Kafka. Prerequisite: any ENG literature course or ENG 112.

**¶ENG 264. English Literature Survey to 1700** (3) Fall. Major authors in the context of major literary traditions from Anglo Saxon times through the Restoration; introduces historical approach to the study of literature. Prerequisites: any ENG literature course or ENG 112.

**¶ENG 265. English Literature Survey, 1700-1900** (3) Spring. Major authors in the context of major literary traditions from the eighteenth century through the Victorian Age, introduces historical approach to the study of literature. Prerequisite: any ENG literature course or ENG 112.

¶ΔENG 266. **American Literature Survey to the Civil War** (3) Fall. 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 of ENG 112.

¶ΔENG 267. **American Literature Survey, Civil War to World War I** (3) Fall, Spring. Literary patterns of idealism, skepticism and emergent materialism based on texts of representative writers such as Dickinson, Twain, James, Howells, Wharton and Norris; literary movements such as local-colorism, realism and naturalism. Prerequisite: any ENG literature course or ENG 112.

ΔENG 268. **20th Century Masterpieces of American and British Literature** (3) Fall, Spring. Seminal works of modern and contemporary literature, seen in relation to the social and human problems of the age. Prerequisite: any ENG literature course or ENG 112. Not accepted toward English major or minor.

ENG 269. **Canadian Fiction** (3) Spring. 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) Fall. Minority literary expression: aims, methods and accomplishments. Prerequisite: any ENG literature course or ENG 112.

ENG 290. **Language Study** (3) Spring. Aspects of form and style in language: structure, usage, semantics; language change and cultural convention; social and regional dialects. Prerequisite: sophomore standing. Not applicable for state certification requirements. Not a substitute for ENG 380 requirement for English education.

ENG 291. **Language Study for Elementary Teachers** (3) On demand. Structure of English; emphasis on linguistic basis of reading, spelling, and other language arts concerns. Prerequisite: ENG 112.

ENG 295. **Telecourse on Current Topics in English** (1-3) On demand. Selected topics within the discipline. Includes departmentally supervised presentations via television complemented by seminars and/or other student-instructor means of interaction on a group or individual basis.

ΔENG 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.

ΔENG 301. **Shakespeare** (3) Fall, Spring. Representative comedies, history plays, tragedies and tragicomedies, and sonnets. Designed for student with no previous Shakespeare courses. Prerequisite: any ENG literature course and ENG 112.

ENG 306. **Bible** (3) Fall. English Bible as literary classic; its development and influence on literary culture. Prerequisite: any ENG literature and ENG 112.

ΔENG 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.

ΔENG 308. **Creative Writing** (3) Fall, Spring. Imaginative writing, fiction and poetry. Class discussion and individual conferences. Required for creative writing major. Prerequisite: B or better in ENG 209 or permission of instructor. May be repeated once.

ΔENG 320. **Modern Poetry** (3) Fall. English and American poetry and European poetry in translation from 1900 to 1945; writers and works significantly influencing development of poetic forms. Required for creative writing major. Prerequisite: any ENG literature course and ENG 112.

ΔENG 322. **19th-Century American Fiction** (3) Fall. 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.

ΔENG 323. **Modern Fiction** (3) Fall, Spring. 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.

ΔENG 325. **Modern Drama** (3) Fall. Great plays by Ibsen, Chekhov, Shaw, O'Neill, and others; dramatist's insight into human condition. Prerequisite: any ENG literature course and ENG 112.

ΔENG 330. **Contemporary Poetry** (3) Spring. Cross section of English and American poetry and European poetry in translation, mostly 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.

ΔENG 333. **Contemporary Fiction** (3) Spring. Cross section of American and English fiction and European fiction in translation, mostly written since 1945; works representing major trends in development of fiction. Required for creative writing major. Prerequisite: any ENG literature course and ENG 112.

ENG 335. **Contemporary Drama** (3) Spring. Plays since 1945 by American, British and European dramatists (in translation); new techniques, thematic trends, and aspect of human condition revealed through plays. Prerequisite: any ENG literature course and ENG 112.

ΔENG 342. **Children's Literature** (3) Fall, Spring. Reading and evaluation of books for children from nursery school through junior high school; novels, folklore, informational literature, poetry and bibliographical sources. Not open to student with credit for LEM 342. Prerequisite: any ENG literature course and ENG 112.

ENG 343. **Literature for Adolescent** (3) Fall, Spring. Reading and evaluation of books for junior and senior high school students; emphasis on fiction; also biography and other nonfiction, folklore, myth, poetry. Prerequisite: any ENG literature course and ENG 112.

ENG 380. **Introductory English Linguistics** (4) Fall, Spring. Structure of English through recent linguistic theories and related topics such as dialects, usage, dictionaries. ENG 290 will not satisfy this requirement for English education. Prerequisite: sophomore standing.

ENG 381. **Grammar and Writing** (3) Fall, Spring. Application of grammatical models (traditional, structural and transformational) to the teaching of writing. Prerequisite: ENG 380.

ENG 385. **Studies in Literature-Film** (3) On demand. Problems in film's relationship to literature; definitions and theory; specific films and literary works. May focus on author, genre or historical period. May be repeated once if topics differ. 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. Prerequisite: junior standing .

ENG 389. **Professional Editing** (3) Fall. Editing technical, scientific and other professional writing, such as proposals, reports, journal articles, conference proceedings and books. Includes introduction to managing editorial services. Prerequisites: junior standing and permission of instructor.

ENG 400. **Chaucer** (3) Fall. The Canterbury Tales, Troilus and Criseyde, and such dreamvision poems as The Book of the Duchess and lyrics, in Middle English. 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 and Prose** (3) Alternate years. Renaissance literature, including great sonnets, early novels, Spenser's Arthurian epic. Skelton's satires and Marlowe's erotic love poetry. 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 405. 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) Fall, Spring. Original composition, analysis of contemporary literary models, emphasis on fiction and poetry. For creative writing seniors taking their second workshop, creation of the senior thesis. Prerequisite: B or better in ENG 308 or approval of instructor. May be repeated once.

**ENG 408. Milton** (3) Alternate years. Paradise Lost, Paradise Regained and Samson Agonistes and selected minor poems and prose. Prerequisite: any ENG literature course and ENG 112.

**ENG 410. English Restoration and 18th-Century Drama** (3) Alternate years. Restoration features heroic drama, pathetic tragedy and libertine comedy; 18th century sentimentality and laughing comedy. Stage and theatre design, historical and social background. 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 1789-1832; Blake, Wordsworth, Coleridge, Byron, Shelley, Keats. Prerequisite: any ENG literature 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) Alternate 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.

**ENG 420. Modern American Writers** (3) Spring. Major American writers from 1900 to 1945: Eliot, 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) Fall. 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: any ENG literature course and ENG 112.

**ENG 460. Literature of Genocide and the Holocaust** (3). Examination of the literature (including memoir, fiction, drama, poetry, philosophy and history) of genocide, the systematic attempt to destroy an entire ethnic, religious or national group. Specific attention to the Native American, Armenian, Cambodian, Soviet-Stalinist and Nazi genocides. Prerequisite: Any ENG literature course and ENG 112.

**ENG 470. Directed Readings in Language and Literature** (1-4) Fall, Spring. For advanced student or small group of students to work independently in specialized subject not covered by existing courses. 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) Fall. Expressive, expository and argumentative writing. For anyone interested in developing rhetorical skills such as invention, arrangement and style in discourse. Especially recommended for students who plan to write as part of their careers. Prerequisite: junior standing.

**ENG 484. The Writing Process** (3) Fall, Spring. Traditional and modern theory and practice of rhetoric and composition; examination of the ways writers gather and organize knowledge, assess their audience, control style and revise.

**ENG 485. Writing Film Criticism** (3) On demand. Principles and assumptions underlying approaches to film criticism as revealed in commentaries and critiques; application of these principles to writing film criticism. Prerequisite: ENG 201 or ENG 207 or ENG 208 or ENG 251, or permission of instructor.

**ENG 488. Technical Writing** (3) Fall, Spring. Advanced study of theory and research in documentation. Student produces a proposal for funding and a full-length portfolio-quality manual or report. Prerequisite: ENG 388 or approval of instructor.

**ENG 489. Internship in Technical Writing** (1-9) Fall, Spring, Summer. 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. Prerequiste: consent of instructor.

**ENG 498. Senior Project Tutorial** (1 and 3) Fall, Spring. 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) Fall. Assessment of public health in the community. Institutional inspection techniques, communicable disease control, solid waste disposal and prevention of food-borne disease. Three hours lecture. Prerequisite: BIOL 204.

**ENVH 302. Industrial Hygiene** (4) Fall. Basic concepts in ergonomics, noise, vibration, temperature and radiation. Protection from chemical and biological agents. Three hours lecture, three hours lab. Prerequisites: CHEM 127, 128 or 137, 138, PHYS 201 or 211 or instructor's consent.

**ENVH 304. Air Quality Control** (4) Fall. Principles of air quality control. Sampling and analysis methods; pollution sources and control strategies. Three hours lecture, three hours lab. Prerequisites: CHEM 127, 128, PHYS 201 or instructor's consent.

**ENVH 306. Environmental Regulation, Organization and Administration** (3) Spring. Foundations of environmental law. Structure and function of federal, state, regional and local environmental agencies. Key environmental statutes. Environmental program administration.

**ENVH 307. Occupational Safety** (4) Spring. Recognition of occupational hazards, including safety practices, fire prevention, material handling, machine guarding and personal protective equipment.

**ENVH 308. Industrial Ventilation** (2) Fall. Principles of ventilation. Design and evaluation of general dilution and local exhaust systems. One hour lecture, three hours lab. Prerequisites: PHYS 201, MATH 120 & 129 or 130.

**ENVH 403. Principles of Water Quality** (4) Fall. Properties of water and biological, chemical and physical pollutants. Relationship between use and quality. Management strategies. Three hours lecture, three hours lab. Prerequisites: CHEM 127, 128 or 137, 138, BIOL 205 or instructor's consent.

**ENVH 404. Water Supply and Pollution Control** (4) Spring. Examination of water sources, requirements and treatment for potable use, and wastewater treatment and disposal. Three hours lecture, three hours lab. Prerequisites: ENVH 403 or instructor's consent.

**ENVH 405. Hazardous Material Management** (3) Spring. Principles of managing hazardous waste and material, disposal, treatment, emergency response and clean-up. Consideration of environmental toxicology and risk assessment. Prerequisite: CHEM 127, 128 or 137, 138.

**ENVH 406. Epidemiology and Biostatistics** (3) Spring. 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** (1-4) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisite: program director's permission. May be repeated.

**ENVH 491. Practicum** (1-4) Fall, Spring, Summer. Experience working under supervision in selected environmental, public health or health planning agencies or industries with environmental health units; emphasis on practice rather than observation. Prerequisites: instructor's permission, at least junior status. Graded S/U. May be repeated up to 4 hours.

## Environmental Studies (ENVS)

**ENVS 101. Approaches to Environmental Studies** (2) Fall, Spring, Summer. Overview of environmental principles and concepts. Students consider contemporary environmental issues as they relate to the quality of life. Topics of environmental concern are used to develop skills in evaluation, analysis and values clarification.

**ENVS 301. Environmental Problems** (3) Fall, Spring. 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) Fall, Spring, Summer. Selected topics and subject areas in environmental studies. Offered on demand to cover current environmental issues. Prerequisite: consent of instructor. Can be repeated once for maximum of 6 credits, if topics differ.

**ENVS 401. Environmental Strategies** (2) Spring. 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) Spring. 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.

**ENVS 403. Geographic Information Systems** (4) Fall. Collection, manipulation, integration and automated display of spatial data from various disciplines with particular emphases on environmental geology, resource management, and geographic analysis. This course is also listed as GEOG 403 and GEOL 403.

## Environmental Health Technology (ENVT)

**†ENVT 110. Basic Microbiology** (3) Spring. Fundamentals of microbiology; emphasis on morphology, growth, genetics and pathogenic microorganisms and their control.

**†ENVT 121. Environmental Regulation** (2) Spring. 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) Fall. 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 study.

**†ENVT 211. Biological and Chemical Examination of Water** (6) Spring. Quantitative 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.

**†ENVT 222. Water and Wastewater Treatment** (4) Fall. 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.

**†ENVT 223. Wastewater Package Treatment** (1) Spring. Operator personnel and inspectors of package type extended aeration plants the basic concepts of routine operations, maintenance, process control and safety. Twenty-eight hours of lecture.

†ENVT 225. Environmental Health and Protection (4) Spring. 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.

†ENVT 226. Institutional Health and Sanitation (2) Spring. 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) Fall. 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) Spring. 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 Hygiene (3) Spring. Regulatory considerations, evaluation and control of industrial hazards, personal protective equipment, employee assistance programs, accident prevention and investigation, and emergency planning. Three hours of lecture.

†ENVT 272. Hazard Recognition (2) Spring. 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) Fall. Microbiology, inspection techniques, safety analysis, prevention of food-borne diseases, Ohio food service laws and planning and equipment review. Twenty-eight hours of lecture.

†ENVT 290. Experimental Studies in the Environment (1) Fall, Spring, Summer. Environmental study projects, workshops, seminars and computer simulation classes dealing with air, water or land resource utilization and planning.

†ENVT 291. Student Field Experience (3) Fall, Spring, Summer. 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) Spring. 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 Environment Technology** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in industrial environment technology. Prerequisite: consent of college.

## Ethnic Studies (ETHN)

¶ΔETHN 101. Introduction to Ethnic Studies (3) Fall, Spring, Summer. Introduction to the discipline of ethnic studies, including methods and appraoches to studying major ethnic groups in the United States.

ETHN 110. Introduction to Latinos in the United States (3) Fall, Spring. Latino experience in the United States; cultures, life experiences and the limited political, education, socio-economical opportunities of this minority.

ETHN 120. Introduction to Black Studies (3) Fall, Spring, Summer. Introduction to the black experience with special emphasis upon but not limited to the cultural experience of the United States.

ΔETHN 130. Introduction to Asian American Studies (3) Spring. Survey of the Asian experience in America. The course's foci of analysis include the forces that led to the large scale Asiatic immigration to the United States from the 19th century onwards, the nature of anti-Oriental prejudice, and the degree to which the Asian-American has become assimilated into the mainstream American socio-political culture.

ETHN 140. Introduction to European American Studies (3) Fall, Spring. Immigration experience of several European groups in the U.S. and their cultural adaptation thereafter. Specific groups to be studied might be Irish, Polish, Italian, Jewish and German Americans.

ETHN 210. Chicanos in American Society (3) Spring, Summer. The Mexican-American culture and its place in American society. Topics include family, migration, religion and others.

ETHN 211. History of Mexican Americans (3) Fall. History of Mexican Americans from the Texas Revolution, Mexican American War to the present.

¶ETHN 220. African Literature (3) Fall. Creative and critical writing in the English language by writers of African descent. Also writers from the Caribbean.

ETHN 300. Topics in Ethnic Studies (3) Fall, Spring, Summer. On demand. Special ethnic topics of interest to students provided as a part of regular offering.

ETHN 301. Ethnicity in America (3) Fall, Spring, Summer. Advanced study of the methods and approaches of the discipline of ethnic studies by focusing on contemporary issues and comparative theories of ethnicity. Prerequisite: Any 100-level ETHN course.

ETHN 302. Ethnic Women in America (3) Fall, Spring, Summer. 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 310. Mexican Culture (3) Spring. The culture of Mexico in the 20th century with emphasis on economics and the national experience as reflected in the family, religion, arts and other select facets of the culture.

ETHN 311. Origins of Latino Culture (3) Fall, Spring. Origins of Latino culture and its contributions to art and folklore.

ETHN 320. Literature of Black Nationalism (3) Spring. Contributions made by African and African American writers to the rise of nationalism.

ETHN 321. Novels of Black Liberation (3) Spring, Summer. Artistic, historical, social and cultural influences on the new world contemporary black novel.

ETHN 395. Workshop on Current Topics (1-3) Fall, Spring, Summer. Comprehensive study of America's ethnicity with special emphasis upon the represented ethnic groups in northwest Ohio

ETHN 400. Senior Project (3) Fall, Spring, Summer. Directed individual research concerning issues in ethnic studies, resulting in a research paper. Prerequisites: senior status, ethnic studies major or minor, permission of instructor, and approval of department.

ETHN 410. Mexican-American Social Thought (3) Spring. The development of the Mexican philosophical thought as related to the Chicano ideologies, their signifcant parallels within their contemporary periods and institutions.

ETHN 420. The Ethnicity of Baldwin and Achebe (3) Spring. The ethnic dimensions of James Baldwin and Chinua Achebe.

ETHN 470. Readings in Ethnic Studies (1-3) Fall, Spring, Summer. Individual extensive readings in consultation with instructor in fields of special interest. May be repeated. Prerequisite: consent of instructor. May or may not partially fulfill group requirements.

**ETHN 480. Seminar in Ethnic Studies** (3) Fall, Spring, Summer. Specific content areas offered depends on demand and interest of staff. May be repeated three times. Prerequisite: consent of instructor. May or may not partially fulfill group requirements.

**ETHN 489. Field Study in Ethnic Studies** (1-9) Fall, Spring, Summer. Placement of students in a variety of agencies or businesses, which are relevant to the study of ethnicity or research/study outside of Bowling Green. Prerequisites: junior standing; 6 hours of upper division ETHN courses relevant to the study; and permission of instructor. Graded S/U.

## Finance (FIN)

**ΔFIN 200. Personal Finance** (3) Fall, Spring, Summer. 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.

**ΔFIN 300. Business Finance** (3) Fall, Spring, Summer. Acquisition of assets and funding in business enterprise. Fundamentals of financial analysis, working capital management, and investment and financing decision-making. Prerequisite: ACCT 222, ECON 202, MIS 200 or equivalent and STAT 212 or equivalent.

**FIN 420. Risk & Insurance Analysis** (3) Fall, Spring, Summer. Analysis of situations of non-speculative risk. Emphasis is on risk identification, 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) Spring. Management of corporate risk through identification, measurement and control of loss exposures 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) Fall. 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) Fall. 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) Spring. Protection provided by and legal aspects of fire, casualty, transportation, workers' compensation, multiple-lines and corporate surety-ship insurance coverages. Prerequisite: grade of C or better in FIN 420.

**FIN 430. Investment Analysis** (3) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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) Summer. Investment decision making in land resource use, appraisal and investment analysis. Real estate location, markets, property rights, financing, taxation and valuation. Accepted by Ohio Real Estate Commission as one of two required courses for licensing exam. Prerequisite: grade of C or better in FIN 300.

**FIN 450. Corporate Finance** (3) Fall, Spring, Summer. Advanced practices of financial management are developed. Financial models used in decision-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) Fall, Spring, Summer. The case method is used to apply decision-making 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. Graded S/U. Prerequisite: permission of instructor and chair.

## Foods & Nutrition (F&N)

**ΔF&N 207. Nutrition, Health and You** (3) Fall, Spring. 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) Fall, Spring. 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) Fall, Spring. Management of available resources for planning, organization, preparation and service of family and commercial type meals. Controls in purchasing, receiving, storage and costing. One hour of lecture and four hours of lab. Prerequisite: F&N 210. Lab fee.

**F&N 230. Professional Catering Techniques** (3) Spring. Techniques of preparation and presentation germane to food service catering specialists. Laboratory fee. Prerequisite: F&N 210 or equivalent. Professional liability insurance required.

**F&N 307. Nutrition** (3) Fall, Spring. 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) Fall. 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) Fall, Spring. 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) Fall. 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) Fall. 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.

**F&N 431. Experimental Foods** (3) Fall, Spring. Experimental methods of quality control and product development. Scientific reasoning applied to the methods of food preparation. Subjective and objective evaluation criteria will be practiced. Two hours of lecture and three hours of lab. Prerequisites: F&N 210, CHEM 306 or consent of instructor. Lab fee.

**F&N 432. Advanced Nutrition** (3) Spring. 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 Management** (3) Spring. Management principles and procedures in institutional or commercial food services. Selection, training and supervision of personnel. Food procurement, production and marketing. Clinical practicum. Two hours lecture and three hours of clinical experience. Prerequisite: F&N 331 or consent of instructor. Professional liability insurance required.

**F&N 434. Diet Therapy** (4) Fall. Diseases and dietary modifications they necessitate. Determination of rationale for inclusion or exclusion of specific foods in prescribed diet; clinical dietitian's roles. Two hours of lecture and four hours of clinical experience. Prerequisite: F&N 432. Professional liability insurance required.

**F&N 435. Nutrition for Infants and Young Children** (3) Fall. Nutrition of infants and children in health and disease, from prenatal period to adolescence. Two hours of lecture and two hours of lab. Prerequisite: F&N 207 or F&N 307. Professional liability insurance required.

**F&N 436. Nutrition for the Aging** (3) Spring. Psychological, physiological and socio-economic factors affecting dietary practices and nutritional needs of the elderly 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. Advanced Foodservice Management** (3) Fall. Management application to the unique aspects of the foodservice industry. Organizational leadership, employee motivation, legal aspects of the industry. Involves role playing, case studies, problem solving techniques. Prerequisite: AHE 489 or consent of instructor.

## French (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.

**¶ΔFREN 101. Elementary French** (4) Fall, Spring. Beginning oral-aural study; attention to grammar. Four class periods and scheduled oral practice each week.

**¶ΔFREN 102. Elementary French II** (4) Fall, Spring. FREN 101 continued. Four class periods and scheduled oral practice each week. Prerequisites: FREN 101 or one year of French in high school.

**¶ΔFREN 201. Intermediate French I** (3) Fall, Spring. Grammar review; development of the four skills. Three class periods and laboratory practice each week. Prerequisite: FREN 102 or two years of French in high school.

**¶ΔFREN 202. Intermediate French II** (3) Fall, Spring. FREN 201 continued. Three class periods and scheduled laboratory each week. Prerequisite: FREN 201 or three years of French in high school.

**¶FREN 211. French Cultural Series III** (3) Fall, Spring.. 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.

**¶FREN 212. French Cultural Series IV** (3) Fall, Spring. 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) Fall. 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 Dictation** (2). French pronounciation; syllabification, stress, linking, intonation. Prerequisite: FREN 202.

**FREN 355. French Linguistics** (3) Fall. Sound system and grammatical structures of modern French; practical application. Prerequisite: FREN 202.

**FREN 361. Introduction to French Literature I** (3). Development of major trends in French literature from the Middle Ages to 1850. Introduction to techniques of literary analysis. Prerequisite: FREN 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 French people from prehistoric times to Industrial 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) Summer. Individual research projects culminating in term paper dealing with some aspect of region of Touraine. Prerequisite: FREN 202. Offered only abroad.

**FREN 444. French Film** (4). Overview of French film history; film as reflection of society; introduction to "auteur" criticism and semiotics. Film in French and subtitles. English and French discussion sections. Prerequisite 300/400 literature/culture course or permission.

**FREN 451. Advanced Composition and Conversation** (3). Development of fluency and accuracy in written and oral skills at an advanced level. Prerequisite: FREN 351 or 352.

**FREN 453. Advanced French Dictation** (3). Continued study of pronunciation, stress and intonation. Prerequisite: FREN 353.

**FREN 454. Translation Workshop** (3). Intensive practice in translating technical and literary texts. Emphasis on French to English translation. Intended to prepare student for certification by a professional translators organization. Prerequisite: FREN 350.

**FREN 458. Career French I** (3). Terminology used in commercial operations, economics, international trade; emphasis on business correspondence; some translation. Prerequisite: FREN 351 or FREN 352.

**FREN 459. Career French II** (3). Advanced study of the economic and administrative structures in France and in Francophone areas, with intensive concentration on related technical language. Prerequisite: FREN 458.

**FREN 464. Seventeenth Century French Literature** (4). Baroque and classical French literature. Prerequisite: FREN 361.

**FREN 470. Independent Readings in French** (1-3). Readings for the advanced student who wishes to study a particular author or period, or problem in language or civilization. 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 Literature** (4). Contemporary French and Francophone novel, theatre and poetry. Prerequisite: FREN 362.

## Geography (GEOG)

**¶ΔGEOG 121. World Geography: Eurasia and Africa** (3) Fall, Spring. Geographical analysis of selected topics in Asia, Africa and Europe. Ecological aspects of cultural, political and economic problems. Open only to freshmen and sophomores.

**¶ΔGEOG 122. World Geography: Americas and Pacific** (3) Fall, Spring. Geographical analysis of selected topics in the Americas and Pacific world. Ecological aspects of cultural, political and economic problems. Open only to freshmen and sophomores.

**ΔGEOG 125. Weather and Climate** (3) Fall, Spring. Atmospheric elements and controls; earth-sun relationships, weather components, weather prediction, and climatic types and distribution. Two one-hour lectures, one-hour demonstration-discussion.

**ΔGEOG 126. Vegetation and Soils** (3) Fall. Physical geography; distribution and classification of vegetation and soil types using maps and profiles. Two one-hour lectures, one-hour discussion-demonstration.

**GEOG 127. Land Form Development and Distribution** (3) Spring. Physical geography; processes of land form development, world-wide distribution of land forms, and U.S. physiographic features and regions. Two one-hour lectures, one-hour demonstration-discussion.

**GEOG 213. Meteorology** (3) Fall, Spring. Processes of atmosphere and daily weather patterns. Two lectures, one two-hour laboratory.

**ΔGEOG 225. World Economic Geography** (3) Fall, Spring. Ways in which people have developed natural and human resources to meet economic needs which result in different economic patterns and landscapes.

**¶ΔGEOG 230. Cultural Geography** (3) Fall, Spring. Geographic influences upon population distribution, religion, dietary patterns, economics, others.

**GEOG 300. Topics in Geography** (3) On demand. Experimental courses considered part of regular offering.

**GEOG 303. Severe Weather** (3) Fall. Occurrence, cause and hazards of blizzards, surface cyclones, hurricanes, severe thunderstorms, tornadoes, lightning, hail, floods, droughts and unusual weather patterns.

**GEOG 312. Geography of Marketing** (3) On demand. Geographical study of marketing concerned with the spatial nature of commerce examined on the macro- and microscales. Theoretical and applied research are used to examine different areal contexts, tertiary economic activities, and targeted populations.

**GEOG 321. Introduction to Map Communication** (3) Fall or Spring. Practical map planning and construction; basic cartographic theory and use of drafting materials and equipment. Two hours of lecture and two hours of lab.

**GEOG 322. Thematic Cartography** (3) Spring. 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.

**GEOG 325. Population Geography** (3) Spring. Spatial analysis of size, distribution, density, migration, age-sex composition, and dynamic factors of change in major world population regions and sub-regions.

**GEOG 326. Environment and Aging** (3) Spring. The development of services and facilities which enhance the ability of older persons to function in their environment; particular emphasis on the impacts of housing and transportation on the lives of older persons.

**GEOG 327. Delivery of Social Services: Geographic Perspectives** (3) Alternate years. Delivery of social services to subnational geographic areas; design and monitoring of delivery systems by examining specific social programs and problems, as those related to poverty, crime, health and elderly.

**GEOG 331. Principles of Conservation Ecology** (3) Fall or Spring. Principles necessary in considering environmental problems and application to various aspects of conservation; interdisciplinary approach combining social, biological and physical sciences.

**GEOG 333. Geography of Recreation and Tourism** (3) Fall. Spatial aspects of outdoor recreation; assessment of present and future recreational resources; space for urban and rural areas, accessibility of these resources, governmental policies and tourism.

**GEOG 334. Geography of Diseases** (3) On demand. Past and present spatial distribution of diseases; cultural and environmental impacts in distribution, transmission and causes of diseases in different regions of world.

**GEOG 335. Geography of Human Migrations** (3) On demand. 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) Fall. Past and present spatial aspects of native American population in United States and Canada; distributions, migrations, economies, land tenure, cultures, art, rural-urban settlement, impact upon cultural and physical landscapes.

**GEOG 341. Soviet Union** (3) Spring. Description and interpretation of geographic factors related to present development.

**GEOG 342. Eastern Europe** (3) On demand. Nations of eastern Europe; description and interpretation of geographic factors related to present development.

**GEOG 343. Western Europe** (3) On demand. Geographic aspects in understanding present-day status of countries of Western Europe.

**GEOG 344. Eastern Asia** (3) On demand. Problems and factors influencing development of countries of eastern Asia; emphasis on China and Japan.

**GEOG 345. Southern and Southeast Asia** (3) On demand. Countries extending from Philippine Islands to Pakistan; different cultures; utilization of resources, future opportunities and problems of development.

**GEOG 346. Middle East** (3) On demand. Contemporary problems of Middle East; petroleum development and impact on society, food needs, population problems, and spatial characteristics of religious and linguistic groups.

**GEOG 347. Africa** (3) On demand. Geographic factors influencing development of African countries.

**GEOG 349. Latin America** (3) Fall. Problems related to contemporary development of societies of Latin America.

**ΔGEOG 350. Anglo-America** (3) On demand. Problems and factors influencing development of U.S. and Canada.

**GEOG 351. Ohio** (3) Fall. Historical, physical, economic and social problems related to development of Ohio.

**GEOG 400. Special Topics in Geography** (3) On demand. Experimental courses considered part of regular offering.

**GEOG 402. Regional Economic Geography** (3) On demand. Problems of subnational area units in county and regional planning, poverty pockets, delivery of services; emphasis on individual projects.

**GEOG 403. Geographic Information Systems** (4) Fall. Collection, manipulation, integration and automated display of spatial data from various disciplines with particluar emphases on environmental geology, resource management, and geographic analysis. This course is also listed as ENVS 403 and GEOL 403.

**GEOG 404. Climatology** (3) Fall or Spring. Fundamentals and applications; drought, water resources, human comfort, health, architecture; short- and long-term climatic changes.

**GEOG 405. Meteorology and Society** (3) On demand. Interrelationships between humankind 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 on rural land use systems.

**GEOG 411. Theoretical Cartography** (3) Alternate 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 321 or consent of instructor.

**GEOG 412. Use and Interpretation of Aerial Photographs** (3) Fall. Sources, types, characteristics, uses and limitations of aerial photographs. Training in use of standard equipment for stereoscopic viewing and height measurement.

**GEOG 413. Introduction to Remote Sensing** (3) Spring. Principles and procedures used to obtain information about natural and cultural features through imagery derived from photographic, multispectral,thematic mapper and side-looking airborne radar sensor systems.

**GEOG 422. Computer Mapping** (3) Spring. 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) Fall. Internal organization of cities. Ecological and land use problems, ghetto development, urban-economic base, urban sprawl and intra-urban delivery of services.

**GEOG 427. Genetic and Regional Analysis of Physical Landscapes** (3) On demand. Selected aspects of physical geography (excluding meteorology and climatology); in-depth analysis of man's natural environment. Prerequisites: GEOG 126 and GEOG 127 or consent of instructor.

**GEOG 433. Soil Classification and Mapping** (3) On demand. Classification of soils; use of soil survey equipment; preparation of soil type, slope and erosion maps of assigned areas. Prerequisite: GEOG 126 or permission of instructor.

**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 Anglo-America** (3) On demand. Reconstruction of natural environment of U.S. and Canada; how different groups perceived environment and used available resources; emphasis on how humankind has modified earth's surface.

**GEOG 452. Geopolitics** (3) Fall. Geographic factors influencing development of states and interrelationship of these countries.

**GEOG 460. Hydrology** (3) Spring. Analysis of the earth's water resources. Topics include surface water systems (drainage basins, rivers lakes and reservoirs), distribution, supply, demand, quality and hydrologic extremes. Prerequisite: GEOL 125 or consent of instructor.

**GEOG 471. Oceanography** (3) On demand. Geographic aspects of oceanography.

**GEOG 489. Internship** (3) Fall, Spring. Provides practical experience in applied geography, such as land use planning; urban and rural planning; recreational, regional and environmental planning; and location of industrial, commercial and health service facilities. May be repeated. Only six hours may be applied to GEOG major or minor; additional hours are for general electives. Graded S/U.

**GEOG 490. Special Problems in Geography** (1-3) On demand. Readings and research on varied topics to suit needs of student.

## Geology (GEOL)

**¶ΔGEOL 100. Introduction to Geology** (3) Fall, Spring, Summer. The earth; physical and historical geology; including economic, social and environmental aspects. Not open to geology majors and minors. Credit not given for both GEOL 100 and GEOL 101 or GEOL 104.

**ΔGEOL 101. Earth Science** (3) Fall, Spring, Summer. Survey of earth's geology, oceanography, meteorology and place in the universe. Credit not given for both GEOL 101 and GEOL 100 or GEOL 104.

**¶ΔGEOL 104. Physical Geology** (4) Fall, Spring, Summer. 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.

**¶ΔGEOL 105. Historical Geology** (4) Fall, Spring, Summer. Introduction to the history of the earth and its inhabitants. Three lectures and one two-hour laboratory. Lab fee.

**¶ΔGEOL 205. Geologic History of Man** (3) Fall. Evolution, distribution, way of life and geologic history of prehistoric hominids.

**GEOL 215. Geologic History of Dinosaurs** (3) Fall, Spring, Summer. Evolution, ways of life, and extinction of the Dinosauria; geologic history of vertebrates and dinosaurs in relation to a changing earth. Two lectures and one two-hour laboratory. Lab fee.

**GEOL 300. Mineralogy** (4) Fall. Minerals; the chemistry, crystallography, identification, classification, association and genesis of the rock-forming and economic materials. Three lectures and one two-hour laboratory. Prerequisite or corequisite: GEOL 104 and CHEM 125 or CHEM 135.

**GEOL 301. Petrology** (5) Spring. 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) Spring, alternate years and Summer. 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) Summer only. Study of fossils and the factors that influence the progressive development 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) Fall. 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) Spring. 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) Fall. 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 Stratigraphy** (4) Spring. Classification and origins of sedimentary rocks; depositional environments; stratigraphic principles and procedures. Three lectures and one two-hour laboratory. Prerequisites: GEOL 105 and 301.

**GEOL 322. Human Environmental Geology** (3) Fall. 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** (3) Fall alternate years. Classification and genesis of metallic ore deposits illustrated by study of classic areas. Two lectures and one two-hour laboratory. Field trip required. Prerequisites: GEOL 309 and GEOL 301.

**GEOL 402. Computer Applications in Geology** (3) Fall. 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 403. Geographic Information Systems** (4) Fall. Collection, manipulation, integration and automated display of spatial data from various disciplines with particular emphases on environmental geology, resource management, and geographic analysis. This course is also listed as ENVS 403 and GEOG 403.

**GEOL 411. Optical Mineralogy** (2) Fall. 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) Spring. Regional and stratigraphic geology, including classical areas in North America and Europe. Prerequisites: GEOL 315 and 316.

**GEOL 418. Geology of Ohio** (3) Fall. Alternate years. Bedrock and surficial geology of Ohio; state's economic-mineral resources. Two lectures and one two-hour laboratory. Three full-day field trips required. Prerequisites: GEOL 100 or GEOL 104 and GEOL 105.

**GEOL 419. Vertebrate Paleontology** (3) Spring. 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) Fall. Contributions of geological concepts to environmentals concerns. One half-day 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) Spring. Tectonic elements in the continents and ocean basins interpreted within the framework of plate tectonics. Prerequisites: GEOL 309 and GEOL 316.

**GEOL 424. Ingeous and Metamorphic Petrology** (4) Fall. 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** (2) Spring. Alternate years. Fossil microinvertebrates; morphology, phylogeny, classification and identification. Two two-hour discussion and laboratory sessions. Prerequisite: GEOL 315 or consent of instructor.

**GEOL 431. Introduction to Geochemistry** (3) Fall. Principles of mass action, acidity, solubility and introductory thermodynamics; applications to natural systems. Prerequisite: CHEM 127 and 128.

**GEOL 432. Geophysics** (3) Spring. 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) Fall. Biochronology, evolution and distribution of fossil faunas through geologic time. Two lectures and one two-hour laboratory. Prerequisites: GEOL 315 and GEOL 316.

**GEOL 440. Geologic Remote Sensing** (4) Fall 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 445. Surface Water Hydrogeology** (3) Spring. Alternate years. Geological aspects of flowing water at the earth's surface, emphasizing open channel hydraulics, flood analysis, sediment transport, water quality, infiltration, and analysis of runoff. Prerequisites: GEOL 316.

**GEOL 472. Marine Geology** (3) Spring. Alternate years. Processes, sediments and organisms of modern environments; interrelationships and expression in rock record. Prerequisite: consent of instructor.

**GEOL 473. Field Experience in Marine Geology** (1) Spring. 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) Fall, Spring. Supervised program in theory of seismology, operation of seismological observatory, interpretation of seismic records. May be repeated to four hours. Prerequisite: consent of instructor. Graded S/U.

**GEOL 480. Seminar in Geology** (2) Fall, Spring. Study of selected topic. May be repeated to four hours. Prerequisite: consent of instructor.

**GEOL 483. Coastal Marine Geology** (3) Summer only. Inshore and nearshore geological processes, sedimentation patterns and landform development. Prerequisites: physical and historical geology. Taught at Gulf Coast Research Labortaory under their number GEOL 431.

**GEOL 490. Geological Problems** (1-3) Fall, Spring, Summer. 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) Summer only. Recognition and study of geologic materials, structures, and landforms in the field. Written report required. Not open to B.S. geology majors. Prerequisites: GEOL 104 and GEOL 105, or GEOL 304 and consent of instructor. Lab fee.

**GEOL 494. Field Geology** (6) Summer only. Principles and practices of field geology and geologic mapping. Final map and report required. Prerequisites: grade of C or better in both GEOL 309 and GEOL 316, and consent of instructor. Lab fee.

**GEOL 496. Field Course in Modern Marine Environments** (1-6) Summer only. Field study of shallow-water marine environments. Prerequisite: consent of instructor.

**GEOL H499. Honors Thesis** (3) Fall, Spring, Summer. 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.

**¶GERM 101. Elementary Language and Culture I** (4) Fall, Spring. Cultural approach to beginning language study in the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.

**¶GERM 102. Elementary Language and Culture II** (4) Fall, Spring. GERM 101 continued. Four class periods and laboratory practice each week. Prerequisite: GERM 101, or by placement.

**¶GERM 117. Beginning Conversational German I** (2) Fall. Basic conversational German. Suggested as a supplemental course to accompany GERM 101, or may be taken independently. Not open to students who have completed GERM 102.

**GERM 118. Beginning Conversational German II** (2) Spring. Basic conversational German continued. Prerequisite: GERM 117 or GER 101 or permission of instructor. Not open to students who have begun or completed GERM 201.

**¶GERM 201. Intermediate German I** (3) Fall, Spring. Grammar review; development of the four skills. Three class periods and laboratory practice each week. Prerequisite: GERM 102, or by placement.

**¶GERM 202. Intermediate German II** (3) Fall, Spring. GERM 201 continued. Three class periods and laboratory practice each week. Prerequisite: GERM 201, or by placement.

**GERM 217. Intermediate Conversational German I** (2) Fall. Practice in conversation at the intermediate level. Suggested as supplemental course to accompany GERM 201, or may be 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) Spring. GERM 217 continued. Not open to students who have begun or completed GERM 318. Prerequisite: GERM 217 or 201 or permission of instructor.

**GERM 231. Intermediate Reading** (3) Fall, Summer. Development of reading skills in expository prose from various fields (scientific, technical, commercial and others). Vocabulary building, analysis of syntax and grammar for reading purposes. Prerequisite: GERM 102 or equivalent.

**¶GERM 260. Modern German Literature in Translation** (3) Spring. Readings in English of internationally known authors from German-speaking 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) Spring. 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) Fall. Representative authors of the 20th century; development of reading skills and vocabulary necessary for discussion of literature. Prerequisite: GERM 202, or by placement.

**GERM 313. Introduction to Literature: 18th and 19th Centuries** (3) Spring. Major authors and representative works of the 18th and 19th centuries; main genres and movements in historical and social context; literary terminology; development of reading skills. Prerequisite: GERM 202, or by placement.

**GERM 315. German Culture and Civilization** (3) Fall, Spring. Cultural-historical treatment of the social, intellectual and artistic life of the German-speaking peoples from medieval times to World War II. Lectures, audio-visual presentations and readings in English.

**GERM 316. Contemporary Germany** (3) Fall, Spring. Lecture-reading course in English. Division of Germany after WWII; rebuilding and development of the two German states since 1949; political, economic and social systems, inter-German relations, patterns of daily living; revolution in East Germany and process of unification.

**GERM 317. Composition and Conversation I** (2-4) Fall. Extensive practice in speaking and writing German. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 202, or by placement.

**GERM 318. Composition and Conversation II** (2-4) Spring. GERM 317 continued. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 317 or permission of instructor.

**GERM 319. German Phonetics and Pronunciation** (1-2) Spring. Theory and practice of German pronunciation; introduction to phonetic principles. Prerequisite: GERM 102.

**GERM 331. Workshop in Translation** (1-3) Spring. Small group work in German to English translation of scientific, technical or business writing or other types of expository prose in the student's specialty. May be repeated to six hours with different projects. Prerequisite: GERM 231 or GERM 201 or permission of instructor.

**GERM 360. Literature in Translation** (3) On demand. Variable topic course on German literature in translation; may center on authors, periods, genres or themes. May be repeated to six hours with different topics. Prerequisite: previous literature course in any department, or permission of instructor. Course does not count towards a German major or minor.

**GERM 380. Topics in German Language, Thought or Culture** (1-3) On demand. Topic chosen to meet curriculum needs and student requests. May be repeated to six hours with different topics. 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) Alternate 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 cultural phenomena and the film.

**GERM 416. Contemporary Austria** (3) Fall. Offered in AYA Salzburg Program. Survey of political and social life, education, mass media, the arts and cultural life in present-day Austria. Guest lectures, discussion sessions, field trips. Prerequisite: admission to AYA program.

**GERM 417. Advanced Composition and Conversation** (2-4) Fall. Development of increased facility in speaking and writing. (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) Spring. Practice and problems of writing style and syntax. Descriptive study of grammatical structures, contrastive analysis of English and German. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 318 or permission of instructor.

**GERM 419. German Drama Workshop** (3) On demand. Practical advanced linguistic training through 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** (1-4) On demand. Topic chosen from literature, culture or language to meet curriculum needs and student requests. May be repeated with different topics. Prerequisites: GERM 318 and two courses from GERM 311, 313, 331, 380, or permission of instructor.

**GERM 482. Introduction to Germanic Linguistics** (3) On demand. Derivation of modern Germanic languages from Proto-Indo-European. Classification and history of the Germanic language group. Development of the German language to 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) Fall, Spring. Interdisciplinary study of special topics in gerontology. May be repeated by consent of the director of the gerontology program. Prerequisite: consent of instructor.

**ΔGERO 101. Introduction to Gerontology** (3) Fall, Spring. 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) Fall, Spring. 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 402. Health and Aging** (3) Spring. Demographic characteristics, health status of older adults; impairments and chronic conditions most typically demonstrated by older adults; pertinent medical terminology; formal and informal supports available to address the health care needs of older adults.

**GERO 405. Cross-Cultural Aging** (3) Fall, Spring. Cross-cultural analysis of the aging process and the problems of the aged throughout the world. Prerequisite: GERO 101 or consent of instructor.

**GERO 410. Administration** (3) Fall. Administration of human service agencies with aging clients. Goal setting, staffing, evaluation, budgeting and organizational structures. Prerequisite: senior standing.

**GERO 411. Principles of Nursing Home Administration** (3) Spring. A capstone course for prospective nursing home administrators to assist them in the integration and concepts necessary for successful operation of a facility. Required of all gerontology majors who have selected the nursing home administration option. Open only to those students who have achieved senior standing in the nursing home administration option.

**GERO 420. Proposal Writing** (3) Fall, Spring. Funding potential, methods, design and proposals in human service agencies. Prerequisite: senior standing.

**GERO 422. Research in Health Care Settings** (4) Fall. Logic of scientific inquiry; the complexity of gerontologic research; critical evaluation of measures, methods used in gerontologic research; hands-on experience in data analysis, interpretation and presentation. Prerequisites: GERO 101; PSYC 270 or SOC 369.

**GERO 440. Seminar in Gerontology** (1-5) Fall, Spring. 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) Fall, Spring, Summer. Experience in working under supervision in selected agencies providing services to the aged. Emphasis on practice rather than observation. May be repeated. Prerequisites: enrollment in gerontology program or permission of program director; junior or senior standing; 2.50 GPA prior to registration. Graded S/U.

**GERO 493. Practicum Seminar** (1). Fall, Spring, Summer. Analysis of problems and experiences encountered in practicum. Prerequisites: permission of program director and GERO 491. Graded S/U.

## Health and Human Services (HHS)

**HHS 100. Seminar in Health and Human Services** (1-5) On demand. Interdisciplinary study of special health or human service topics. May be repeated. Prerequisite: consent of dean's office.

**HHS 200. AIDS: Acquired Immune Deficiency Syndrome.** Fall, Spring. A comprehensive course on AIDS, discussing epidemiology, biology, socio-demography, safe sex, ethics, public policy, test sites & support services. Bowling Green faculty, as well as community experts, will be brought in as instructors. This course will be informative and practical.

**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.

## Health Education (HED)

**HED 209. Advanced Concepts in Personal and Community Health** (3) Fall, Spring. Detailed study of factors that influence personal and community health in a contemporary society. Primarily for health education and physical education students.

**ΔHED 215. Personal Wellness** (3) Fall, Spring, Summer. Broad overview of the elements and principles of developing a wellness lifestyle. Personal assessment and behavior change techniques will be used to enhance health behavior.

**ΔHED 216. Introduction to Health Education** (3) Fall, 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) Spring. 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) Fall. Overview of the theories, principles and methods involved in the planning and evaluation of health promotion programs. Prerequisites: HED 215 and 216.

**ΔHED 313. Cardiopulmonary Resuscitation and Advanced First Aid and Safety** (3) Fall, Spring, Summer. Provides knowledge and training in the prevention and treatment of accidents, injuries and procedures of basic life support. Satisfactory completion may result in American Red Cross certification. Participation in skill practice required. Fee $7.50.

**ΔHED 314. Instructors Advanced First Aid and Emergency Care** (1) Spring. Successful completion may lead to advanced instructor's certificate by the American National Red Cross. Prerequisites: junior standing and valid American Red Cross advanced first aid certificate.

**HED 315. Cardiopulmonary Resuscitation Recertification** (1) Fall, Spring, Summer. Basic life support for victim of sudden cardiac arrest and/or respiratory 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) Fall, Spring, Summer. Information and concepts of human sexuality, including the physiological, social, psychological, moral and legal aspects. Prerequisite: junior standing or consent of instructor.

**HED 340. Drug Use/Abuse** (3) Fall, Spring. Knowledge regarding the ambiguity of drugs in society. Physical, psychological and social ramifications of drug use/abuse will be discussed. Prerequisites: HED 209 and junior standing or consent of instructor.

**ΔHED 346. Health Education for the Elementary School Teacher** (3) Fall, Spring, Summer. Content and techniques for teaching personal and community health in the elementary school.

**HED 348. Instructional Techniques in Health Education K-12** (3) Fall, Summer, on demand. Principles, planning methods, materials, resources and human relations of teaching health. C/F hrs.: 4.

**HED 362. Instructors Drivers Education** (3) Fall, Summer. First of two courses required leading to certification in the state of Ohio. Provides teacher with introduction to traffic problems in our society and overview of existing driver education programs. Fee $15. Prerequisites: junior standing and driver's license. C/F hrs.: 5.

**HED 393. Practicum in Health Education** (2-5) Fall, Spring, Summer. An opportunity to observe and participate in health education activities in a professional setting on a limited basis. Includes campus seminars. May be repeated up to a total of five credit hours. Prerequisites: HED 313, and HED 348 or 310.

**HED 395. Workshop on Current Topics** (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) Fall, Spring, Summer, on demand. Consideration of school health services and school environment, including principles, organization and administration of: health appraisal, health counseling, communicable disease control, educational adjustments, emergency programs, record keeping and a safe school environment. Prerequisite: junior standing. C/F hrs.: 20.

**HED 411. Organization and Administration of Health Agencies** (3) Spring. Basic concepts for organization and administration of health agencies. Topics covered include: Principles of organization, ethical and legal concerns, principles of management as they relate to fiscal and personnel policies, marketing, public relations, and health statistics and information systems. Prerequisite: HED 310.

**HED 462. Advanced Instructors Driver Education** (3) Fall, Summer. Second of two courses required to qualify a student for state certification in driver education; students learn to organize, administer and teach driver education in Ohio secondary schools. Emphasis on laboratory experience involving Transportation Research Center. Prerequisite: HED 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) Fall, Spring. Discussion of issues and problems faced by the health educator. Prerequisites: HED 393 and senior standing.

**HED 489. Internship in Health Education** (15) Fall, Spring, Summer. A concentrated pre-professional experience for those preparing for a career in health education in settings other than schools. Prerequisites: Senior standing, satisfactory completion of HED 310, and a minimum GPA of 2.5. Petitioning and one three-credit-hour HED 393 experience required before registration.

**HED 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching 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) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## History (HIST)

**¶ΔHIST 151. World Civilizations** (3) Fall, Spring. Comparative study of selected Western and non-Western civilizations in terms of how and why economic, social, political and intellectual factors shaped and defined history of ancient and medieval worlds.

**¶ΔHIST 152. The Modern World** (3) Fall, Spring. 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) Fall, Spring. 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.

**¶ΔHIST 205. Early America** (3) Fall, Spring. 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.

**¶ΔHIST 206. Modern America** (3) Fall, Spring. How and why selected economic, intellectual, political and social developments transformed post-Civil War America and shaped 20th-century American society.

**HIST 301. American Military History** (3) Fall, Spring. Development of American military institutions, policies, strategy, tactics from American Revolution to present.

**HIST 302. Crime, Poverty and Violence in 19th Century** (3) Spring. 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) Fall. How and why Atlantic-European, Mediterranean and Pacific-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) Spring. 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) Fall. 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.

**ΔHIST 306. History of Ohio** (3) Fall, Spring. Precolonial background, early exploration, settlement; Northwest territory; Ohio in French and Indian War, American Revolution, War of 1812; Ohio's place in national development.

**HIST 307. Afro-American History** (3) Fall. 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) Fall. 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) Fall. Latin-American history treating these phases: pre-Columbian; discovery and conquest; colonial; wars of independence. Role of indigenous and European cultures in development of Latin America.

**HIST 310. Modern Latin America** (3) Spring. Common and unique social, economic, political and intellectual 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, Dollar 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 319. Indian in American History** (3) Spring. 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 323. History of American Journalism** (3) Fall, Spring. American journalism from colonial newspapers to multimedia age, emphasizing 20th century.

**ΔHIST 325. Business History of the United States** (3) Spring. American business in its historical setting from 1607 to present. Interaction between economic and political forces in explaining unique role private enterprise has played in American life.

**HIST 326. Women in American History** (3) Spring. Major issues and movements in American history that have involved women from colonial period to modern times.

**HIST 337. The Vietnam War** (3) Spring. 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 natural 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. Introduction to Public History** (3) Spring. Acquaints students with the practice of public history through a variety of sources including archives, oral accounts, museums, historical sites and parks, and corporations. Special attention is given to understanding public history as a discipline and its importance to the field of history.

**HIST 357. English Origins of American Law** (3) Spring. 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) Spring. 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) Spring. Impact of French Revolution on society of Old Regime; formation of revolutionary creed; Great Revolution, Jacobin Republic, Thermidor; Napoleon and principles of 1789.

**HIST 367. Hitler's Germany: Rise and Fall of Nazism** (3) Fall. Major developments in Germany from defeat in 1918 through collapse in 1945 and recovery in Cold War era. Weimer Republic, Hitler, Third Reich, post-war reactions and conditions; keyed to causes and effects of Nazi totalitarianism and racism.

**HIST 370. The Soviet Union in the Twentieth Century** (3) Fall. 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) Fall. European historical development 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, militarism, communism; America's involvement in wars and peacemaking.

**HIST 382. Chinese Culture and Institutions** (3) Fall. 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) Spring. Higher culture in traditional Japan. Religion, visual arts, literature, theatre and uniquely Japanese arts. Political and institutional history as it relates to cultural development.

**ΔHIST 391. Special Studies in History** (1-3) Content and theme vary with instructor. Designed to meet needs and interest of nonmajors.

**ΔHIST 395. Workshop on Current Topics** (1-3) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format used. Requirements usually completed within time format. May be repeated if topics differ on approval of adviser.

**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) Fall. 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) Spring. 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) Spring. Political, economic and social development of Greater Antilles and Spanish Main from 17th to 20th centuries; war and trade, slavery, revolution, caudillism and communism in Caribbean.

**HIST 414. Canada** (3) Fall. 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 if Iberian peninsula from invasion of Moors to 20th century dictators; reconquest, reign of Hapsburgs, Spanish Civil Wars, regimes of Franco and Salazar.

**HIST 419. Westward Movement in America** (3) Fall. Development of Trans-Mississippi West during 19th century; American Indian, territorial expansion, sectional conflict, economic development.

**HIST 421. American Colonial History, 1492-1763** (3) Fall. 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) Spring. Causes, course and consequences of War for Independence; organization of government and emergence of national party system; economic, social, diplomatic problems of young republic.

**HIST 425. Conflict and Division in U.S.** (3) Fall. Economic, social, political institutions of 1815-1860; Old South and forces that produced Civil War.

**HIST 426. Civil War and Reconstruction, 1861-1877** (3) Spring. 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) Spring. Reconstruction South, new industrial growth, evolution of Southern agriculture, racial and labor problems. South in American political life, southern education and culture, South today.

**HIST 428. U.S., 1877-1917 Industrialization and Reform** (3) Fall. Transformation of U.S. from agrarian nation to industrialized society and attendant 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) Spring. Political, economic and 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) Fall. Politics: persistence and demise of the New Deal party system; congressional coalitions. Public policy: Fair Deal, Eisenhower Equilibrium, Great Society, Reagan Revolution. Society: Red Scare, prosperity and poverty, conformity, black struggle, student revolt, challenge to sexism, Middle America and reaction to protest.

**HIST 433. American Constitutional History** (3) Fall. 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 History** (3) Fall. Select topics in American social and emotional experience during 18th and 20th centuries: nationalism, regionalism, urbanization, immigration, ethnicity, professionalism, gender, childrearing, education, mental health.

**HIST 437. U.S. as World Power in 20th-Century** (3) Fall. American involvement in world affairs; imperialism in Asia and Latin America; World War I—response to German militarism and Russian communism; post-war "isolationism"; World War II—background to Pearl Harbor, wartime alliances, peace settlements.

**HIST 441. Classical Hellenism** (1000-400 B.C.) (3) Fall. 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 Atheno-Peloponnesian war.

**HIST 442. Roman Revolution: From Gracchi Through Caesar Augustus** (3) Spring. 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) Spring. 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) Fall. Comparative study of European societies in an age of transition. Renaissance, Reformation, growth of absolutism and constitutionalism, economic expansion, social change, intellectual development and emergence of baroque art forms.

**HIST 448. Modern European Society and Thought** (3) Spring. 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) Fall. Foreign policies and diplomatic practices of the great powers and their statesmen: World War I, postwar quest for stability; World War II, Europe in the Cold War; contemporary problems.

**HIST 458. England, 55 B.C.-1689** (3) Fall. 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, 17th-century civil war and revolution.

**HIST 459. Great Britain, 1689-Present** (3) Spring. Growth of parliamentary government; impact of the Enlightenment, French Revolution and industrialization; Victorian England; political and economic reform; two world wars and their consequences.

**HIST 462. British Empire-Commonwealth** (3). 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) Spring. Social and economic development of France, 1815-Third Republic; Jacobin radicalism, emergence of French labor movement; France between two world wars; Vichy and the Resistance; problems of Fourth and Fifth Republics.

**HIST 469. Medieval and Imperial Russia, 900-1825** (3) Fall. Radical, political and religious origins; development of autocracy; national and imperial problems to death of Alexander I.

**HIST 470. Modern Russia, 1825-Present** (3) Spring. 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) Fall, Spring. 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) Spring. China's modern transformation from the Confucian empire to the socialist nation of one billion people. Culturalism, nationalism, Marxism and Communism; China's cultural legacy, problems of modernization; China's relations with the West.

**HIST 486. Japan: New Superstate** (3) Spring. 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) Fall, Spring. 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) Fall, 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) Fall, even years. Home economics: the profession, the role of the educator and understanding students; development of educational strategies including peer teaching through field and clincial experiences. One hour of seminar and three hours of experience in a professional setting.

**HOEC 311. Family Resource Management** (3) Spring, even years. Integration and application of concepts; processes and principles of family resource management within household environment. Four hours lecture/lab plus arranged. Prerequisites: HOEC 205 and F&N 307. Lab fee.

**HOEC 352. Vocational Home Economics in Secondary Schools** (3) Fall, 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 Vocational Job Training Program** (3) Spring, even years. Techniques of teaching, occupational analysis, curriculum planning and supervision of cooperative education in school programs and in vocational and technical schools. No S/U grade for home economics education majors. Prerequisites: HOEC 250; HEOC 352 prerequisite or concurrent.

**HOEC 354. Curriculum Management in Home Economics** (2) Spring, odd years.nd. Field experience and coordinated seminar examining curriculum management as it differs in urban, suburban or rural schoools. 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 Economics** (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 certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs: 300. May be repeated. Graded S/U.

## Honors Program (HNRS)

**HNRS 201. Evaluating Social Controversies** (5) Fall, Spring. Interdisciplinary inquiry in social sciences. Analysis of arguments through assumptions, ambiguity, data and fallacies; formulation of conclusions and alternative inferences; value assumptions and decision making.

**HNRS 240. Honors Seminar: Social Sciences** (4) Fall. Interdisciplinary social sciences seminar that integrates at least two different social sciences. Content and skills will relate to both specific disciplines and social sciences in general. Satisfies social science group requirement. Prerequisite: admission to the honors program or permission of honors director.

**HNRS 260. Interdisciplinary Humanilte Seminar** (3) Spring. Integrates at least two different humanities. Content and skills will relate to both specific disciplines and humanities in general. Satisfies humanities group credit. Prerequisite: admission to the honors program or permission of the honors director.

**HNRS 300. Special Topics Seminar** (1-3) Fall, Spring. On demand. Subject matter varies. These special seminars are elective courses that are designed to meet the interest and curiostiy of honors student. Prerequisite: approval of honors director. May be repeated up to six hours if topics differ.

**HNRS 400. Speical Topics Seminar** (1-3) Fall, Spring on dmeand. Subject matter varies. Special seminars are elective courses designed to meet the interest and curiosity of honors students. Prerequisite: approval of honors dircector. May be repeated to six hours if topics differ.

**HNRS 499. Honors Interdisciplinary Thesis** (3) Fall, Spring, Summer. Student selects two faculty from different disciplines to advise the work on a research or creative project that draws upon the knowledge and skills from at least two disciplines. Prerequisites: Senior standing with at least a 3.5 GPA.

## Human Development and Family Service (HDFS)

**HDFS 105. Personal and Family Relationships** (3) Fall, Spring. Growth and development of college student as individual and in social relationships in family, college, community; activities and functions of present-day family.

**HDFS 107. Black Families in America** (3) Fall, Spring. Living patterns of the American black family: historical development, present status, strengths, problems and prognosis.

**HDFS 120. Survey of Child and Family Community Services** (3) Fall, Spring. 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) Fall, Spring. 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) Spring. Learning about the development of young children as individuals and in groups using observation and other data gathering techniques.

**HDFS 224. Program Planning for Young Children** (3) Fall, Spring. Play, materials, methods for enhancing development of children under six. Planning, implementing and evaluating experiences and activities with groups of young children. C/F hours: 50.

**HDFS 302. Foundations of Marriage and Family Relations** (3) Fall, Spring. Development of basic understanding of marriage and family relationships in a democratic society. Emotional, psychological and physical aspects of dating and marriage; family interrelationships. Prerequisites: HDFS 105 or SOC 101; junior or senior standing.

**HDFS 305. Integrating Career and Family** (3) Fall, Spring. 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.

**ΔHDFS 320. Infant and Toddler Development** (3) Fall. Growth and development of infants and toddlers from conception to two years. Developmental theories and characteristics. Implications for enhancing development. C/F hours: 15.

**HDFS 321. Child Development** (3) Spring. Physical, emotional, social and cognitive development of children from conception to school age, emphasis on ages 2-6. Developmental theories; influences of family, peers and society.

**HDFS 322. Child Development Practicum** (3) Fall, Spring. Supervised participation with preschool children. Two hours seminar and six hours of lab. Must apply in the Child Development Center office during preregistration for class enrollment. Prerequisites: HDFS 224 and 321 or EDFI 342. C/F hours: 120.

**HDFS 328. Preadolescent and Adolescent in Family and Community** (3) Fall. Development and socialization of preadolescents and adolescents; youth growth, culture and potential problems. Focus on family and peers. A review of research relevant for intervention or service programming. Prerequisite: HDFS 105 or consent of instructor.

**HDFS 407. Research in Human Development and Family Studies** (3) Fall, Spring. Research methodology: completing a research project on a topic of the student's choice in the area of human development and family studies. Prerequisite: junior or senior standing.

**HDFS 408. Minority Families in American Society** (3) Spring. Investigation of family patterns among racial, ethnic, and cultural minority groups in the United States. Theoretical analysis of minority family systems. Prerequisite: junior or senior standing.

**HDFS 421. Parenting and Parent Education** (3) Fall, Spring. Theories related to process of parenting and interactive effects of parent-child relationships including its impact on roles of professionals. Strategies for working with parents explored. No prerequisites.

**HDFS 422. Cognitive Development of the Young Child** (3) Fall, 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) Spring. 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) Fall. Infants' and children's efforts to 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) Fall. 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) Fall. 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) Spring. 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) Spring. Interrelationships of areas of human sexuality and family development/interaction. Intended 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) Spring. The family in the middle and later years, with emphasis on relationship between spouses, and with children and grandchildren. Identification and critical analysis of factors associated with success and problem areas for such families.

**HDFS 491. Pre-kindergarten Student Teaching** (1-12) Spring. 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) Spring. Experience of art including music, film, theatre, literature, dance, painting, sculpture, architecture, philosophy and the combined arts.

**†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 if topics differ. Prerequisite: HUM 101 or consent of instructor.

## Interpersonal and Public Communication (IPCO)

**ΔIPCO 102. Speech Communication** (3) Fall, Spring, Summer. Basic principles of interpersonal, small-group and public communication; field of speech communication with attention to individual needs.

**ΔIPCO 201. Human Communication** (3) Fall, Spring. Summer. Development of theoretical formulations in speech communication. Emphasis on special heuristic (not general explanatory) theories which focus on relationship factors, as well as speaker and message aspects. Interdisciplinary perspectives utilized. Prerequisite: IPCO 102.

**ΔIPCO 203. Small Group Communication** (3) Fall, Spring, Summer. Theory and practice in the analysis of social interaction in small groups as it affects problem solving and policy formation processes. Mass lecture plus lab sections. Prerequisites: IPCO 102 and IPCO 201.

**ΔIPCO 205. Public Speaking** (3) Fall, Spring. Principles of public communication composition and public speaking, including practice. Prerequisites: IPCO 102 and IPCO 201.

**IPCO 207. Interpersonal Communication I** (3) Fall, Spring, Summer. Introduction to dyadic communication with a focus on factors which influence effectiveness. Practical experience in behaviors associated with interpersonal competence. Prerequisites: IPCO 102 and IPCO 201.

**IPCO 208. Simulation of Organizational Communication** (3) Assessment and development of communication skills and practices prevalent in contemporary profit and non-profit organizations. Direct participation in a simulation of organizational communication. Prerequisites: IPCO 102 and 201.

**IPCO 303. Persuasive Communication** (3) Fall, Spring, Summer. Theories and concepts of persuasive communication; attitude change, audience analysis and strategies of persuasion. Prerequisites: IPCO 102 and IPCO 201.

**IPCO 304. Leadership in Group Communication** (3) Fall. 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 201.

**ΔIPCO 306. Interpersonal Communication** (3) Fall, Spring, Summer. Two-party communication, reduction of defensive climates as means of facilitating effective communication. Practical experience in information seeking, persuasive and personal encounters. For nonmajors only.

**IPCO 307. Speech Communication in Organizations** (3) Fall, Spring, Summer. Message initiation, diffusion and reception in organization setting. Function and conduct of meetings, including both parliamentary procedure and relationships to organizational settings. Prerequisites: IPCO 102 and IPCO 201.

**IPCO 308. Argumentation** (3) Fall, Spring, Summer. Principles of argumentation; case analysis and construction; practice in forms of debating using comtemporary topics. Prerequisites: IPCO 102 and IPCO 201.

**IPCO 395. Workshop on Current Topics** (1-3) 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 201.

**IPCO 403. Assertiveness** (3) Fall, Spring. 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** (3) 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) Fall, Spring, Summer. Selected topics or subject areas within the field of communication, marital communication, legal speaking, assertiveness and nonverbal communication. May be repeated.

**IPCO 407. Interpersonal Communication II** (3) Fall, Spring, Summer. Extended analysis of current theoretical positions and research in interpersonal communication. Topics include social exchange, rules, attribution, attraction, relational stages, power, impression formation and management. Prerequisite: IPCO 102, 201, and IPCO 207 or 306.

**IPCO 489. Communication Internship** (1-10) Fall, Spring, Summer. 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 201.

**IPCO 490. Problems in Interpersonal and Public Communication** (1-3) Fall, Spring. For advanced student who wishes to do intensive study in rhetoric, public address or communication studies independently or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of department. Prerequisites: IPCO 102 and IPCO 201.

## Italian (ITAL)

Students who had Italian 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.

**ITAL 101. Elementary Italian I** (4) Fall. Cultural approach to beginning language. Development of the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.

**ITAL 102. Elementary Italian II** (4) Spring. ITAL 101 continued. Four class periods and laboratory practice each week. Prerequisite: ITAL 101 or one year of Italian in high school.

**ITAL 201. Intermediate Italian I** (3) Fall. Grammar review. Development of the four skills. Three class periods and laboratory practice each week. Prerequisite: ITAL 102 or two years of Italian in high school.

**ITAL 202. Intermediate Italian II** (3) Spring. ITAL 201 continued. Three class periods and laboratory practice each week. Prerequisite: ITAL 201 or three years of Italian in high school.

**ITAL 261. The Italian Cinema** (3). Modern Italian culture and literature movements and their expression in cinema; demonstrates close relationship between literature and cinema. In English.

**ITAL 351. Italian Composition and Conversation I** (3). Improvement of oral and written skills; emphasis on composition. Prerequisite: ITAL 202.

**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)

**¶JAPN 101. Elementary Language and Culture I** (4) Fall. Introduction to modern spoken Japanese. Four class periods and scheduled oral practice each week.

**¶JAPN 102. Elementary Language and Culture II** (4) Spring. JAPN 101 continued. Four class periods and scheduled oral practice each week. Prerequisite: JAPN 101 or equivalent.

**¶JAPN 201. Intermediate Japanese I** (4) Fall. JAPN 101-102 continued. Conversation, writing, reading, grammar. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 102 or equivalent.

**¶JAPN 202. Intermediate Japanese II** (4) Spring. JAPN 201 continued. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 201 or equivalent.

**JAPN 301. Third Year Japanese I** (3). JAPN 201-202 continued. Development of the four skills. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 202 or equivalent.

**JAPN 302. Third Year Japanese II** (3) Spring. JAPN 301 continued. Three class periods and scheduled oral practice each week. Prerequisite: JAPN 301 or equivalent.

**JAPN 480. Selected Topics in Japanese** (1-3) On demand. Topics chosen from Japanese literature, culture or thought to meet curriculum needs and student requests. May be repeated to six hours with different topics.

**JAPN 491. Studies in Japanese** (1-3). On demand. Independent reading for the advanced student. Prerequisite: arrangement with instructor and consent of department chair prior to registration.

## Journalism (JOUR)

**ΔJOUR 103. Introduction to Mass Communication** (3) Fall, Spring, Summer. 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.

**JOUR 203. History of Journalism** (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) Fall, Spring. 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.

**†JOUR 291. Foundations of Journalism** (1-3) Fall, Spring. 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) Fall, Spring, Summer. Practice in the elementary forms of newspaper, magazine, broadcast and public relations writing; emphasis on grammar, spelling, punctuation and sentence structure. Prerequisites include completion of at least 30 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 earned in the aforementioned course work at the time of admittance into JOUR 300, as well as a minimum grade of C in JOUR 103. This course is reserved for pre-journalism majors and exceptions approved by the Department of Journalism. Application for this course must be made at the journalism office, 319 West Hall.

**JOUR 301. Journalism Techniques for Non-Majors** (3) Fall, Spring. Introduction to news gathering, news writing, news editing and journalistic graphics for non-journalism majors whose programs might benefit from such a course. Not open to those who are presently journalism majors. Does not serve as a prerequisite to other journalism classes. Prerequisite: completion of freshman English composition requirements.

**JOUR 302. Copy Editing** (3) Fall, Spring. Theory and practice in editing local and wire news, headline writing, picture editing, evaluating news, layout and design, video display terminal operation. Prerequisites: Major or minor status; junior standing. Lab fee.

**JOUR 303. Editing Specialized Publications** (3) Fall, Spring, Summer. 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: Major or minor status; junior standing. Lab fee.

**JOUR 304. Feature Writing** (3) Fall, Spring. Discovering, researching and writing the newspaper feature story and short magazine article. Prerequisites: Major or minor status; junior standing. Lab fee.

**JOUR 305. Photojournalism Editing** (3) Spring. Assignment, selection, preparation and display of photographs for publication, especially in newspapers, magazines and newsletters. Prerequisites: Major or minor status; junior standing. Lab fee.

**JOUR 307. Advanced Photojournalism** (3) Fall. 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) Fall, Spring. 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: Major or minor status; junior standing. Lab fee.

**JOUR 312. Reporting of Public Affairs** (3) Fall, Spring. 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) Fall, Spring. 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: Major or minor status; junior standing. Recommended: broadcast production course in RTVF. Lab fee.

**JOUR 331. Advanced Radio/Television News** (3) Fall, Spring. 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 Relations** (3) Fall, Spring. 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) Fall, Spring. Public relations writing skills for business and nonprofit organizations. Prerequisites: Major or minor status; junior standing. Lab fee.

**JOUR 402. Journalism Law and Ethics** (3) Fall, Spring, Summer. Legal concept of freedom of the press, constitutional guarantees, libel, privacy, copyright, broadcast regulation, contempt, obscenity, ethical problems, right to know. Open to non-majors.

**JOUR 403. The Editorial** (3) Fall. Techniques of persuasive and critical writing and the role of editorial opinion in modern mass media. Prerequisites: Major or minor status; junior standing.

**JOUR 404. Magazine Article Writing** (3) Fall, Spring. Searching for story ideas, analyzing magazine markets, researching subject matter, writing and polishing stories. Prerequisite: JOUR 304.

**JOUR 407. Color Photography** (3) Spring. 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) Fall, Spring, Summer. Journalism internship program required of all journalism majors and minors. Activity may be in more than one medium, full or part time, paid or 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; JOUR 300 and major or minor status; junior standing. Graded S/U.

**JOUR 414. Supervision of High School Publications** (3) Spring. 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 Journalism** (3) Fall, Spring. 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) Spring. 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) Fall, Spring. 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 broadcast quality. Prerequisite: C or better in JOUR 331. Lab fee.

**JOUR 431. Interpretive Reporting** (3) Fall. 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) Spring. 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) Fall. 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) Fall, Spring, Summer. Press as institution, its role, content, effects and responsibilities as a cultural force in society. Open to non-majors.

**JOUR 440. Public Relations Campaigns** (3) Fall, Spring. Application of public relations theories, tools and techniques to the public relations campaign. Research, planning and execution are practiced. Prerequisites: senior status in the public relations sequence and C or better in JOUR 303, 340 and 380.

**JOUR 470. International Press Systems** (3) Fall. Social, economic and political factors, organization and control in the national news and informational systems of countries around the world. Open to non-majors.

**JOUR 471. International Media Networks** (3) Spring. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. Research problems, practical projects, intensive reading or mini-courses to meet needs of student's 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.

**¶LAT 101. Elementary Latin I** (4) Fall. Cultural approach to beginning language. Development of the four skills: listening, speaking, reading, writing. Four class periods and laboratory practice each week.

**¶LAT 102. Elementary Latin II** (4) Spring. LAT 101 continued. Four class periods and laboratory practice each week. Prerequisite: LAT 101 or one year of Latin in high school.

**LAT 141. Great Greek Minds** (3) Fall. 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) Spring. 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.

**¶LAT 201. Intermediate Latin I** (3) Fall. Grammar review. Development of the four skills. Three class periods and laboratory practice each week. Prerequisite: LAT 102 or two years of Latin in high school.

**¶LAT 202. Intermediate Latin II** (3) Spring. LAT 201 continued. Three class periods and laboratory practice each week. Prerequisite: LAT 201 or three years of Latin in high school.

**LAT 351. Latin Prose Composition I** (3). Developing increased ability to understand structural pecularities of classical Latin. Prerequisite: LAT 202.

**LAT 352. Latin Prose Composition II** (3). Developing increased ability to understand structural pecularities 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) Fall, Spring. 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) Fall. 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 humanities requirement; no Greek required. No credit for both LAT 141 and 485.

**LAT 486. Latin Literature in English** (3) Spring. 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 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) Spring. 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)

**ΔLEGS 200. Perspectives of American Law** (3) Fall. Thematic case study of family law, property, privacy, torts, criminal law and other areas which explain social forces that give substance to American law, analysis and reasoning behind court decisions. Prerequisite: 30 hours.

**ΔLEGS 301. Business Law and the Legal Environment** (3) Fall, Spring, Summer. The fundamentals of the structure of the American legal system, contracts, torts and selected topics related to the legal environment of business. Prerequisite: junior standing.

**LEGS 305. Comparative Legal Philosophy** (3) Fall. Legal philosophy and comparative law using legal systems of Western, Communist and developing countries as models; treatment of commercial obligations and constitutional rights within different legal systems.

**LEGS 401. Law of Business Relationships I** (4) Fall. Legal environment of business relationships; includes study of contracts, sales, professional responsibility and commercial paper. No credit for students who have taken LEGS 301. Recommended for accounting students planning on taking the CPA examination.

**LEGS 402. Law of Business Relationships II** (4) Spring. Commercial law including secured transactions, bankruptcy, bailments, agency, partnership, corporation, insurance, trusts and wills. Prerequisite: LEGS 301 or 401. Recommended for accounting students planning on taking the CPA examination.

**LEGS 406. International Business Transactions** (3) Spring alternate years. Legal problems faced by individual and corporate business persons when operating within international framework. Methods of control of multinational corporate entities, effect of doing business as national or foreign firm, and act of state doctrine relating to expropriation of assets of foreign firm.

**LEGS 410. Business, Individuals and the Constitution** (3) Fall. An analysis of economic and individual rights of U.S. citizens and businesses and of the relationship between state and federal governments. Topics of current constitutional import will be featured. Prerequisite: Junior standing.

**LEGS 413. Trusts and Estates** (3) Fall alternate years. Execution, administration, revocation of wills and trusts, guardianships, life insurance estates; insurance law relating to estates, their protection, and liability; role of wills and trusts in distribution of wealth. Prerequisite: LEGS 301 or 401.

**LEGS 414. Liability Law** (3) Fall alternate years. History and development of modern concepts in areas of privacy, product and service liabilities, legal problems in advertising, responsibility to work force, and ecology.

**LEGS 415. Realty Law** (3) Spring. Creation of property rights; acquisition, transfer of realty; deeds and mortgages as security devices and their economic implications; landlord-tenant relations and economic role of leasehold interests.

**LEGS 419. Employment Law I** (3) Spring. A discussion of federal and state labor laws regulating (a) labor union and management relationships, (b) plant closings, (c) safe and healthy working environment, (d) employment of immigrants and aliens, (e) privacy (polygraph usage and drug testing) in the work place, (f) employment at will and for term, and (g) wrongful discharge. Prerequisite: Junior standing.

**LEGS 421. Government Regulation of Business** (3) Spring. Regulation of business and policy implications for public; antitrust, trade practices and securities regulation.

**LEGS 423. Computer and Technology Law** (3) Fall. Developing law concerning computers and technology, including acquisition of computer hardware and software, remedies for failure of a computer system, computer crime, privacy, liability and intellectual property.

**LEGS 425. Health Care Law** (3) Fall. Public-private constraints in foundation health agencies; experimentation and risk assumption; agency and independent contract liability; reasonable standards of care doctrines; governmental regulations.

**LEGS 429. Employment Law II** (3) Spring. A discussion of laws focusing on the prohibition of discrimination and harassment on the basis of race, color, national origin, sex, religion, age and handicap, and veterans; and on wage and salary discrimination using equal pay and comparable worth analysis. Prerequisite: Junior standing.

**LEGS 431. Environmental Law** (3) Spring 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) Spring. Legal analysis of the state and federal laws regulating the purchasing, sale and marketing of goods and services. Regulations involving corporate procurement and marketing functions as well as consumer rights and remedies emphasized. Prerequisite: LEGS 301 or 401.

**LEGS 450. Hospitality Law** (3) Spring. Legal regulations, duties, liability and relationships of persons and businesses engaged in the food service, restaurant, hotel/motel and hospitality industries.

**LEGS 490. Legal Research and Drafting Seminar** (3) Spring. Legal research and drafting seminar that requires use of all types of legal resources. Series of projects to develop competencies in legal research and drafting.

**LEGS 491. Studies in Business Law** (1-3). 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) Fall, Spring, Summer. For student in business administration who wishes to pursue supervised independent program of reading and study. Prerequisite: 3.0 accumulative GPA, or consent of department.

## Library and Educational Media (LEM)

**LEM 203. Introduction to Librarianship** (3) Fall, Spring. 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) Fall, Spring, Summer. Selection, operation and utilization of common classroom educational media. Lecture; discussion/questioning; problem solving; laboratory; practice/drill. Prerequisite: to follow EDFI 302. C/F hrs.: 16.

**LEM 395. Workshop in Educational Media** (1-2) On demand. Study, readings and development of materials to meet the needs of practitioners. Topics vary from offering to 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; role-playing; 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 materials 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/answering; problem solving; laboratory. Prerequisite: LEM 301 or 428 or consent of instructor. C/F hrs.: 20.

**LEM 434. Individualizing Instruction with Educational Media** (3). The application of educational technology (equipment, materials and instructional design techniques) to the conceptual and operational aspects of individualized instruction. Lecture; viewing/listening/answering; problem solving; independent learning/self-instruction. Prerequisite: LEM 301 or 428 or consent of instructor. C/F hrs.: 20.

**LEM 438. Selection, Maintenance and Repair of Media Equipment** (3). The role of the teacher and media specialist in selection, maintenance and repair of classroom media equipment at building level. Lecture; practice/drill; laboratory; independent learning/self-instruction; problem solving; discover. Prerequisite: LEM 428 or consent of instructor. C/F hrs.: 20.

**LEM 441. Storytelling** (3) Fall. 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/answering; 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/questioning; practice/drill; problem solving; practicum; role-playing. Prerequisite: just prior to student teaching. C/F hrs.: 20.

**LEM 455. Instructional Media in Industry, Business and Government** (3). Selection and utilization of instructional media in non-school 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) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

**LEM 497. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. C/F hrs.: 300. May be repeated. Graded S/U.

## Linguistics (LING)

**LING 310. Introduction to Linguistics** (3) Spring. Nature of languages and human communication; principles and procedures for analyzing and describing languages; language change and variation. Prerequisite: sophomore standing.

**LING 490. Special Problems in Linguistics** (2-3) On demand. Theories and applications of linguistics studies or problems in languages, literatures, psychology, speech and other related fields. Prerequisite: LING 310.

## Management (MGMT)

**ΔMGMT 300. Introduction to Production and Operations Management** (3) Fall, Spring, Summer. Fundamentals of management of operations of firm; design of production systems, operation, coordination and control of production activity; major analytical tools for management. Prerequisite: STAT 212 or equivalent.

**MGMT 305. Principles of Organization and Management** (3) Fall, Spring, Summer. Fundamentals of organization theory; objectives, policies, decision-making, authority, management development, leadership, communication, motivation and

effective human relations to management principles. No credit allowed toward BSBA degree.

**MGMT 330. Purchasing Management** (3) Fall, Spring, Summer. Introduction to the general area of purchasing and materials management with in-depth coverage of selected topical areas. A general overview of the purchasing cycle is provided along with short term operational considerations of managing this functional group. The critical components of sourcing decisions, contract and legal terms and conditions, the purchase process for capital equipment and disposition of surplus and waste materials are also covered. Prerequisite: MGMT 300 (concurrent registration in MGMT 300 permitted with instructor approval).

**MGMT 360. Organizational Theory and Behavior** (3) Fall, Spring, Summer. 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, and organization structure. Prerequisite: STAT 212.

**MGMT 361. Human Resource Management** (3). Fall, Spring, Summer. Survey of human resource management activities designed to attract, retain and motivate qualified employees, including such functions as human resource planning, staffing, appraising performance, compensation, training and development, labor relations, health and safety, and compliance with government requirements. Prerequisites: MGMT 360 or MGMT 305 (concurrent registration in MGMT 360 or MGMT 305 permitted with instructor approval).

**MGMT 430. Advanced Purchasing Management** (3). Fall, Spring. Advanced topics in purchasing. Product-related issues of design, specifications, and price/cost are examined in detail. Special issues relating to government and institutional purchasing. Operational aspects of materials transportation, receiving, inspection, and warehousing. Computer applications and purchasing information systems. Prerequisites: MGMT 300 and MGMT 330 (concurrent registration in MGMT 330 permitted with instructor approval).

**MGMT 439. Purchasing and Materials Management Problems** (3). Fall, Spring. Capstone course integrating principles from other required courses in the area of purchasing and materials management; lectures, case discussions, simulations and research projects used for instructional purposes. Prerequisites: MGMT 330 and 430. Admission to purchasing specialization required.

**MGMT 441. Process and Quality Management** (3). Fall, Spring. Effective design of production systems including long-term capacity planning, process selection, and alternative measures of system performance. Quality management in production systems and its impact on the competitiveness of the firm in domestic and world markets. Prerequisite: MGMT 300.

**MGMT 442. Materials Management Systems** (3). Fall, Spring, Summer. Focus on material needs determination and the study of traditional theories and techniques of inventory control. Current inventory methodology such as kanban systems and just-in-time concepts are also studied. Broad range of inventory control problems covered. Prerequisite: MGMT 300.

**MGMT 445. Production Planning and Control** (3). Fall, Spring. Production planning and control processes including: intermediate range scheduling such as aggregate planning and master scheduling; short range production scheduling such as job shop scheduling; capacity planning and control such as rough-cut capacity planning and capacity requirements planning; material planning and control using material requirements planning; project scheduling with resource constraints. Prerequisite: MGMT 300.

**MGMT 449. Problems in Production and Operations Management** (3). Fall, Spring, Summer. Integrates principles, theories and techniques gained from previous courses in production and operations management to provide a broad perspective for the efficient and effective management of operations in both manufacturing and service organizations. Case studies, group projects and presentations, and integrative simulation models are used for instructional purposes. Prerequisites: MGMT 445 and either MGMT 441 or 442 Admission to production specialization required.

**MGMT 452. Human Resource Management in the Hospitality Industry** (3). Fall. Concepts and skills involved in staff planning, selection, placement, appraisal and development of personnel in the hospitality industry. Prerequisites: MGMT 360 and completion of 400 hours of practicum. Admission to the BSBA program.

**MGMT 454. Managing the Employment Process** (3). Fall. Current practices and recommended methods for providing an organization with the human resources needed to meet organizational goals. Emphasis on application of relevant theories. Major topics include quantitative methods and computer utilization in employment, job analysis; human resource planning, recruiting, selection, training, and government regulation of employment practices. Prerequisite: MGMT 361 (concurrent registration in MGMT 361 permitted with instructor approval).

**MGMT 455. Managing the Compensation Process** (3). Spring. Current practices and recommended methods in the establishment of base pay, incentive pay, and employee benefits and services. Government regulations concerning pay, job analysis and job evaluation, wage surveys, pay structure design, pay for performance, benefits and services, pay administration, and the issue of comparable worth. Prerequisite: MGMT 361 (concurrent registration in MGMT 361 permitted with instructor approval).

**MGMT 456. Managing Productivity Measurement and Improvement** (3). Spring. Major ideas, skills and activities involved in the study, measurement and improvement of organizational productivity. Focus on developing student's ability to analyze and critique existing organizational systems and to create or modify organizational systems in order to improve individual, team and organizational performance. Stresses understanding and application of contemporary performance improvement strategies. Prerequisite: MGMT 361 (concurrent registration in MGMT 361 permitted with instructor approval).

**MGMT 463. Organization Theory, Analysis and Design** (3). Fall, Spring. Organizational variables and processes which influence the overall design and functioning of organizations. Investigates traditional and contemporary theories of organization such as systems theory, social construction, political models, information processing and population ecology. Prerequisite: MGMT 360 or MGMT 305 (concurrent registration in MGMT 360 or MGMT 305 permitted with instructor approval).

**MGMT 465. Organization Development Theory and Technology** (3). Fall. 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. Emphasizes understanding, measuring, and improving organization culture. Prerequisite: MGMT 360.

**MGMT 468. Organization Development Field Experience** (3) Spring. An integrative and applied course designed to allow students to develop and apply skills in diagnosing organizations, designing interventions and carrying out change in organizations. Prerequisite: MGMT 465.

**MGMT 489. Internship** (1-3) Fall, Summer. Experience in approved business position. Student participates in seminar to formally evaluate work experience. Must be arranged in advance and approved by coordinator. Work experience must be completed within one year of acceptance into program. No credit for students with credit from any similar program in College of Business Administration. Graded S/U.

**MGMT 491. Studies in Management** (1-3) On demand. Selected areas not covered by existing courses but which are developing rapidly as important parts of discipline. Offered to individual on lecture basis or in seminar, depending on student need and course content. May be repeated to six hours.

**MGMT 495. Readings for Honors in Management** (1-3) Fall, Spring, Summer. For superior student who desires individual reading program to broaden knowledge of management literature on semi-independent basis. Prerequisite: academic standing in upper 20 percent of class.

## Management Information Systems (MIS)

**ΔMIS 200. Introduction to Management Information Systems** (3) Fall, Spring, Summer. 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.

**MIS 360. Introduction to Systems Concepts** (3) Fall, Spring, Summer. Introduction to the general concept of a system and to systems theory, the system life-cycle and system development processes; emphasis is on application to business-oriented information systems. Prerequisite: MIS 200.

**MIS 370 Database Management** (3) Fall, Spring. 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) Fall, Spring. Provides the student with skills necessary to conceptualize, design and implement decision support systems (DSS) and expert systems (ES) in organizations; includes the use of a variety of software in creating DSS and ES. Prerequisite: MIS 360.

**MIS 421. Business Data Communication and Distributed Processing** (3) Fall, Spring. 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) Fall, Spring. 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) Fall, Spring. Survey of area of A.I. with an emphasis on business decision making. Students will do a project utilizing an A.I. language or Shell. Prerequisite: MIS 200 or permission of instructor.

**MIS 471. Systems Analysis and Design** (3) Fall, Spring. 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.

**MIS 479. Information Resource Management.** (3) Fall, Spring. 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) Fall. To be completed at first opportunity following suitable internship experience. Work experience to be preceded by at least 70 hours of academic credit. No credit for students with other internship credit in College of Business Administration. 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.)

**ΔMFG 112. Introduction to Manufacturing Processes and Systems** (3) Fall, Spring, Summer on demand. Technology of the manufacturing enterprise. Production materials and methods, manufacturing planning, organizing and controlling. Two one-hour lectures and one two-hour laboratory per week.

**†MFG 134. Time Study** (4) Fall, Spring. Responsibilities of a time study technician and equipment utilized; emphasis on performance, rating, coducting a time study, determining allowances, work sampling.

**†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 plactics processing plants. Two hours lecture; three hours laboratory. Prerequisite: MFG 113.

**†MFG 213. Manufacturing Processes II** (3) Spring 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.

**†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.

**ΔMFG 222. Metallic Materials and Processes I** (3) Fall. A survey of metallic machining practices. Laboratory applications and techniques are studied. Two one-hour lectures and one two-hour laboratory per week. Prerequisites: MFG 112.

**†MFG 225. Plastic Materials and Processes** (3) Spring. Identification, properties, characteristics and selection of plastic materials. Set-up and operation of plastic processing equipment. Two hours lecture and two hours laboratory. Prerequisite: MFG 112 or permission by instructor.

**ΔMFG 229. Metallic Materials and Processes II** (3) Spring. A survey of hot metal forming and combining practices. Laboratory applications and techniques are studied. Two one-hour lectures and one two-hour laboratory per week. Prerequisite: MFG 112.

**†MFG 243. Quality Control** (3). Quality assurance; product reliability; acceptance, attribute, and variable sampling; control charts as related to quality control. Prerequisites; MFG 112 and 223, and MATH 115 or STAT 200 or 211, or permission of instructor.

**†MFG 290. Problems in Manufacturing Technology** (3) on demand. For advanced students wanting to conduct intensive study of selected problems in manufacturing technology. May be repeated up to 3 hours. Prerequisites: sophomore standing and consent of instructor.

**MFG 322. Non-Metallic Materials and Processes I** (3) Spring. Wood, reconstructed wood, and ceramic materials, processing methods, and product applications. One two-hour lecture and one two-hour laboratory. Prerequisite: MFG 112.

**MFG 326. Quality Assurance** (3) Spring. 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. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MATH 126, or equivalent, STAT 200, TECH 289 and two of the following courses: MFG 222, 229, 322 or 329.

**MFG 327. Manufacturing Engineering Applications** (3) Fall. Work measurement, methods design, motion economy, process

analysis, plant layout, and material handling applications in industry. One two-hour lecture and one two-hour laboratory per week. Prerequisites: TECH 289 and two of the following courses: MFG 222, 229, 322 or 329.

**MFG 328. Metrology, Inspection and Gauging** (3) Fall, Spring on demand. The study of metrology, inspection and gauging systems including major characteristics and relationships. Emphasis is on technology of inspection for process control and product acceptance. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MFG 222, 229 and 326 or permission of instructor.

**MFG 329. Non-Metallic Materials and Processes II** (3) Fall. Identification, properties, characteristics and selection of plastics materials. Set-up and operation of primary and secondary plastics processing equipment. One two-hour lecture and one two-hour laboratory. Prerequisite: MFG 112.

**MFG 424. Manufacturing Systems** (3) Fall, Spring on demand. Production methods, process equipment, tooling, organization and control employed in manufacturing industries. One two-hour lecture and one two-hour laboratory per week. Prerequisites: Two of the following: MFG 222, 229, 322 or 329.

**MFG 428. Automation and Computer Integrated Manufacturing** (3) Spring. Automation and computer integrated manufacturing, including ergonomics, planning, organization, management, numerical control, computer control, robotics, computer-aided design and computer-aided manufacturing. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MFG 112, CS 101 or MIS 200.

**MFG 438. Materials and Metallurgy** (3) Fall. Metallurgical structure and its effects on properties of ferrous and nonferrous metals and alloys. Conditioning of properties of metallic and non-metallic materials to affect their selection and performance in industrial products. One two-hour lecture and one two-hour laboratory per week. Prerequisites: MFG 222 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: Senior standing and consent of department.

## Marketing (MKT)

**ΔMKT 300. Principles of Marketing Management** (3) Fall, Spring, Summer. Introduction to the discipline. Topics include 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 than MATH 124. (NOTE: These prerequisites apply to all students.)

**MKT 400. Topics in Marketing** (1-3) Fall, Spring. Selected areas not covered in depth by existing courses but which are developing as an important part of marketing. Offered on lecture basis or in seminar, depending on student demand and course content. Typical topics, which may vary from semester to semester, could include nonprofit marketing; demand analysis and forecasting; distribution systems; product (brand) management; or pricing strategies. May be repeated to 6 hours. Prerequisites: depending upon course content, prerequisites in addition to MKT 300 may be required.

**MKT 402. Buyer Behavior** (3) Fall, Spring, Summer. 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) Spring. 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) Fall, Spring, Summer. 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) Fall, Spring. 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) Fall, Spring. 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) Fall, Spring, Summer. 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) Fall, Spring. 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) Fall, Spring, Summer. Evolution, organization and operation of retailing; a managerial emphasis is maintained. Prerequisite: MKT 300.

**MKT 436. Retail Merchandising** (3) Fall, Spring. 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) Fall, Spring, Summer. 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.

**ΔMKT 442. Sales Management** (3) Fall, Spring, Summer. 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) Fall, Spring. 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 455. International Marketing** (3) Fall. Spring. Theory and practice of marketing cross national borders as well as marketing within different foreign environments, highlighting the similarities and differences among various countries and regions. Special attention to the marketing structure and strategies of global coroporations. Prerequisites: MKT 300 and BA 390 (BA 390 may be taken concurrently).

**MKT 460. Strategic Marketing** (3) Fall, Spring, Summer. 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. Admission to the BSBA program.

**MKT 489. Marketing Internship** (1-3) Fall, Spring, Summer. Work in approved business position; credit determined by quality and extent of work experience. Not open to freshmen and sophomores. No credit for students with credit for ACCT 489 or BA 489 or MGMT 489 or MIS 489. Prerequisites: Nine hours of MKT course work and permission of department chair. Graded S/U.

**MKT 491. Special Studies in Marketing** (1-3) Fall, Spring. Independent or small group study of selected topics not covered by existing courses but which are currently (or becoming) an important part of marketing. Prerequisite: permission of department chair. Graded S/U.

**MKT 495. Reading for Honors in Marketing** (1-3) Fall, Spring. For superior student who wishes individual reading program or independent research experience with guidance from an appropriate adviser. Prerequisite: open only to marketing 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 I: MATH 131*, 232, 233
Sequence II: MATH 126
Sequence III: MATH 115, 116

*Since the last catalog MATH 134 (3) and MATH 135 (3) have been introduced. This sequence is a slower version of MATH 131 offered primarily during evening hours. A student must take both MATH 134 and MATH 135 for credit equivalent to MATH 131.

**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 Sequence I. 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 or MATH 131. Some programs require MATH 131. Note that the MATH 131 option allows for much greater flexibility of major than does MATH 126, and similarly, MATH 128 and 130 allow for more choices than does MATH 120.

**Sequence III:** Sequence III is a general introductory statistics sequence. MATH 115 is required by certain majors in the College of Health and Human Services. A satisfactory placement score is required to enter MATH 115 (see "Mathematics Placement Examination").

Other program and college groups requirements may be satisfied, in part, by using MATH 111, 120, 128 or 130.

The Department of Mathematics and Statistics also offers MATH 095 (Intermediate Algebra) 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 A, B, C or S has been earned in the prerequisite.

**Mathematics 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 Buiding). These entry points are:

(for Sequence I) MATH 120, 128, 130 or 131

(for Sequence II) MATH 120 or 126

(for Sequence III) MATH 115

Students should use the Mathematics Placement exam scores and consult with their adviser 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 090. Elementary Algebra** (5) Fall, Spring. An introduction to fundamental topics of beginning algebra. Intended for students having no previous algebra experience. Offered only at Firelands College. Credit for this course cannot be applied toward any degree program. Graded S/No Record.

**ΔMATH 095. Intermediate Algebra** (5) Fall, Spring. 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.

**ΔMATH 098. Algebra Review** (3) Fall, Spring, Summer. 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.

**¶ΔMATH 111. Topics in Modern Mathematics** (3) Fall, Spring. 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.

**¶ΔMATH 115. Introduction to Statistics** (3) Fall, Spring, Summer. 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.

**¶ΔMATH 116. Introduction to Statistics II** (3) Spring. 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.

**¶ΔMATH 120. College Algebra** (4) Fall, Spring, Summer. Polynomials, factoring, rational exponents, linear and quadratic equations and inequalities, applications; polynomial, exponential and logarithmic functions and their graphs; systems of equations, theory of equations. Not to be taken if credit for MATH 127, 128 or 130 has been received. Prerequisite: Two years of high school algebra, one year of geometry AND a satisfactory placement exam score.

**¶ΔMATH 126. Basic Calculus** (5) Fall, Spring, Summer. Differential and integral calculus, multivariate differential calculus and matrix theory; applications. Not open to students with a grade of C or higher in MATH 125, 131, or 135. 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.

**¶ΔMATH 128. College Algebra and Trigonometry** (5) Fall, Spring. 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.

**ΔMATH 129. Trigonometry** (2) Fall, Spring. Trigonometric functions, graphs, identities, equations, inverse functions, solution of triangles, complex numbers. Intended for students who have good preparation in algebra and geometry but lack knowledge of trigonometry. Not to be taken if credit for MATH 128 or 130 has been received. Prerequisite: C or higher in MATH 120,or consent of instructor.

**¶MATH 130. Precalculus Mathematics** (3) Fall, Spring, Summer. Theory of equations, coordinate geometry, exponential, logarithmic and trigonometric functions, applications. Overlaps with content of MATH 128 and 129. Not to be taken if credit for MATH 128 or 129 has been received. Prerequisites: two years of high school algebra, one year of high shool geometry and a satisfactory placement exam score.

**¶ΔMATH 131. Calculus and Analytic Geometry** (5) Fall, Spring, Summer. Differential and integral calculus including applications. The MATH 131-232-233 sequence is a traditional calculus course for well-prepared students and is prerequisite for all advanced mathematics and statistics courses. Prerequisites: (1) two years of high school algebra, one year of geometry, 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 134. Calculus and Analytic Geometry IA** (3) Fall, Spring. Limits, the derivative, differentiation techniques and applications of the derivative. MATH 134 and 135 is a two-semester sequence which includes all the topics from MATH 131. Not open to students with a grade of C or higher in MATH 131 or MATH 126. Prerequisites: same as MATH 131.

**MATH 135. Calculus and Analytic Geometry IB** (3) Fall, Spring. The definite integral; the fundamental theorem; indefinite integrals; integration by parts, by substitution and using tables; and applications of definite and indefinite integrals. Prerequisite: a grade of C or higher in MATH 134, or satisfactory placement exam score.

**ΔMATH 222. Discrete Mathematics** (3) Fall, Spring. Sets, functions, relations, algorithms, induction, elementary combinatorics, graph theory and propositional calculus. A student cannot receive credit for both MATH 222 and 322. Prerequisite: MATH 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.

**¶ΔMATH 232. Calculus and Analytic Geometry II** (5) Fall, Spring. MATH 131 continued. Techniques of integration, sequences and series, vector valued functions, analytic geommetry, partial derivatives. Prerequisite: grade of C or higher in MATH 131.

**ΔMATH 233. Calculus and Analytic Geometry III.** (3) Fall, Spring. MATH 232 continued. Partial derivatives, multiple integrals, vector fields, power series, introduction to differential equations, applications. Prerequisite: grade of C or higher in MATH 232.

**Δ**MATH 241. Mathematics for Elementary Teachers I** (3) Fall, Spring, Summer. Numeration systems, set theoretic development of the whole number system, systems on integers and rationals, number theory. Open only to elementary and special education majors. Prerequisite: satisfactory placement exam score.

**Δ**MATH 242. Mathematics for Elementary Teachers II** (3) Fall, Spring, Summer. 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 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.

**MATH 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) Spring. (1991 and alternate years). History through calculus. Prerequisite or corequisite: MATH 332.

**MATH 313. Elementary Mathematical Logic** (3) Fall. Propositional and predicate logic; nature of mathematical proof; applications to mathematics and computer science. Prerequisite: MATH 131. Not open to students with credit for CS 313.

**MATH 322. Discrete Mathematics** (3) Fall, Spring. 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) Fall, Spring, Summer. 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) Fall. Introduction to ordinary differential equations: general equations of low order, higher order linear equations with constant coefficents, series solutions, qualitative theory, and systems of differential equations. Prerequisite: MATH 233.

**MATH 339. Fundamental Concepts of Modern Algebra** (3) Fall, Spring, Summer. Elementary topics from rings, fields, groups: divisibility properties of integers; integral domains, construction of the rational, real and complex number systems, polynomial rings. MATH 339 should not be used as an elective for students in the College of Arts and Sciences. Prerequisite: MATH 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, facorization of integers, Fibonacci numbers, elementary diophantine equations, and applications. Prerequisite: MATH 332 or consent of instructor.

**MATH 402. Modern Geometry** (3) Fall, Spring. 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) Fall. 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) Spring. 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) Spring. 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) Fall. Logic; set theory (including informal discussion of infinite sets and cardinals); axiomatic method (including models, consistency and independence). Prerequisite: MATH 322 and MATH 339, or MATH 403, 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) Fall. 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) Spring. Net premium reserves; multiple life functions; multiple decrement models; valuation theory for pension plans; insurance models including expenses, nonforteiture benefits and dividends. Prerequisite: MATH 426.

**MATH 430. Advanced Calculus** (3) Fall. Sets, functions, numerical sequences and series, topology of the real numbers, continuity, differentiation, Riemann integration, and uniform convergence of sequences and series of functions. Prerequisite: MATH 233 and 332, or consent of instructor.

**MATH 432. Linear Algebra with Applications** (3) Spring. Matrices and vector spaces, eigenvalues, orthogonal matrices, positive definite matrices, quadratic forms. Applications to differential equations, Markov chains, least squares. Prerequisite: MATH 332 or consent of instructor.

**MATH 434. Vector Calculus** (3) Spring (1992 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) Fall, Spring. 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) Spring. 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) Fall (1992 and alternate years). Probability models for applications, finite Markov chains, queueing systems, Poisson process, applications to genetics, diffusion, computer systems. Prerequisites: MATH 332 and 441.

**MATH 447. Exploratory Data Analysis** (3) Fall (1991 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) Fall. Study of numerical methods for interpolation and approximation, integration and differentiation, solution of non-linear equations and systems of linear and non-linear equations. Prerequisites: MATH 332 and programming experience. Not open to students with credit for CS 451.

**MATH 452. Numerical Analysis** (3) Spring. Study of numerical methods for the 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 of Complex Analysis** (3) Spring (1991 and alternate years). Complex numbers, complex valued functions, differentiation of complex valued functions, analytic functions, power series, integration, contour integrals, residues and poles, conformal mapping, applications. Prerequisite: MATH 233 and 332 or consent of instructor.

**MATH 465. Introduction to Real Analysis** (3) Fall. 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 489. 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 elementary education credit only

## Health Information Technology (MRT)

**†MRT 100. Introduction to Health Information Systems** (4) Fall. Survey of health care delivery systems and their levels of organization. Basic policies and procedures as they relate to technical medical record standards as required by accreditation or licensing agencies. Three hours lecture and two hours assigned lab. Prerequisite: Permission of instructor.

**†MRT 101. Medical Terminology** (3) Fall. Vocabulary and terms used by medical personnel; prefixes, suffixes, word roots and their combining forms, usage, spelling and pronunciation; specialized terms within body systems and medical specialities. Two hours lecture and two hours of assigned lab.

**†MRT 102. Medical Transcription** (4) Spring. Skill in use of transcription equipment and expansion of medical terminology and typing accuracy and speed. Practice in typing medical, operative, clinical summary, laboratory, history, physical and admission reports. One hour lecture and two hours lab. Prerequisites: MRT 101 and typing proficiency as indicated with a grade of C or better in BUSE 111 or equivalency, CS 180.

**†MRT 112. Coding and Classification Systems** (3) Spring. Coding, classifying and reimbursement systems utilizing ICD-9-CM and CPT-4. Skill in utilizing computerized encoding systems and Diagnostic Related Groups. Current topics related to reimbursement schemes for federally funded patients. Three hours lecture and two hours of assigned lab. Prerequisite: MRT 100.

**†MRT 201. Medical Record Directed Practice** (2) Fall, Spring, or Summer. Application of medical record theory to actual practice through a supervised learning experience in an assigned clinical setting under the instruction of a professional medical record practitioner. Prerequisites: MRT 102 and 112. Corequisite: enrollment in MRT 211. 112 hours per semester of clinical instruction.

**†MRT 202. Medical Record Directed Practice II** (2) Fall, Spring, or Summer. Continued application of medical record theory to actual practice or more advanced, technical skills through instruction of a professional medical record practitioner. Prerequisites: MRT 201 and 211. Corequisites: enrollment in MRT 204 and 212. 112 hours per semester of clinical instruction.

**†MRT 204. Pathophysiology** (4) Spring. Disordered human functions and systems; language, causes and types of diseases; diseases of the body systems, each described in terms of its etiology, pathology, symptoms and treatment. Four hours lecture. Prerequisites: RT 101.

**†MRT 211. Health Data Collection and Quality Assessment** (4) Fall. Health and hospital data collection, analysis and presentation. Quality assurance and assessment, utilization review and risk management programs as required by accrediting and licensing agencies. Cancer registry policy and procedures. Three hours lecture and two hours assigned lab. Prerequisite: MRT 112.

**†MRT 212. Supervision of Medicolegal Aspects** (3) Spring. Policy and procedure as it relates to legality issues involving medical information. Focus onconsent and release of information. Basic concepts for supervision of procedures as they relate to confidential communications. Two hours lecture, one hour laboratory. Prerequisite: MRT 211.

**†MRT 213. Advanced Coding** (2) Spring. MRT 112 continued. Emphasis on coding for reimbursement purposes and severity of illness, diagnostic related groups and new legislative changes affecting current reimbursement trends. Prerequisites: MRT 112 or permission of instructor in relation to on-the-job experience.

**†MRT 290. Topics in Medical Record Technology** (1-3) Fall, Spring. Medical record technology projects, workshops and seminars dealing with current topics not covered in existing courses. Prerequisite: permission of instructor.

**†MRT 291. Field Experience** (3) Fall, Spring, Summer. Fifteen weeks of paid field work in a medical record department under supervision of Registered Record Administrator or Accredited Record Technician. Prerequisite: permission of instructor.

## Medical Technology (MEDT)

*Duration of these courses may vary slightly from hospital to hospital.

**MEDT 101. Introduction to Health Professions** (1) Fall. Survey of health and human service professions and the function of health care personnel within these professions. Issues, policies and regulations affecting health care delivery.

**MEDT 201. Orientation to the Professions of Medicine/Medical Technology** (1) Fall, Spring. 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 301. Medical Terminology I** (2) Fall, Spring. Vocabulary and terms used by medical personnel; prefixes, suffixes, word roots and their combining forms, usage and spelling; specialized terms by body systems. Prerequisite: sophomore standing.

**MEDT 402. Orientation and Management** (1) Fall, Spring, Summer. 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) Fall, Spring, or Summer according to sequence. Fourteen weeks of supervised practical experience in identification of bacteria, fungi and parasites in a hospital laboratory setting. Prerequisite: admission to hospital-based medical technology program.*

**MEDT 404. Clinical Serology** (2) Fall, Spring, or Summer according to sequence. Three weeks of supervised experience in clinical applications of cellular and humoral immunity as diagnostic procedures. Prerequisite: Admission to hospital-based medical technology program.*

**MEDT 405. Applied Clinical Hematology** (5) Fall or Spring or Summer. Eight weeks of supervised practical experience in hematologic methods, coagulation and blood cell morphology in a hospital laboratory setting. Prerequisite: Admission to hospital-based medical technology program.*

**MEDT 406. Applied Clinical Chemistry** (11) Fall or Spring or Summer according to sequence.Seventeen weeks of supervised practical experience in manual and automated methods in clinical chemistry, toxicology and endocrinology in a hospital setting. Prerequisite: Admission to hospital-based medical technology program.*

**MEDT 407. Blood Bank** (5) Fall or Spring or Summer according to sequence. Seven weeks of supervised practical experience in blood group serology with emphasis on preparation and testing of blood for transfusion in a hospital laboratory setting. Prerequisite: Admission to hospital-based medical technology program.*

**MEDT 411. Diagnostic Immunology I** (2) Fall or Spring or Summer according to sequence. Theory of clinical immunology related to humoral and cellular immunity in health and disease states. Prerequisites: BIOL 439 recommended and permission of instructor.

**MEDT 412. Diagnostic Immunology I Laboratory** (1) Fall or Spring or Summer according to sequence. Laboratory application and testing related to humoral and cellular immunity in disease states. One three-hour laboratory. Prerequisites: BIOL 439 recommended and permission of instructor. Lab fee.

**MEDT 413. Immunohematology I** (4) Fall or Spring or Summer according to sequence. Theory of human blood groups, compatibility testing, detection and identification of antibodies, blood collection/storage, management of transfusion service. Prerequisites: BIOL 439 recommended and permission of instructor.

**MEDT 414. Immunohematology I Laboratory** (2) Fall or Spring or Summer according to sequence. Laboratory application and testing of human blood groups, compatibility testing, detection and identification of antibodies. Two three-hour laboratories. Prerequisites: BIOL 439 recommended and permission of instructor. Lab fee.

**MEDT 415. Immunohematology II** (3) Fall, Spring, or Summer. MEDT 413 and MEDT 414 continued; emphasis on a clinical application. Prerequisites: MEDT 413 and 414 with a grade of C or better and permission of instructor. Lab fee.*

**MEDT 416. Clinical Immunology II** (2) Fall, Spring, or Summer. Clinical laboratory experience regarding testing and application of diagnostic immunology (MEDT 411 and 412). Prerequisites: grade of C or higher in MEDT 411 and 412 and permission of instructor. Lab fee.*

**MEDT 421. Hematology I** (3) Fall, Spring, or Summer according to sequence. Origin, regulation, morphology and function of blood cells in health and disease. Congenital and acquired hematologic aberrations. Prerequisite: BIOL 332 or equivalent and permission of instructor.

**MEDT 422. Hematology I** (2) Fall or Spring or Summer according to sequence. Diagnostic laboratory procedures applied to qualitative and quantitative evaluation of blood cells. Prerequisites: BIOL 332 or equivalent and permission of instructor. Lab fee.

**MEDT 423. Hematology II** (2) Fall or Spring or Summer according to sequence. Mechanism of hemostasis in health and hemorrhagic and thrombotic disease. Blood cell morphology. One lecture and one two-hour laboratory. Prerequisite: MEDT 421 and 422. Lab fee.

**MEDT 424. Hematology III** (3) Fall or Spring or Summer. Continuation of Phase I hematology sequence with emphasis on clinical application and hospital laboratory instrumentation. Full-time clinical instruction and practice. Prerequisites: grade of C or better in MEDT 421, 422 and 423 and permission of instructor. Lab fee.*

**MEDT 431. Clinical Microbiology I** (3) Spring or Summer. Isolation identification and detailed description of clinically important bacteria. Microbial etiology of disease; methods of prevention and control. Prerequisites: BIOL 313 or equivalent and permission of instructor.

**MEDT 432. Clinical Microbiology I Laboratory** (2) Fall or Spring or Summer. Diagnostic microbiology laboratory procedures. Methods of isolation and identification of clinically significant bacteria. Prerequisites: BIOL 313 or equivalent and permission of instructor. Lab fee.

**MEDT 433. Clinical Bacteriology II** (4) Fall or Spring or Summer. MEDT 431 and 432 continued; emphasis on clinical application and identification of clinically significant bacteria. Full-time clinical instruction and practice. Prerequisites: Grade of C or better in MEDT 431 and 432 and permission of instructor. Lab fee.*

**MEDT 434. Clinical Parasitology** (2) Fall or Spring or Summer according to sequence. Parasitic diseases of man; methods of detection, isolation, and identification of clinically significant human parasites. Lecture and lab. Prerequisites: BIOL 313 and permission of instructor. BIOL 405 recommended. Lab fee.

**MEDT 435. Clinical Mycology** (2) Fall or Spring or Summer according to sequence. Clinically significant fungi; methods of detection, isolation and identification. Lecture and lab. Prerequisites: BIOL 313 or equivalent and permission of instructor. Lab fee.

**MEDT 441. Clinical Chemistry I** (4) Fall or Spring or Summer according to sequence. Theoretical principles of analysis of chemical constituents of blood and body fluids in normal and disease states. Prerequisites: CHEM 308, 309 or CHEM 341, 342; CHEM 201 and PHYS 201 recommended and permission of instructor.

**MEDT 442. Clinical Chemistry I Laboratory** (2) Fall or Spring or Summer according to sequence. Methods, instrumentation and techniques of clinical chemistry through experiments, problems and demonstrations. Two three-hour laboratories. Prerequisites: CHEM 308, 309 or CHEM 341, 342; CHEM 201 and PHYS 201 recommended and permission of instructor. Lab fee.

**MEDT 443. Clinical Chemistry II** (5) Fall or Spring or Summer. Continuation of MEDT 441 and 442; emphasis on clinical application. Prerequisites: MEDT 441, 442 and 451 and permission of instructor. Lab fee.*

**MEDT 451. Analysis of Body Fluids** (2) Fall or Spring or Summer according to sequence. Physiology of urinary system and related diseases. Methods of detection of chemical and cellular elements of urine, cerebrospinal fluid, amniotic fluid and other body fluids. One lecture and one three-hour laboratory. Prerequisites: BIOL 332 or equivalent. Lab fee.

**MEDT 465. Laboratory Management and Education** (1) Fall or Spring. Laboratory supervision and management; principles of education and laboratory instruction; seminars or case histories on selected topics of clinical interest. Prerequisite: Completion of preclinical MEDT courses or permission of instructor.

**MEDT 470. Research and Special Topics** (1-3) Fall or Spring or Summer according to sequence. May be repeated to maximum 3 credits. Research techniques, literature search, experimental design, critical reading. Paper required on selected problem. Prerequisite: permission of instructor. Graded S/U.

**MEDT 480. Introduction to Clinical Research** (1-3) Fall or Spring or Summer. Research techniques, literature search, experimental design. Term paper required. For university-based students during clinical training at clinical site. Prerequisites: completion of pre-clinical courses and permission of instructor. Lab fee.

## Military Science (MILS)

**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, professional 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. Military Tactics** (2). Army tactics, principles of engagement, written military orders and usage of military maps. Simulation exercises and war games will be utilized in class highlighting military tactics. No military obligation. Freshmen and sophomores only. Prerequisite: MILS 201 or permission of instructor.

**MILS 301. Professionalism/Leadership** (3). Professionalism and leadership required of the US Army Officer; application of leadership principles and styles through case studies and role-playing exercises with emphasis on military situations. Participation in leadership labs, physical training program and 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 including court martial, nonjudicial and nonpunitive actions. Development of military writing techniques, preparation of staff papers and staff actions. Discussions of various administrative details pertinent to newly commissioned lieutenants. Participation in field training exercises, physical training, and leadership labs. Prerequisite: department permission.

**MILS 470. Studies in Military Science** (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)

**ΔMUCH 100. Small Ensembles** (1) Fall, Spring. Collegium Musicum of College of Musical Arts offered under supervision of Composition/History Department. For freshmen or sophomores. May be repeated. Following small ensembles offered: Early Music Ensemble, Balinese Gamelan Ensemble, New Music Ensemble.

**¶ΔMUCH 101. Exploring Music** (2) Fall, Spring. Focus on three types of contexts important to appreciating music: the composer, the place and the time. Not open to Bachelor of Music degree students.

**MUCH 110. Elements of Music** (3) Fall, Spring, Summer. 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) Spring. Examines diverse styles of American jazz and its African roots; emphasis on individual musicians who pioneered various styles of jazz. Not open to Bachelor of Music degree students.

**MUCH 116. Fundamentals of Composition** (2) Fall, Spring. Basic compositional techniques for students not yet admitted to baccalaureate program in music composition. May be repeated. Cannot be substituted for MUCH 316. Prerequisite: Passing grade on freshman placement exam or consent of instructor.

**¶MUCH 125. Music of World Cultures** (3) Fall, Spring. Musical systems of major non-Western art musics: Africa, Near East, Pacific and Asia. Theoretical, analytical and cultural concepts related to music. Not open to Bachelor of Music degree students.

**MUCH 131. Western Art Music I** (4) Spring. 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) Fall. Music of Classical and Romantic periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 131.

**MUCH 141. Aural Skills I** (2) Fall, Spring, Summer. Basic skills in sightsinging; rhythmic, melodic and harmonic dictation of diatonic and triadic materials. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

**MUCH 142. Aural Skills II** (2) Fall, Spring, Summer. MUCH 141 continued. Prerequisite: MUCH 141.

**MUCH 211. Jazz Improvisation and Repertoire I** (2) Fall alternate years. Techniques of jazz improvisation and related repertoire; application of basic scales, arpeggios, melodic construction to blues and standard pop tunes. Prerequisite: MUCH 131 or consent of instructor.

**MUCH 212. Jazz Improvisation and Repertoire II** (2) Spring alternate years. Advanced techniques of jazz improvisation and related repertoire; application of modes, altered scales, chord extensions, chromatic harmony to jazz compositions. Prerequisite: MUCH 211.

**MUCH 213. Jazz Piano Fundamentals** (3) Fall alternate years. Analysis of jazz piano accompaniment styles; techniques of left-hand voicing and rhythmic accompaniment; scale repertoire; piano arranging from lead sheets. Prerequisites: MUED 151, and passing grade on freshman placement exam or MUCH 110.

**¶MUCH 221. Masterpieces of Music** (2) Fall, Spring. Music of important composers from various periods; directed listening of selected works. Not open to Bachelor of Music degree students.

**MUCH 231. Western Art Music III** (3) Spring. Music of the 20th century viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 132, MUCH 142.

**MUCH 232. Western Art Music IV** (2) Fall, Spring. Music of the Medieval and Renaissance periods viewed from theoretical, analytical, historical, cultural and performance perspectives. Prerequisite: MUCH 141.

**¶MUCH 233. Music in African Culture** (2) Spring alternate years. The study of music in various groups of sub-Sahara Africa with emphasis on its relation to individual cultures, its structure, and performance. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

**¶MUCH 234. Music in Japanese Culture** (2) Spring alternate years. The study of music in Japanese religious ritual, historical court music, and music for theater and concert, with emphasis on its socio-historical context. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

**¶MUCH 235. Music in Indonesian Culture** (2) Fall. The study of music in Java Bali, and the Sunda in its historical and cultural contexts. Music of the outer islands is compared to the principal groups. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

**MUCH 236. Introduction to Jazz and Commercial Music** (2) Fall. Analysis of theoretical and historical evolution of American popular music, focusing on Broadway musical theater, rock'n roll and contemporary jazz-rock. Prerequisite: Passing grade on freshman placement exam or MUCH 110.

**MUCH 237. Jazz** (3) Spring. The music of various styles of jazz from around 1900 to the present. Theoretical, analytical, cultural and performance concepts will be related to the music. Prerequisite: MUCH 131 or consent of instructor.

**MUCH 241. Aural Skills III** (2) Fall, Spring, Summer. Intermediate skills in sightsinging; rhythmic, melodic and harmonic dictation of chromatic material including seventh chords. Prerequisite: MUCH 142.

**MUCH 242. Aural Skills IV** (2) Fall, Spring, Summer. MUCH 241 continued. Prerequisite: MUCH 241.

**MUCH 245. Introduction to Music Technology** (3) Spring alternate years. Emphasis on the practical use of analog and digital hardware and software. Survey of present state of commercial music hardware and software. Basics of using computers to write and score music printing. Prerequisite: none.

**MUCH 300. Small Ensembles** (1) Fall, Spring. Collegium Musicum of College of Musical Arts offered under supervision of Composition/History Department. For juniors and seniors. May be repeated. Following small ensembles offered: Early Music Ensemble, Balinese Gamelan Ensemble, New Music Ensemble.

**MUCH 308. Keyboard Harmony I** (2) Fall alternate years. Use of keyboard skills related to score reading, transposition, extemporization and accompanying.

**MUCH 309. Keyboard Harmony II** (2) Spring alternate years. Continuation of keyboard skills developed in MUCH 308. Prerequisite: MUCH 308.

**MUCH 311. Jazz Arranging and Analysis I** (3) Fall alternate years. Swing repertoire, typical chord progressions, formal structure, melodic construction, compositional devices. Basic arranging techniques common to traditional big-band music. Prerequisite: MUCH 212 or consent of instructor.

**MUCH 312. Jazz Arranging and Analysis II** (3) Spring alternate years. Harmonic trends of bop period; substitute chords, altered chords, melodic and rhythmic treatment. Addition of double reeds, French horns and strings to the big-band. Contemporary trends in jazz and commercial music, including small group and rock styles. Prerequisite: MUCH 311.

**MUCH 315. Orchestration** (2) Fall. Score analysis; arranging and/or composing for various families of orchestra (woodwinds, brass, percussion, strings), and scoring for full symphonic orchestra. Prerequisite: MUCH 231.

**MUCH 316. Composition** (3) Fall, Spring, Summer. Original composition in vocal and instrumental forms. May be repeated to 12 hours. Prerequisite: MUCH 231 and 242. Open only to composition majors.

**MUCH 318. Symphonic Literature** (2) Fall alternate years. Listening to and analyzing works tracing development of symphony and symphonic poem to modern period. Prerequisite: MUCH 231.

**MUCH 320. Band Scoring** (2) Fall, Spring. Scoring for band instruments, from small ensembles to concert band and marching band. Prerequisite: MUCH 231.

**MUCH 325. Choral Arranging** (2) Spring. Text analysis; arranging for men's voices, treble voices, mixed voices; A Cappella and accompanied ensemble arranging techniques; calligraphy, reproduction and copyrighting; dealing with publishers. Prerequisite: MUCH 232.

**MUCH H341. Aural Skills V** (2) Spring. 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) Fall. Jazz from African influences through present developments; personalities involved in stylistic change.

**MUCH 403. Counterpoint I** (2) Fall alternate years. 16th-century counterpoint. Prerequisites: MUCH 231 and 232.

**MUCH 404. Counterpoint II** (2) Spring 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) Spring alternate years. Performance practice in music, improvisation, ornamentation, accompaniment, instrumentation, rhythm and tempo. Prerequisite: MUCH 231.

**MUCH 408. Chamber Music Literature** (2) Fall 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) Fall, Spring. Musical styles and techniques of 20th century. Compositional and analytical approach, considering various influences of past. May be repeated to 8 hours. Open automatically to composition majors, to others by consent of instructor. Prerequisite: MUCH 231 with C or better.

**MUCH 411. Jazz Pedagogy** (2) Spring alternate years. Prepares student to teach fundamentals of jazz improvisation, arranging, jazz ensemble techniques. Prerequisite: MUCH 312.

**MUCH 412. Opera Literature** (2) Fall alternate years. Styles, interpretation, traditional performances of various schools. Prerequisite: MUCH 231.

**MUCH 420. Problems and Techniques of Ethnomusicology** (2) Spring alternate years. Topics and techniques in ethnomusicology. Open to students interested in all music as aspects of culture.

**MUCH 431. Aesthetics of Black Music** (3) Spring. West African and Afro-American concepts of music; modifying effects America has had from slavery to present.

**MUCH 436. Audio Recording Techniques** (2) Fall, Spring. 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) Fall, Spring. 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) Spring alternate years. Computer music and MIDI-applications; studio recording for the professional musician; technology and its role in professional music.

**MUCH 444. Music Technology I** (3) Fall. Basic audio techniques (with no electronic background assumed and no math beyond basic algebra needed). Study of analog classical and voltage control techniques. History and literature and electronic music. Learn to use analog hardware. Prerequisite: none.

**MUCH 445. Music Technology II** (3) Spring. Introduction of MIDI computer-music techniques. Use of computer music software, including sequencers and music editors for printing music. Study of schematics of analog hardware. Prerequisite: MUCH 444.

**MUCH 446. Music Technology III** (3) Fall. Programming of MIDI voice modules. Extended study of computer music MIDI techniques and audio sampling. Introduction to videographic techniques and multi-media. Prerequisite: MUCH 445.

**MUCH 447. Music Technology IV** (3) Spring. Students work independently to produce multi-media computer compositions under faculty supervision. Prerequisite: MUCH 446.

**MUCH 470. Reading and Research** (2-4) Fall, Spring. Directed independent reading and research in history, philosophy, theory or aesthetics of music. Prerequisites: 16 hours of music theory and history, and consent of instructor.

## Music Education (MUED)

For music education majors or minors only *unless otherwise noted.* Questions concerning eligibility for MUED courses should be directed to the Chair of Music Education prior to enrollment.

**MUED 125. Percussion Class** (1) Spring. Prerequisite: MUED 145. (Elective).

**MUED 130. Trumpet-French Horn Class** (1) Fall, Spring.

**MUED 136. Trombone-Euphonium-Tuba Class** (1) Fall, Spring.

**MUED 140. Clarinet-Saxophone Class** (1) Fall, Spring.

**MUED 145. Flute-Percussion Class** (1) Fall, Spring.

**MUED 146. Oboe-Bassoon Class** (1) Fall, Spring.

**MUED 147. Bassoon Reed Class** (1) Spring.(Elective).

**MUED 150. Class Piano** (1) Fall, Spring. Class piano instruction for beginners and those with minimal keyboard experience. Placement into MUED 150 and 151 is determined on the basis of an audition. Only open for credit to music majors and minors. Grade of C of better required for admittance into MUED 151. Lab fee.

**MUED 151. Class Piano** (1) Fall, Spring. MUED 150 continued. Grade of C or better required for admittance into sophomore level group piano courses. This course includes Piano Proficiency I. Lab fee.

**MUED 154. Class Piano** (1) Fall, Spring. Intermediate class study. A more advanced approach to the acquisition of functional skills for those with advanced keyboard facility who need class instruction in order to pass functional proficiency requirements. A grade of C or better required for admittance into sophomore level group piano courses; includes Piano Proficiency I. Lab fee.

**MUED 156. Beginning Piano for the Non-music Major I** (2) Fall, Spring. Class piano course for beginning work in music reading, pop/jazz chords, keyboard technique, improvisation and elementary piano literature. Not open to music majors or minors.

**MUED 157. Beginning Piano for the Non-music Major II** (2) Spring. 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) Fall, Spring. Beginning study of voice production, breathing, posture and diction through vocalises and songs in English. Open to non-majors.

**MUED 177. Voice Class** (1) Fall, Spring. MUED 170 continued. Prerequisite: MUED 170. Open to non-majors.

**MUED 180. String Class** (2) Fall, Spring.

**MUED 190. Troubadour Harp Class** (1) Fall, Spring. (Elective).

**MUED 195. Guitar Class** (1) Fall, Spring. (MUED majors and minors only.)

**MUED 240. Introductory Music Field Experience** (3) Fall, Spring. Introduction to the music education profession and a wide variety of teaching situations at all levels. Prerequisite: sophomore standing in music. C=10 hours; F=32-40 hours. Required of all sophomores.

**ΔMUED 248. Music Teaching Skills for the Classroom Teacher** (3) Fall, Spring. Emphasis on the development of skills necessary for planning and implementing children's musical experiences. C=20 hours. Not open to credit for music education majors or minors.

**MUED 250. Class Piano: Instrumental Harmonization and Score Reading I** (2) Fall, Spring. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and 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) Fall. 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 I. Grade of C or better required for admittance into accompanying course.

**MUED 252. Class Piano: Choral Harmonization and Score Reading I** (2) Fall, Spring. Class piano course for intermediate level work in melody harmonization, pop/jazz chords, and 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) Fall. 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 Proficiency I. Grade of C or better required for admittance into accompanying course.

**MUED 254. Class Piano: Classroom Harmonization, Transposition and Improvisation I** (2) Fall. 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) Fall. Class piano course for students with advanced keyboard facility; intermediate level work in melody harmonization, accompaniment transposition and improvisation. Prerequisite: Piano Proficiency I. Grade of C or better required for admittance into accompanying course.

**MUED 256. Class Piano: Accompanying as a Teaching Tool I** (1) Fall, Spring. Class piano course for music education students who are not advanced pianists; provides introductory work in accompanying skills. Prerequisite: Piano Proficiency II. Grade of C or better required of music education majors for graduation.

**MUED 257. Class Piano: Accompanying as a Teaching Tool II** (1) Spring. Class piano course for music education 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) Fall. [Choral, String, Band (University Lab Schools) options only]; Spring. (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. C=20 hours. Taken with conducting, MUED 341, applied study, one 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) Fall. [Choral, string, band (University Lab Schools) options only]; Spring. (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. 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) Fall. Material suitable for use in secondary schools; related performance problems and their solutions. C=5 hours.

**MUED 360. Musical Theatre Production Survey** (2) Spring. On demand.Overview of considerations necessary in production of music theatre at public school level.

**MUED 395. Workshop on Current Topics** (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. Requirements usually met within time format.

**MUED 402. Beginning Wind and Percussion Instrument Repair** (1) Spring. Basic practices and techniques of instrument repair. Lab fee.

**MUED 450. Adult Group Piano Teaching** (2) Spring. A survey of materials, supervised teaching and program development appropriate for adult level class. Open to students with a strong piano background. Consent of instructor required. Available for graduate credit also. Alternate years beginning 1984 or on demand.

**MUED 451. Advanced Methods for Classroom Music** (2) Fall. Examination of methods, instructional hardware, organizational patterns and curricular models. Available for graduate credit also. Prerequisite: MUED 340 or consent of instructor. Required for classroom option. Should be completed prior to student teaching. C=10 hours.

**MUED 458. Marching Band Techniques** (2) Spring. Techniques in planning, charting and rehearsing marching band shows and administering public school marching bands. Prerequisite: junior standing.

**MUED 470. Readings in Music Education** (1-3) Fall, Spring. Special topics in music education. Admittance by consent of instructor.

**MUED 491. Teaching Practicum** (1-2) Fall, Spring. Supervised teaching in University laboratory schools for junior level classroom, choral or instrumental option music education majors. Prerequisite: consent of instructor. Graded S/U.

**MUED 497. Student Teaching** (1-10) Fall, Spring. Supervised teaching in area schools, supplemented by conferences and seminars. Ten semester hours required of all music education majors. Meets student teaching requirement for special teacher's certification in music. Lab fee. Graded S/U.

## Music, General (MUS)

**MUS 099. Recital Attendance** (0) Fall, Spring. Required of all music majors for six semesters. Successful completion of course requires attendance at minimum of 15 on-campus music performances. Graded S/U.

**MUS 190. Beginning Guitar** (2) Fall, Spring. Introduction to the guitar, fundamentals of technique and music notation reading. Open to non-music majors only.

**MUS 191. Intermediate Guitar** (2) Fall, Spring. MUS 190 continued. Open to non-music majors only. Prerequisites: MUS 190 or previous experience and consent of instructor.

## Music Performance Studies (MUSP)

**MUSP 100. Small Ensembles** (1) Fall, Spring. For freshmen and sophomores. May be repeated. Formed under supervision of College of Musical Arts and offered on demand. Open to any University student who qualifies on the basis of audition. Designed to foster independent listening and performance skills and the investigation of appropriate literature. For audition 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 adviser. The following small ensembles are offered:

*MUSP 100. Brass*
*MUSP 100. Brass Choir I*
*MUSP 100. Guitar*
*MUSP 100. Electric Guitar*
*MUSP 100. Euphonium-Tuba*
*MUSP 100. Harp*
*MUSP 100. Horn Club*
*MUSP 100. Jazz*
*MUSP 100. Jazz Lab I*
*MUSP 100. Jazz Lab II*
*MUSP 100. Mixed Chamber*
*MUSP 100. Music Theater Productions*
*MUSP 100. Percussion*
*MUSP 100. Piano Accompaniment Practicum*
*MUSP 100. Saxophone*
*MUSP 100. String*
*MUSP 100. Trombone Choir*
*MUSP 100. Trumpet Guild*
*MUSP 100. Varsity Quartet*
*MUSP 100. Vocal Chamber Lab*

*(See also MUCH 100.)*

**MUSP 160. Sight Reading I** (1) Fall. Development of visual comprehension of intervallic patterns and basic rhythmic patterns for the keyboard player. Prerequisite: consent of instructor.

**MUSP 195. Pedal Harp Class** (1) Fall, Spring. Prerequisite: one semester of Troubadour Harp (MUED 190) or permission of instructor. Fee: $22.50.

**MUSP 201. Guitar Lab** (1) Fall, Spring. May be repeated. Practical applications of concepts covered in MUS 191, Intermediate Guitar class; continued study of chords, scales, reading and repertoire. Prerequisites: MUS 191 or equivalent and consent of instructor.

**MUSP 210. Piano Repertoire I** (3) Fall alternate years. Literature from early keyboard music through classical. Prerequisite: consent of instructor.

**MUSP 211. Piano Repertoire II** (3) Spring alternate years. Literature from Romantic era to present. Prerequisite: consent of instructor.

**MUSP 214. Singers' Diction** (2) Fall. Introductory application of the International Phonetic Alphabet (IPA) to selected English, French, German and Italian song texts.

**MUSP 215. Organ Repertoire I** (2) Fall alternate years. Literature from 1325 to the present, excluding the music of J.S. Bach. Prerequisite: consent of instructor.

**MUSP 216. Organ Repertoire II** (2) Spring alternate years. Organ music of J.S. Bach. Prerequisite: consent of instructor.

**MUSP 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) Fall, Spring, Summer.

**MUSP 231. Applied Trumpet** (1,2,3,4) Fall, Spring, Summer.
**MUSP 232. Applied French Horn** (1,2,3,4) Fall, Spring, Summer.
**MUSP 233. Applied Trombone** (1,2,3,4) Fall, Spring, Summer.
**MUSP 234. Applied Euphonium** (1,2,3,4) Fall, Spring, Summer.
**MUSP 235. Applied Tuba** (1,2,3,4) Fall, Spring, Summer.
**MUSP 241. Applied Flute** (1,2,3,4) Fall, Spring, Summer.
**MUSP 242. Applied Oboe** (1,2,3,4) Fall, Spring, Summer.
**MUSP 243. Applied Clarinet** (1,2,3,4) Fall, Spring, Summer.
**MUSP 244. Applied Saxophone** (1,2,3,4) Fall, Spring, Summer.
**MUSP 245. Applied Bassoon** (1,2,3,4) Fall, Spring, Summer.
**MUSP 261, Applied Piano** (1,2,3,4) Fall, Spring, Summer. (Permission of instructor required for 2 or more credits)
**MUSP 262. Applied Harpsichord** (1,2,3,4) Fall, Spring, Summer.
**MUSP 263. Applied Organ** (1,2,3,4) Fall, Spring, Summer.
**MUSP 271. Para Voice** (2) Fall, Spring. No audition required. Fee: $45.
**MUSP 272. Applied Voice** (1,2,3,4) Fall, Spring, Summer.
**MUSP 281. Applied Violin** (1,2,3,4) Fall, Spring, Summer.
**MUSP 282. Applied Viola** (1,2,3,4) Fall, Spring, Summer.
**MUSP 283. Applied Cello** (1,2,3,4) Fall, Spring, Summer.
**MUSP 284. Applied Double Bass** (1,2,3,4) Fall, Spring, Summer.
**MUSP 285. Applied Harp** (1,2,3,4) Fall, Spring, Summer.
**MUSP 286. Applied Guitar** (1,2,3,4) Fall, Spring, Summer.

All students registered for applied instruction are subject to the following regulations:

Jury examinations occur at selected times once each semester of each academic year. All music majors are expected to perform jury examinations. In addition, some areas have 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 appropriate chair will send a letter to the student indicating the reason(s) for the probationary status, its duration and recommended action for its removal. If the student overcomes the identified deficiencies within the stated period, the probationary status will be lifted and permission will be granted to continue applied instruction as required by the student's degree program. If conditions for removal of the probationary status are not met, the student will be denied registration in applied instruction within the degree program. After one semester, the student may audition for reinstatement.

Jury examinations are appropriate times for students to be evaluated for change of emphasis or degree programs within the College of Musical Arts.

**MUSP 238-239, 277-279, 288-289. Large Ensembles** (1-2) Fall or Spring. For freshmen and sophomores. May be repeated. Open to any University student who qualifies on the basis of audition. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser.
**MUSP A238. Fall Concert Band** (1)Fall.
**MUSP A238. Symphonic Band** (2) Spring.
**MUSP B238. Fall Wind Ensemble** (1) Fall.
**MUSP B238. Concert Band** (1) Spring.
**MUSP C238. University Band** (1) Spring.
**MUSP F238. Athletic Band** (1) Spring.
**MUSP 239. Marching Band** (2) Fall.
**MUSP 277. A Cappella Choir** (1) Fall, Spring.
**MUSP 278. Collegiate Chorale** (2) Fall, Spring.
**MUSP A279. University Women's Chorus** (1) Fall, Spring.
**MUSP B279. University Men's Chorus** (1) Fall, Spring.
**MUSP 288. Chamber Orchestra** (1) On demand.
**MUSP 289. Philharmonia** (2) Fall, Spring.

**MUSP 264. Accompanying Techniques I** (1) Fall, Spring. Problems involving musical comprehension of solo part together with accompaniment and general introduction to vocal and instrumental accompaniment literature. Prerequisite: MUSP 160 or consent of instructor.

**MUSP 265. Piano Four-Hand Class** (1) Fall, Spring. May be repeated. Appropriate four-hand literature. Prerequisite: MUSP 160 or consent of instructor.

**MUSP 275. Introduction to Opera Theater** (2) Fall. Basic terminology and practices of opera theatre.

**MUSP 300. Small Ensembles** (1) Fall, Spring. For juniors and seniors. May be repeated. Formed under supervision of College of Musical Arts and offered on demand. Open to any University student who qualifies on the basis of audition. Designed to foster independent listening and performance skills and the investigation of appropriate literature. For audition information and other particulars, consult with department chair. It is recommended that music majors and minors discuss the selection of ensembles with the applied teacher and academic adviser. The following small ensembles are offered:

*MUSP 300. Brass*
*MUSP 300. Brass Choir I*
*MUSP 300. Guitar*
*MUSP 300. Electric Guitar*
*MUSP 300. Euphonium-Tuba*
*MUSP 300. Harp*
*MUSP 300. Horn Club*
*MUSP 300. Jazz*
*MUSP 300. Jazz Lab I*
*MUSP 300. Jazz Lab II*
*MUSP 300. Mixed Chamber*
*MUSP 300. Music Theater Productions*
*MUSP 300. Percussion*
*MUSP 300. Piano Accompaniment Practicum*
*MUSP 300. Saxophone*
*MUSP 300. String*
*MUSP 300. Trombone Choir*
*MUSP 300. Trumpet Guild*
*MUSP 300. Varsity Quartet*
*MUSP 300. Vocal Chamber Lab*
*(See also MUCH 300.)*

**MUSP 305. Conducting I** (2) Fall. Fundamental beat and cueing techniques; option of either instrumental or vocal emphasis.

**MUSP 306. Conducting II** (2) Spring. Advanced study and analysis of baton techniques, score reading and rehearsal procedures; option of either instrumental or vocal emphasis.

**MUSP 310. Vocal Repertoire for the Young Singer** (1) Fall. Designed for music education choral/musical theater majors only. Late 19th century to present with emphasis on British and American song literature for young singers.

**MUSP 311. Vocal Repertoire I** (2) Fall. Late 19th century to present British and American song literature; repertoire for high school vocal solo contest; Scandinavian and Russian song literature. Prerequisite: consent of instructor.

**MUSP 312. Vocal Repertoire II** (2) Spring alternate years. 19th and 20th century French, Spanish and German arts song literature. Prerequisite: consent of instructor.

**MUSP 360. Sight Reading II** (1) Spring. Rapid comprehension of complex intervallic and rhythmic patterns; special attention to ensemble precision. Prerequisite: MUSP 160 or consent of instructor.

**MUSP 361. Style and Interpretation** (1) Fall, Spring. May be repeated. Supervised preparation and analysis of selected works from the piano repertoire; emphasis on style and interpretation. Prerequisite: Consent of instructor.

**MUSP 364. Accompanying Techniques II** (1) Spring. MUSP 264 continued, using more advanced literature. Prerequisite: MUSP 264 or consent of instructor.

**MUSP 367. Piano Pedagogy I** (3) Fall. Methods, materials and teaching techniques for the beginning pre-college student. Prerequisite: consent of instructor.

**MUSP 368. Piano Pedagogy II** (3) Spring alternate years. Methods, materials and teaching techniques for the intermediate pre-college student. Prerequisite: consent of instructor.

**MUSP 370. Vocal Pedagogy** (3) Fall. Basic concepts of vocal pedagogy; methods, materials and terminology. Prerequisite: consent of instructor.

**MUSP 378. Opera Theater** (2) Fall, Spring. May be repeated. Development of stage techniques for more advanced students in productions of scenes and complete operas.Prerequisite: MUSP 275 and consent of instructor.

**MUSP 396. Service Playing I** (2) Fall alternate years. Hymn playing, transposition, modulation, improvisation and accompanying at the organ. Prerequisite: consent of instructor.

**MUSP 397. Service Playing II** (2) Spring alternate years. MUSP 396 continued. Prerequisite: MUSP 396 or consent of instructor.

**MUSP 410. Harpsichord Repertoire I** (3) Fall 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) Spring 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) Spring alternate years. History of the design and construction of the organ. Prerequisite: consent of instructor.

**MUSP 416. Church Music** (2) Spring. 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 credits available to performance majors only. Students enrolled for applied instruction have access to practice rooms and equipment with schedules and regulations determined by College of Musical Arts. Fee for each applied course: $45 for one credit hour; $90 for two or more credit hours. Lesson times arranged through the instructor.

**MUSP 421. Applied Percussion** (1,2,3,4) Fall, Spring, Summer.
**MUSP 431. Applied Trumpet** (1,2,3,4) Fall, Spring, Summer.
**MUSP 432. Applied French Horn** (1,2,3,4) Fall, Spring, Summer.
**MUSP 433. Applied Trombone** (1,2,3,4) Fall, Spring, Summer.
**MUSP 434. Applied Euphonium** (1,2,3,4) Fall, Spring, Summer.
**MUSP 435. Applied Tuba** (1,2,3,4) Fall, Spring, Summer.

**MUSP 441. Applied Flute** (1,2,3,4) Fall, Spring, Summer.
**MUSP 442. Applied Oboe** (1,2,3,4) Fall, Spring, Summer.
**MUSP 443. Applied Clarinet** (1,2,3,4) Fall, Spring, Summer.
**MUSP 444. Applied Saxophone** (1,2,3,4) Fall, Spring, Summer.
**MUSP 445. Applied Bassoon** (1,2,3,4) Fall, Spring, Summer.
**MUSP 461. Applied Piano** (1,2,3,4) Fall, Spring, Summer. (Permission of instructor required for 2 or more credits hours.)
**MUSP 462. Applied Harpsichord** (1,2,3,4) I, II.
**MUSP 463. Applied Organ** (1,2,3,4) Fall, Spring, Summer.
**MUSP 471. Para-Voice** (2) Fall, Spring. No audition required. Fee: $45.
**MUSP 472. Applied Voice** (1,2,3,4) Fall, Spring, Summer.
**MUSP 481. Applied Violin** (1,2,3,4) Fall, Spring, Summer.
**MUSP 482. Applied Viola** (1,2,3,4) Fall, Spring, Summer.
**MUSP 483. Applied Cello** (1,2,3,4) Fall, Spring, Summer.
**MUSP 484. Applied Double Bass** (1,2,3,4) Fall, Spring, Summer.
**MUSP 485. Applied Harp** (1,2,3,4) Fall, Spring, Summer.
**MUSP 486. Applied Guitar** (1,2,3,4) Fall, Spring, Summer.

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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) Fall or Spring. 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) Fall.
**MUSP A438. Symphonic Band** (2) Spring.
**MUSP D438. Fall Wind Ensemble** (1) Fall.
**MUSP D438. Concert Band** (1) Spring.
**MUSP J438. University Band** (1) Spring.
**MUSP M438. Athletic Band** (1) Spring.
**MUSP 439. Marching Band** (2) Fall.
**MUSP 477. A Cappella Choir** (1) Fall, Spring.
**MUSP 478. Collegiate Chorale** (1) Fall, Spring.
**MUSP A479. University Women's Chorus** (1) Fall, Spring.
**MUSP D479. University Men's Chorus** (1) Fall, Spring.
**MUSP 489. Philharmonia** (2) Fall, Spring.

**MUSP 453. Brass Pedagogy** (2) Fall. Teaching techniques and materials for brass instruments. Prerequisite: consent of instructor.

**MUSP 454. Woodwind Pedagogy** (2) Spring. Teaching techniques and materials for woodwind instruments. Prerequisite: consent of instructor.

**MUSP 458. String Pedagogy** (2) Spring. Upper and lower strings. Principles of teaching string instruments. Investigation of related literature and materials. Prerequisite: consent of instructor.

**MUSP 459. Organ Pedagogy** (2) Spring 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) Fall, Spring. May be repeated. Laboratory in supervised piano teaching, both private and classes. Prerequisite: MUSP 367 or consent of instructor.

**MUSP 467. Piano Technology** (1) Fall. Understanding of piano design, construction and tuning. Prerequisite: consent of instructor.

**MUSP 470. Readings, Research and Performance in Music** (1-4) Fall, Spring, Summer. May be repeated. Directed independent readings, research and/or performance related to performance studies. Prerequisites: consent of instructor and department chair.

**MUSP 473. Vocal Pedagogy Practicum** (1) Fall, Spring. May be repeated. Supervised teaching of both private and class voice. Includes participation in designated segments of MUED 240 and/or 340. Prerequisite: MUSP 370 or consent of instructor.

**MUSP 495. Senior Recital** (2) Fall, Spring, Summer. May be repeated. For performance studies majors only. Required full recital for all degree options. Repertoire requirements

determined by respective areas/studios. Prerequisite: satisfactory completion of recital jury and consent of department chair.

## Nursing (NURS)

**ΔNURS 100. Orientation to Nursing** (1) Fall. Assists freshmen in choosing nursing as major and career goal; professional nurse's role, history of nursing, future trends in relation to current U.S. health care delivery system.

**NURS 255. Human Anatomy** (3) Fall. Structure of body systems.

**NURS 257. Human Physiology** (3) Spring. Function of various body systems. Prerequisite: NURS 255.

**NURS 259. Microbiology and Infectious Disease Processes** (3) Spring. 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 352. Foundational Nursing Technologies.** Opportunity is provided for learning selected nursing technological skills in the college laboratory with simulated clients. Self paced modular learning experiences help students develop beginning cognitive knowledge and psychomotor skills. Prerequisite: completion of sophomore level courses. Lab fee.

**NURS 370. Pathophysiology: Physiologic Deficits of the Human Body** (3) Fall. 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 117, 118, BIOL 331, 332, 314, 315.

**NURS 371. Introduction to Orem's Self-Care Deficit Theory of Nursing** (4) Fall. 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 379. Introduction to Nursing Agency** (1) Fall. 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) Spring. 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) Spring. 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) Spring. 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) Fall. 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.

**ΔNURS 384. Clinical Nursing Ethics** (1) Fall, Spring. Assists students in recognizing ethical situations as they occur in clinical nursing practice. 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) Spring. 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) Spring. 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) Fall. 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) Spring. 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) Spring. 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) Fall. 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 Ill Adult** (2) Fall, Spring. An elective theory 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) Spring. Designed to study nursing systems related to episodic, primary and acute care in the emergency care setting. Prerequisite: completion of junior level nursing courses. Graded S/U.

**NURS 408. Intraoperative Nursing Elective** (2) Fall, Spring. Designed to enhance the student's knowledge base and clinical competence in developing nursing agency in the operating room. Prerequisite: completion of junior level nursing courses. Graded S/U.

**NURS 409. Critical Care Clinical** (2) Spring. Application of theory from NURS 406, Care of the Critically Ill Adult, in a critical care clinical setting. Students have weekly contact with clients and are responsible for identifying clients' nursing needs. Students examine stressors for nurse, client and family. Prerequisites: NURS 406 and junior level nursing courses. Graded S/U.

**NURS 410. Computer Trends in Nursing and Health Care** (2) Spring. 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. Hands-on experience will be provided through the use of pre-packaged health-related software. No experience with computers required.

**NURS 416. Decision Making in Self Care** (1). Exploration of self-care as deliberate action. Purpose is to assist clients in decision-making and/or goal directed behavior which will sustain, protect and promote human functioning. Offered to health-related professions, social workers, teachers and counselors. Prerequisite: consent of instructor.

**NURS 420. Holistic Self Care Management** (2). Focuses on creative, innovative nursing strategies which will assist clients to increase

their self-care strategies. Includes use of therapeutic touch, relaxation techniques, imagery, hypnosis, biofeedback and others. Utilizes the holistic, person-centered perspective. Prerequisite: admission to nursing program or consent of instructor.

**NURS 470. Independent Study in Nursing** (1-3) Fall, Spring, Summer. 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) Fall, Spring. The student has opportunities to gain experience in designing, implementing and evaluating nursing systems for the childbearing family within a self-care framework. Prerequisite: successful completion of all junior level courses. Lab fee.

**NURS 474. Nursing Systems: Holistic Care for the Well/Ill Child.** (3) Fall, Spring. 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. College laboratory experience included with applications in an acute care setting. Prerequisite: successful completion of junior level courses.

**NURS 481. Nursing Systems: Persons with Psychosocially Altered Health States** (3) Fall, Spring. 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 junior level courses.

**ΔNURS 484. Nursing Systems: Community Health Nursing** (4) Fall, Spring, Summer. 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) Spring. 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, 474, 481 and 484.

**NURS 492. Concepts in Management** (1) Spring. Designed as an independent study experience for exploration of the management 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, 474, 481, 484.

**ΔNURS 493. Issues in Professional Role Development** (1) Spring. 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.

**ΔNURS 495. Nursing Research** (3) Fall, Spring. Class content emphasizes all phases of the research process. The new course will develop students' skills in critically analyzing and evaluating various research approaches to investigating problems.

THE FOLLOWING COURSES IN THE NURSING MAJOR ARE COMPLETED BY THE R.N./B.S.N. STUDENTS. (Note: Nursing 484, 493 and 495 are taken both by the basic students and by those in the RN track.)

**ΔNURS 374. Introduction to Nursing Agency for RN students** (2) Fall. 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. Graded S/U.

**ΔNURS 375. Clinical Decision Making: Development of Nursing Agency** (2) Fall. 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 decision-making skills. Prerequisite: admission to RN major.

**ΔNURS 385. Clinical Decision-Making II** (2) Spring. Continuation of exploration of Orem's Theory. Examination of developmental and universal self-care requisites of air, activity and social interaction.

**ΔNURS 386. Physical Assessment I** (1) Fall. Focuses on the development of skills of health 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.

**ΔNURS 387. Nursing Agency: Therapeutic Communication** (1) Spring. 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 facilitate or impede interpersonal functioning are explored. Prerequisite: successful completion of NURS 374. Graded S/U.

**ΔNURS 395. Nursing Systems: Social and Interpersonal Elements** (3) Spring. 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. This course includes a two-hour lecture, a two-hour clinical conference and four hours of clinical lab per week. Prerequisite: successful completion of NURS 387, 385. Clinical course.

**ΔNURS 396. Physical Assessment II** (2) Fall. Focuses on further developing physical assessment skills culminating in the total physical exam of the adult. Prerequisite: successful completion of NURS 386 or consent of instructor. Graded S/U. Lab fee.

**ΔNURS 475. Nursing Systems: Holistic Care for the Older Adult** (3) Fall. 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. Clinical course.

**ΔNURS 485. Nursing Agency: Developing Leadership and Management Abilities** (3) Fall. Focuses on the development of the leadership/management component of nursing agency. Students will analyze their present leadership/management abilities, then incorporate theories of leadership/management into the professional role. Prerequisite: successful completion of NURS 374, 375. Clinical course.

## Operations Research (OR)

**OR 380. Introduction to Operations Research** (3) Fall, Spring, Summer. Introduces various quantitative approaches for modeling and solving business problems. 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, production, queuing, scheduling, economic systems; implementing these models using computer simulation languages (e.g. GPSS). Prerequisites: STAT 212 or MATH 442, and at least one computer programming course.

**OR 485. Introduction to Stochastic Models** (3). Problems of incorporating risk into decision models; queuing theory; stochastic inventory models; Markov chains, stochastic mathematical programming. Prerequisite: 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, assignment, 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 areas of contemporary problems. May be offered individually and in classes, depending on student needs and nature of material.

## Philosophy (PHIL)

**¶ΔPHIL 101. Introduction to Philosophy** (3) Fall, Spring. Systematic study of enduring human concerns about God, morality, society, the self and knowledge.

**¶ΔPHIL 102. Introduction to Ethics** (3) Fall, Spring. Discussion of ethical concepts such as good and evil and right and wrong in the context of contemporary moral issues; major ethical theories as a basis for dealing with contemporary moral concerns.

**¶ΔPHIL 103. Introduction to Logic** (3) Fall, Spring. Uses of language including definitions and arguments, typical mistakes in reasoning, and methods of evaluating arguments.

**¶ΔPHIL 204. Aesthetics** (3) Fall, Spring. Meaning of "beauty" or aesthetic value in art and nature, approached problematically and applied to present-day experiences.

**PHIL 210. Philosophy of Development of Persons** (3) Fall, Spring. Self-development and criteria for evaluating life plans. Concepts of self-esteem and social responsibility applied to personal and counseling situations.

**¶ΔPHIL 211. History of Ancient Philosophy** (3) Fall. Progress of Greek philosophy from its earliest origins in Greece through the Presocratics, Plato and Aristotle, concluding with main themes of Hellenistic, Roman and medieval philosophy. PHIL 211 can function as an excellent introduction to philosophy.

**¶ΔPHIL 212. History of Modern Philosophy** (3) Spring. 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) Fall or Spring. The nature of persons, the relation of mind and body, free will, language and thought, thought and action, the nature of mental phonomena and the problem of other minds (humans, animals and machines).

**PHIL 217. World Religions** (3) Fall or Spring. Fundamental tenets of major world religions-Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam, with the cultural backgrounds of lands of their development.

**PHIL 218. Legal Reasoning** (3) Fall or Spring. The logic of judicial decision making, from "mechanical jurisprudence" to various forms of judicial discretion. The role of definition in legal reasoning, and several theories of statutory interpretation.

**¶PHIL 230. Scientific Reasoning** (3) Fall or Spring. Study of the scientific method which develops skills for interpreting scientific findings and evaluating theories, tests and causal and statistical claims. One component deals with decision-making procedures based on these evaluations. No prerequisites.

**ΔPHIL 240. Topics in Philosophy** (3) Fall, Spring. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.

**PHIL 245. Philosophy of Feminism** (3) Fall or Spring. Philosophical presuppositions and specific proposals of feminists; views on sex roles, human welfare, justice and equality, rights, self-actualization, self-respect, autonomy, exploitation, oppression, freedom and liberation, reform and revolution.

**PHIL 303. Symbolic Logic** (3) Fall or Spring. Notation and proof procedures used by modern logicians to deal with special problems beyond traditional logic; propositional calculus, truth tables, predicate calculus, nature and kinds of logical proofs.

**PHIL 311. History of Medieval Philosophy** (3) Fall alternate years. Major philosophical positions of Middle Ages; St. Augustine through Renaissance philosophers.

**PHIL 312. Modern Political Philosophy** (3) Fall or Spring. A survey of some of the main political thinkers and works of the modern world from Hobbes to Marx.

**PHIL 315. American Thought** (3) Fall or Spring. Philosophical thought in America; emphasis on pragmatists (Peirce, James, Dewey); Natural Rights philosophy, transcendentalism, other major figures such as Royce, Santayana, Whitehead.

**PHIL 316. Philosophy of Psychology** (3) Fall or Spring. 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 neorophysiology (of the brain), the nature of mental representation, including imagery, psychological explanation and cognitive architecture.

**ΔPHIL 317. Philosophy of Religion** (3) Fall or Spring. Nature of religion; gods and/or God; faith, revelation and religious belief; evil and righteousness; meaning of life. Readings from variety of sources, largely contemporary.

**PHIL 318. Philosophy of Law** (3) Fall, Spring. Philosophical foundations of legal system; essential nature of law and relation to morality; liberty, justice and legal responsibility (intention, human causality, negligence, mens rea, fault, etc.) and punishment. Prerequisite: For philosophy major section, PHIL 102 or 312.

**ΔPHIL 319. Philosophy of Death and Dying** (3) Fall, Spring. Conceptual, metaphysical and epistemological issues related to nature of death; existential issues related to human significance of death for individual and community; normative issues related to care of dying.

**ΔPHIL 320. Business Ethics** (3) Fall, Spring. Value conflicts that arise in business situations and philosophical ways of resolving them including issues involving the social responsibility of business people. Prerequisite: for philosophy major section, PHIL 102 or 312.

**PHIL 321. Indian and Chinese Philosophy** (3) Fall or Spring. Traditional schools such as Nyaya, Sankhya-Yoga, Buddhism, Vedanta, Confucianism and Taoism; epistemology, formal inference, causality, metaphysics, mind-body relationships.

**PHIL 322. Thought Across Cultures** (3) Fall or Spring. Philosophical dimension of the structure and content of "culture", including examination of the presupporitions 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) Fall or Spring. Freedom, alienation, human nature, the state, etc. as they function in communist, capitalist and democratic ideology.

**PHIL 327. Philosophy of Punishment** (3) Fall, Spring. Justification of capital punishment; acceptability of imprisonment as punishment; desirability of treating criminals as mentally ill rather than punishing them; related issues of different theories of punishment.

**PHIL 330. Theory of Knowledge** (3) Fall or Spring. Theories of knowledge, truth, belief and evidence.

**PHIL 331. Existentialism** (3) Fall or Spring. Various existential themes, including the meaning of life, human freedom, the limits of reason, the meaning of death, and the individual vs. society. Kierkegaard, Nietzsche, Dostoevsky, Camus, Sartre, Jaspers, Buber and others comprise the reading.

**ΔPHIL 332. Environmental Ethics** (3) Fall or Spring. 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) Fall or Spring. Death, perception of self, conflict of values occurring in novels, plays and poetry from various cultures. Content may vary from instructor to instructor, and from semester to semester. May be taken only once for credit.

**PHIL 335. Philosophy of Film** (3) Fall or Spring. 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) Fall, Spring. Subject matter designated in class schedule. Primarily for students with little or no background in philosophy.

**ΔPHIL 342. Medical Ethics** (3) Fall, Spring. Selected topics such as genetic engineering, euthanasia, honesty with the dying, and human experimentation viewed from perspective of representative ethical theories Prerequisite: For philosophy major section, PHIL 102 or 312..

**PHIL 344. Computers and Philosophy** (3) Fall, Spring. Philosophical dimensions of the impact 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) Fall or Spring. A survey of decision theory covering basic issues in utility theory, decision making under risk or uncertainty, game theory and social choice theory.

**PHIL 395. Workshop on Current Topics** (1-4) Fall, Spring on demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format is used. Requirements are usually completed within this expanded time format. May be repeated if topics differ and adviser approves.

**PHIL 406. Philosophy of Language** (3) Fall alternate years. Historical and contemporary theories of meaning; their use in resolving traditional philosophical controversies and in providing foundation for contemporary analytic philosophy; various interdisciplinary connections.

**PHIL 411. Contemporary Analytic Philosophy** (3) Fall or Spring. Major twentieth century movements in the analytic tradition, including ideal language philosophy, ordinary language philosophy, and naturalized, holistic philosophy, including such philosophers as Russell, Austin, Witttgenstein, Quine, Davidson and Kripke. Prerequisite: Six hours of philosophy including PHIL 212 or 312.

**PHIL 412. Contemporary Continental Philosophy** (3) Fall or Spring. Major twentieth century movements in France and Germany, beginning with the phenomenology of Husserl, proceeding through Sartre and Heidegger and including philosophical hermeneutics, critical theory, the theory of communication and genealogies of values, with attention to such philosophers as Gadamer, Ricoeur and Derrida, Adorno, Habermas and Foucault. Prerequisite: Six hours of philosophy including PHIL 212 or 312.

**PHIL 414. Metaphysics** (4) Fall or Spring; Alternate years. Survey of traditional metaphysical 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) Fall or Spring. Theme or themes central to American philosophy. Prerequisite: one course in PHIL (excluding PHIL 103) or consent of instructor.

**PHIL 417. Skepticism and Faith** (3) Fall or Spring. In-depth examination of modern challenges to religious faith and religious responses. Topics such as evolution, societal secularization, the autonomy of morals and naturalistic explanations of religion and religious experience. Prerequisites: PHIL 217 and 317; 412 is recommended. May be repeated with different topics.

**PHIL 418. Topics in the Philosophy of Law** (3) Fall or Spring. In-depth examination of such topics as the nature and analysis of law, legal reasoning, judicial decision, hard cases, responsibility, causation and fault, the mental element in crime, formal and material principles of justice and the legal enforcement of morality. 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) Fall or Spring. An in-depth treatment of some theme(s) in social philosophy combined with a survey of traditional ethical theories as a background to social philosophy. Prerequisite: PHIL 102 and PHIL 318 or 320 or 325 or 332 or 342.

**PHIL 431. Topics in Philosophy of Science** (3) Fall or Spring. Content varies from year to year. Topics include: nature of scientific 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) Spring. Physical theories of space and time from philosophical, scientific and historical points of view. Topics include Zeno's paradoxes, Greek concepts of space and time, classical Newtonian world view, general ideas of modern theory of relativity and cosmology. Course presupposes high school level mathematics only. Cross-disciplinary; cross-listed in as PHYS 433.

**PHIL 442. Philosophy of Health** (3) Fall or Spring. In-depth examination of selected issues in medical epistemology, philosophy of science and the philosophy of mind, drawing on the continental philosophical tradition to examine professional and social constructs and their impact on the therapeutic relationship. Prerequisite: PHIL 342 and 412. May be repeated with different topics.

**PHIL 445. Topics in the Philosophy of Business and Economics** (3) Fall or Spring. In-depth examination of such concepts as profit and 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, cover-ups and whistleblowing. Prerequisites: PHIL 312 and 345. May be repeated with different topics.

**PHIL 470. Readings and Research** (1-3) Fall, Spring. 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) Fall, Spring. In-depth examination of one specific philosopher, philosophical movement or problem. Determined by need and interest of student. Prerequisite: three hours in PHIL (excluding PHIL 103) or consent of instructor.

## Physical Education, General (PEG)

**ΔPEG 100. General Physical Education** (1) Fall, Spring, Summer. All students must select two activity courses from those listed below to full the University requirement of two semester hours of general physical education. Each activity course develops the knowledge, understanding and skills pertinent to the activity. Most activities are coeducational. Offerings each term will vary. Graded S/U.

*PEG 101. Adapted Physical Education.* For students with physical limitations. Department permission required.
*PEG 104. Aerobic Dance.*
*PEG A104. Intermediate Aerobic Dance.*
*PEG 106. Archery.*
*PEG 107. Badminton.*
*PEG 110. Basketball.*
*PEG 111. Billiards.* $25 fee required.
*PEG 112. Bowling.* $25 fee required.
*PEG A112. Intermediate Bowling.* $25 fee required.
*PEG 114 Canoeing.*
*PEG 115 Cheerleading Gymnastics.*
*PEG 116 Colorado Ski Weekend.* Extra fee of approximately $300 required.
*PEG 118 Cycling.* $10 fee required.

*PEG 119 Curling.* $20 fee required.
*PEG 120 Ballroom Dance I.*
*PEG A120 Ballroom Dance II.*
*PEG 121 Classical Ballet I.*
*PEG A121 Classical Ballet II.*
*PEG D121 Classical Ballet III.*
*PEG 122 Ballet Pointe I.*
*PEG 123 Folk and Square Dance.*
*PEG 125 Jazz Dance I.*
*PEG A125 Jazz Dance II.*
*PEG D125 Jazz Dance III.*
*PEG 126 Modern Dance I.*
*PEG A126 Modern Dance II.*
*PEG D126 Modern Dance III.*
*PEG 127 Tap Dance I.*
*PEG A127 Tap Dance II.*
*PEG 129 Diving—Introduction.*
*PEG A129 Intermediate Diving.*
*PEG 131 Downhill Skiing.* $92 fee required.
*PEG 132 Exercise and Conditioning.*
*PEG 134 Fencing.* Fee required.
*PEG A134 Intermediate Fencing.* Fee required.
*PEG 135 Fitness Walking.*
*PEG 136 Coed Flag Football.*
*PEG 137 Golf.* $6 fee required.
*PEG A137 Intermediate Golf.* $18 fee required.
*PEG D137 Advanced Golf.* $24 fee required.
*PEG 139 Beginning Gymnastics Apparatus I (women).*
*PEG A139 Intermediate Gymnastics Apparatus II (women).*
*PEG 140 Handball.*
*PEG 141 Basic Hockey.* $15 fee required.
*PEG A141 Advanced Hockey.* $15 ree required.
*PEG D141 Competitive Level Hockey.* $20 fee required.
*PEG 142 English Horsemanship.* $135 fee required.
*PEG 143 Western Horsemanship.* $135 fee required.
*PEG 144 Water Aerobics.*
*PEG 146 Basic Ice Skating.* $15 fee required.
*PEG 147 Figure Skating.* $15 fee required.
*PEG 148 Precision Skating.* $20 fee required.
*PEG 150 Jogging.*
*PEG 151 Karate.*
*PEG 153 Racquetball.*
*PEG A153 Intermediate Racquetball.*
*PEG D153 Advanced Racquetball.*
*PEG 154 Sailing.* Fee required.
*PEG 155 Skin Diving/Snorkeling.*
*PEG 156 Soccer.*
*PEG A156 Intermediate Soccer.*
*PEG 157 Softball - Men.*
*PEG 158 Softball - Women.*
*PEG 159 Softball - Coed.*
*PEG 160 Squash.*
*PEG A160 Intermediate Squash.*
*PEG 170 Survival Swimming.*
*PEG 171 Beginning Swimming.*
*PEG A171 Intermediate Swimming*
*PEG D171 Advanced Swimming*
*PEG 173 Tennis*
*PEG 175 Triathalon Training*
*PEG 176 Tumbling and Gymnastics*
*PEG 177 Volleyball*
*PEG 179 Weight Training*
*PEG A179 Intermediate Weight Training*
*PEG 162 Whitewater Rafting.* $104 fee required.

**ΔPEG 200. General Physical Education** (1) Fall, Spring, Summer. Develops knowledge, understanding and skills pertinent to the activity. Most are coeducational. Offerings vary each term. Prerequisite: Completion of two hours of PEG 100.

*PEG 201 Adapted Physical Education.* For students with physical imitations. Department permission required.
*PEG 204 Aerobic Dance.*
*PEG A204 Intermediate Aerobic Dance.*
*PEG 206 Archery.*
*PEG 207 Badminton.*
*PEG 210 Basketball.*
*PEG 211 Billiards.* $25 fee required.
*PEG 212 Bowling.* $25 fee required.
*PEG A212 Intermediate Bowling.* $25 fee required.
*PEG 215 Cheerleading Gymnastics.*
*PEG 218 Cycling.* $10 fee required.
*PEG 219 Curling.* $20 fee required.
*PEG 220 Ballroom Dance I.*
*PEG A220 Ballroom Dance II.*
*PEG 221 Classical Ballet I.*
*PEG A221 Classical Ballet II.*
*PEG D221 Classical Ballet III.*
*PEG 222 Ballet Pointe I.*
*PEG 223 Folk and Square Dance.*
*PEG 225 Jazz Dance I.*
*PEG A225 Jazz Dance II.*
*PEG D225 Jazz Dance III.*
*PEG 226 Modern Dance I.*
*PEG A226 Modern Dance II.*
*PEG D226 Modern Dance III.*
*PEG 227 Tap Dance I.*
*PEG A227 Tap Dance II.*
*PEG 229 Diving--Introduction.*
*PEG A229 Intermediate Diving.*
*PEG 232 Exercise and Conditioning.*
*PEG 234 Fencing.* Extra fee required.
*PEG A234 Intermediate Fencing.* Extra fee required.
*PEG 235 Fitness Walking.*
*PEG 236 Coed Flag Football.*
*PEG 237 Golf.* $6 fee required.
*PEG A237 Intermediate Golf.* $18 fee required.
*PEG D237 Advanced Golf.* $24 fee required.
*PEG 239 Beginning Gymnastics Apparatus II. (Women)*
*PEG A239 Intermediate Gymnastics Apparatus II. (Women)*
*PEG 240 Handball.*
*PEG 241 Basic Hockey.* $15 fee required.
*PEG 244 Water Aerobics.*
*PEG 246 Basic Ice Skating.* $15 fee required.
*PEG 247 Figure Skating.* $15 fee required.
*PEG 248 Precision Skating.* $20 fee required.
*PEG 250 Jogging.*
*PEG 251 Karate.*
*PEG 253 Racquetball.*
*PEG A253 Intermediate Racquetball.*
*PEG D253 Advanced Racquetbsll.*
*PEG 255 Skin Diving/Snorkeling.*
*PEG 256 Soccer.*
*PEG A256 Intermediate Soccer.*
*PEG 257 Softball - Men.*
*PEG 258 Softball - Women.*
*PEG 259 Softball - Coed.*
*PEG 260 Squash.*
*PEG A260 Intermediate Squash.*
*PEG 270 Survival Swimming.*
*PEG 271 Beginning Swimming.*
*PEG A271 Intermediate Swimming.*
*PEG D271 Advanced Swimming.*
*PEG 273 Tennis.*
*PEG 275 Triathalon Training.*
*PEG 276 Tumbling and Gymnastics.*
*PEG 277 Volleyball.*

## 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) Fall, Spring.
*PEP 112. Gymnastics-Women* (2) Fall, Spring.
*PEP 116. Soccer* (2) Fall.
*PEP 121. Tennis* (2) Fall.
*PEP 123. Track and Field* (2) Fall.
*PEP 124. Volleyball* (2) Fall, Spring.

**PEP 137. Educational Dance** (1) Fall, Spring. Movement approach for dance in which the learner becomes aware of the expressive values inherent in dance by experiencing and analyzing movement, creating dances and responding to dance structure. One laboratory. Advisable to take concurrently with PEP 138.

**PEP 138. Educational Gymnastics** (1) Fall, Spring. Movement approach to gymnastics in which the learner becomes aware of how to manage body weight and understand concepts related to the development of versatile, qualitative and inventive movement. One laboratory. Advisable to take concurrently with PEP 137.

**PEP 164. Introduction to Movement Analysis** (2) Fall, spring, Summer. Introductory study and analysis of human motion through application of basic mechanical concepts and use of a movement framework. One lecture, one laboratory. Prerequisite: none. One activity course must be taken concurrently with this course.

**PEP 201-205, 207-209, 213, 214, 217-219, 226-228. Elective Professional Activities.** Elective courses of skill and knowledge development basic to participation and understanding of the activity. One laboratory.
*PEP 201. Archery* (1) Fall. Alternate years.
*PEP 202. Badminton* (1) Fall, Spring.
*PEP 203. Basketball* (1) Fall, Spring.
*PEP 204. Bowling* (1) Spring.
*PEP 205. Diving* (1) Fall. Alternate years.
*PEP 207. Fencing* (1) Spring. Alternate years.
*PEP 208. Field Hockey* (1) Fall. Alternate years.
*PEP 209. Golf* (1) Fall.
*PEP 213. Lacrosse* (1) Spring. Alternate years.
*PEP 214. Rebound Tumbling* (1) Spring. Alternate years.
*PEP 217. Softball* (1) Fall.
*PEP 218. Swimming* (1) Fall.

*PEP 219. Synchronized Swimming* (1) Fall.
*PEP 226. Wrestling* (1) Spring. 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 Lifesaving** (1) Fall, Spring. Red Cross Advanced Lifesaving training techniques and skills designed to save lives in the event of aquatic emergencies. Prerequisite for water safety instructor's course and lifeguard training. One laboratory. Prerequisite: eligibility testing conducted first week of course.

**PEP 227. The Physical Education Profession** (2) Fall. An introduction to physical education as a professional career choice.

**PEP 229. Individualized Exercise Prescription** (1) Development and administration of exercise training programs designed for improving personal physical fitness. (2 hours per week). Class restricted to physical education majors and minors; others by permission of instructor.

**PEP 230. Structural Kinesiology** (3) Fall, Spring. The study of movement based on functional anatomy. Two lectures; one laboratory. Prerequisite: PEP 164.

**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) Fall 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. Educational Games Teaching to Children** (2) Fall, Spring. Movement approach to games/sports with special emphasis on program content, methodology and progression. One lecture, one laboratory. Prerequisite: PEP 137 or 138 or permission of instructor. C/F hrs.: 40.

**PEP 247. Introduction to Teaching Physical Education** (3) Fall, Spring. Introduction to the teaching of elementary and secondary physical education. Two lecture hours and arranged field hours. C/F hours: 40. Prerequisites: PEP 164, PEP 227, and two major activity courses.

**PEP 303. Biomechanics** (2) Fall, Spring. The study of human motion through the examination of internal and external forces acting on the body and the effects produced by these factors. Two lectures. Prerequisites: PEP 164 and 230.

**PEP 322. Red Cross Water Safety Instructor's Course** (2) Fall, Spring. Successful completion certifies student to conduct and to certify Red Cross swimming and lifesaving courses except WSI. One lecture, one laboratory. Prerequisites: Current advanced lifesaving certificate and consent of instructor. (Eligibility testing conducted first week of course.)

**PEP 328. Principles, Ethics and Problems of Coaching** (3) Fall, Spring. Non-technical, "off-the-field" aspects of athletic coaching educational implications; coaching ethics; public relations; equipment; financing; liability; coach-athlete rapport.

**PEP 329. Coaching Football** (3) Fall. Development of personal skills and understandings in football; team administration, organization, philosophy, theory, fundamentals, strategy, methods and responsibilities of coaching football. Two lectures, two lab hours per week. Prerequisite: sophomore standing.

**PEP 331. Coaching Basketball** (2) Fall. 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) Fall, Spring. Analysis of student-teacher behaviors through clinical and field-based experiences for the purpose of developing and improving teacher-learning effectiveness. Emphasis on personal assessment and development of techniques. Two lectures, one laboratory. Prerequisites: PEP 137, PEP 138, PEP 241 and/or permission of instructor. C/F hrs.: 60.

**PEP 337. Teaching Education Dance** (2) Fall 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 339. Coaching of Interscholastic Sports: A Practicum** (2) Fall, Spring. Offers prospective coaches instruction in planning, teaching, administrative functions, safety, and liability essential to effective coaching. Taken during semester in which selected sport is in season. One lecture hour and arranged practicum hours. Prerequisites: PEP 328, HED 313.

**PEP 340. Motor Development** (3) Spring. 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) Fall, Spring, Summer. 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) Fall, Spring. Perception, learning, motivation and other psychological factors involved in motor learning and performance. Two lectures, one laboratory. Prerequisite: EDFI 302. C/F hrs.: 40.

**PEP 356. Philosophical and Cultural Bases of Physical Education** (3) Spring. Study of philosophy and culture pertinent to the shaping of physical education as a discipline.

**PEP 360. Exercise Physiology** (3) Fall, Spring. Lecture/laboratory course; the immediate and long-range effects of exercise upon the human body. Two lectures, one laboratory. Prerequisite: BIOL 332. C/F hrs.: 20.

**PEP 362. Teaching Motor Activity in Secondary Schools** (3) Fall, Spring. Principles, objectives, lesson planning, instructional materials, teaching methods, curriculum and field experience in physical education in the secondary schools. Two lectures, two laboratories. Prerequisites: PEP 350, EDFI 302 and admission to PEP Major Plans II or III. C/F hrs.: 60.

**PEP 387. Practicum** (1-5) Fall, Spring, Summer. 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 Physical Education** (2) Fall, Spring. Field experience in physical education in the public school. Weekly assignment includes being in a public school two half days and attending regular 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 Motor Activity** (3) Fall, Spring. Assessment and evaluation principles and techniques with application to performance/learning in physical education and related activity programs. Two one-hour lectures and one two-hour laboratory. Prerequisite: junior standing. C/F hrs.: 22.

**PEP 412. Organization and Administration of Physical Education and Interscholastic Athletics** (3) Fall, Spring. Organization and administration of the total physical education program including instructions, intramurals, extramurals and interscholastic athletics. Prerequisite: senior standing.

**PEP 428. The Movement Approach to Teaching Physical Education to Children** (5) Spring. Selection, design and application of learning experiences appropriate for elementary school child based on movement concepts. PEP 387 may be taken concurrently. 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) Fall, Spring, Summer. Principles, objectives and history of adapted physical education with an overview of disabilities. C/F hrs.: 35.

**PEP 435. Movement Analysis in Adapted Physical Education** (3) Spring 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 438. Seminar in Elementary School Physical Education** (2) Spring 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) Fall, Spring, Summer. An indepth study project of a topic of particular significance to the student. Project must be approved by project supervisor and program area chair prior to registration. May be repeated. Prerequisite: by permission.

**PEP 487. Practicum** (1-5) Fall, Spring, Summer. Under supervision of PEP division of School of Health, Physical Education and Recreation. Petitioning 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) Fall, Spring. Classroom physical education 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.

**PEP 497. Student Teaching** (1-10) Fall, Spring. 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 300. Introduction to Physical Therapy** (2) Fall. Introduction to physical therapy practice. Primary focus on professional terminology, the problem-solving process, and principles of: body mechanics, client-positioning, transfers, gait training, infection control and management of clinical emergencies. One hour of lecture, two hours of laboratory.

**PHYT 301. Human Gross Anatomy I** (5) Fall. An integrated study of the structure and function of the musculoskeletal, circulatory, and connective tissues systems of the back, chest, and lower extremity including basic embryology, and histology. Laboratory session to include cadaver dissection and prosected materials. Five hours of lecture, one, 3-hour laboratory.

**PHYT 302. Anatomy and Physiology II** (2) Spring. An integrated study of the structure of the musculoskeletal, circulatory, and connective tissue systems of the upper extremity, neck, and head. Laboratory sessions to include cadaver dissection and prosected materials. One hour of lecture, one, 2-hour laboratory.

**PHYT 307. Neurosciences and Clinical Correlations** (5) Spring. An integrated study of the structure and function of the central and peripheral nervous systems. Principles of neurophysiological and neuropathological motor and sensory function and related basic assessments skills. Two, 2-hour lectures, one, 2-hour laboratory.

**PHYT 309. Kinesiology I** (3) Fall. Normal and abnormal static and dynamic human posture through the examination of internal and external forces acting on the trunk and lower limbs. Special emphasis on human locomotion. Two hours of lecture, one, 2-hour laboratory.

**PHYT 310. Kinesiology II** (2) Spring. Normal and abnormal static and dynamic human posture through the examination of internal and external forces acting on the upper limbs. One hour of lecture; one 2-hour laboratory.

**PHYT 311. Pathophysiology I** (1) Spring. Introduction to cellular level pathophysiology. Clinical correlations of circulatory, infectious and collagen diseases, genetic and metabolic defects. One and one-half hours of lecture.

**PHYT 312. Pathophysiology II** (1) Summer. Pathophysiology and clinical correlations in hematology, toxicology, dermatology, gastrointestinal diseases and renal diseases. Basic pharmaceutical principles and nutritional principles and management. One and one-half hours lecture.

**PHYT 321. Theory and Procedures of Physical Therapy I** (3) Fall. Physiological and bioelectrical principles and application of conduction and convection modalities used in treating clients. Two and one-half hours of lecture, one, 3-hour laboratory.

**PHYT 322. Theory and Procedures of Physical Therapy II** (3) Spring. Physiological and bioelectrical principles and application techniques of conversion and radiation modalities used in treating clients. Basic therapeutic massage/soft tissue mobilization techniques. Two hours of lecture, 2 hours laboratory.

**PHYT 331. Therapeutic Exercise I** (2) Fall. Introduction to the types and application of therapeutic exercise—includes passive, resistive coordination. Principles of relaxation training and posture correction. One hour of lecture, one, two-hour laboratory.

**PHYT 340. Foundations of Physical Therapy I** (1) Fall. Introduction to concepts and principles forming the cultural orientation for physical therapy practice and behavior—professional ethos. Includes ethics and therapeutic communication skills. Two hour of discussion.

**PHYT 341. Foundations of Physical Therapy II** (1) Spring. Continuation of Foundations I. Includes advanced communication skills, developing support systems, dealing with difficult clients, such as the dying client, family of severely disabled children, and older clients. Two hours of discussion and recitation.

**PHYT 342. Foundations of Physical Therapy III** (1) Spring. Introduction to conceptual basis for the health care delivery system in the United States. Critical issues in the health care system and physical therapy as a subsystem will be presented—prevention/health promotion, legislative process, quality assurance. One and one-half hours discussion/recitation sessions.

**PHYT 350. Musculoskeletal Problems I** (3) Spring. Theories and principles of basic musculoskeletal screening. Biomechanical gait analysis and correction will be covered. Introduction to the pathophysiology of the musculoskeletal system with pertinent assessment and treatment principles. Two hour of lecture, two, 2-hour laboratory.

**PHYT 381. Clinical Practicum** (4) Summer. Course consists of 5 weeks of clinical observation and supervised application of appropriate assessment and treatment skills/procedures. Forty hours per week for 5 weeks. Arranged. Graded S/U.

**PHYT 401. Early Development** (3) Summer. Principles of development from conception to adolescence. Includes congenital problems, high risk neonate assessment and intervention, developmental assessment tools, and common pediatric disorders. Three hours of lecture, one hour laboratory.

**PHYT 402. Electrophysiological Assessment and Treatment** (3) Summer. Theory and application of electrical currents in assessment and treatment of clients. Two hours of lecture, one, 2-hour laboratory.

**PHYT 406. Management of Physical Therapy Services** (3) Spring. Introduction to theory and principles of management. Includes programmatic planning, organizational change, motivation, cost analysis and budgeting. Workshops, case studies, and group projects are methods to be used. Three hours of lecture.

**PHYT 410. Scientific Inquiry** (2) Fall. Introduction to elements of basic research design, reliability and validity, and critical review of research literature. Pertinent statistical knowledge required to critically analyze published research. Two hours of lecture.

**PHYT 415. Research Topics** (1) Fall. Discussion of current research topics and their implications and relevance to the practice of physical therapy. One and one-half hours of discussion/recitation.

**PHYT 421. Principles of Exercise Physiology** (3) Spring. Principles of exercise physiology as they relate to healthy and temporarily or permanently disabled clients. Also included will be the pathophysiology, assessment and treatment of cardiopulmonary dysfunction. Two hours of lecture, one, 3-hour laboratory.

**PHYT 422. Principles of Rehabilitation** (3) Fall. Theories, philosophies and principles of rehabilitation for the chronically disabled with emphasis on spinal cord injuries and amputations. Three hours of lecture, one, 2-hour laboratory

**PHYT 426. Psychology of Physical Disability** (3) Fall. Review of basic principles and major theoretical approaches to understanding personality and human behavior as it relates to illness and physical disability. Special emphasis on hemiplegia, burns, eating disorders, sexuality and the disabled, and chronic pain. Three hours of lecture.

**PHYT 428. Gerontology in Physical Practice** (2) Spring. A study of age-related anatomical, physiological and biomechanical change and the psychosocial problems of the aged. Special emphasis on pharmaceutical, exercise, nutritional, and political concerns. Clinical case studies will be discussed. Two hours of lecture/discussion.

**PHYT 430. Principles of Therapeutic Exercise II** (3) Fall. Principles and theories of therapeutic exercise as they relate to the neuro-muscular dysfunctional client. Includes theories of motor control, normal and abnormal movement, client assessment and treatment. Extensive clinical laboratory will be part of the course. One hour of lecture, two, 2-hour laboratory.

**PHYT 431. Principles of Therapeutic Exercise III** (2) Spring. Continuation of Therapeutic Exercise II. Selected theories include neurodevelopmental, and sensory integration. Assessment and treatment planning for adult and pediatric clients, with pediatric components to be conducted as clinical laboratories. Other topics to traumatic train injury and oral motor control. One hour of lecture, 3 hours laboratory.

**PHYT 440. Clinical Problem Solving I** (1) Fall. Presentation of selected clinical cases. Discussion and planning of appropriate assessment and treatment procedures. One and one-half hours of discussion/recitation sessions.

**PHYT 441. Clinical Problem Solving II** (1) Spring. Presentation of selected clinical cases. Discussion and planning of appropriate assessment and treatment procedures. One and one-half hours of discussion/ recitation sessions.

**PHYT 444. Fundamentals of Teaching and Learning in Physical Therapy** (3) Spring. Introduction to basic principles of teaching and learning as they relate to health promotion and patient, family, and community education, in service education and instruction of physical therapy students. Students will design and conduct educational activities. Two hours of lecture, 2 hours laboratory.

**PHYT 446. Professional Issues** (1) Spring. In-depth exploration of current issues affecting the practice of physical therapy. One and one-half hours of discussion.

**PHYT 450. Musculoskeletal Problems II** (3) Fall. Theory and principles of advanced musculoskeletal evaluation of trunk and peripheral joints. Topics to include sports related injuries, peripheral joint mobilization. Isokinetic protocols, introduction to work hardening/ergonomics. One hour of lecture, two, 2 1/2 hours laboratory.

**PHYT 460. Computer Applications in Physical Therapy** (2) Spring. Introduction to microcomputers and the Computer Learning Research Center (MCO). Tutorials in word processing, graphics, Medline database, and clinical decision making. Two hours of tutorial/ self instruction. Graded S/U.

**PHYT 480. Seminar** (1-3) Spring. In-depth exploration of selected clinical topics. Arranged.

**PHYT 489. Clinical Internship** (5-7) Summer, Fall. Observation and orientation to physical therapy departments including supervised application of assessment and treatment procedures. Forty hours/week for 10-14 weeks. Graded S/U. Arranged. May be repeated for a maximum of 12 credits.

## Physics (PHYS)

**ΔPHYS 100. Basic Physics** (3) Fall, Summer. For nonscience student; major principles and concepts; application to other fields. Not acceptable toward physics major or minor.

**¶PHYS 101. Physics for Society** (3) Spring. Relation of physics to areas of natural science, cultural development and society. Two lecture-recitations and one two-hour laboratory. For nonscience students; not acceptable toward physics major or minor. Lab fee.

**ΔPHYS 104. Physics for Elementary Teachers** (2) Fall, Summer. 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.

**¶Δ**PHYS 201. College Physics I** (5) Fall, Spring, Summer. First term of an introductory physics sequence intended for students without calculus. Motion, forces, energy, fluids, heat and wave motion. Four lecture-recitations and one two-hour laboratory. Prerequisites: algebra and trigonometry. Lab fee.

**¶Δ**PHYS. 202. College Physics II** (5) Fall, Spring, Summer. Physics 201 continued. Sound, electricity, magnetism, electrical measurements, optics; atomic, nuclear and solid state physics. Four lecture-recitations and one two-hour laboratory. Prerequisite: PHYS 201. Lab fee.

**¶Δ*PHYS 211. University Physics I** (5) Fall. Introductory calculus-based physics sequence for science and engineering majors. Kinematics in one, two and three dimensions; Newtonian mechanics; gravitation; heat and thermodynamics. Four lecture-recitations and one two-hour laboratory. Corequisite: MATH 131. Lab fee.

**¶Δ*PHYS 212. University Physics II** (5) Spring. PHYS 211 continued. Wave motion, sound, optics, electricity and magnetism. Four lecture-recitations and one two-hour laboratory. Prerequisite: PHYS 211. Corequisite: MATH 232. Lab fee.

**PHYS 270. Independent Study** (1-3) On demand. Introduction to research in physics and astronomy; projects chosen in consultation with adviser. May include library and laboratory work. For lower division students only. Prerequisites: consent of instructor.

***PHYS 301. Modern Physics** (3) Fall. Topics from relativity; quantum physics; nuclear, atomic and molecular physics. Three lecture-recitations. Prerequisites: MATH 232 and PHYS 202; or PHYS 212. Student must also register for PHYS 313.

**PHYS 303. Electronics** (3) Spring. Discussion and laboratory practice in networks, transistors, integrated circuits and associated circuitry. Two lecture-recitations and one three-hour laboratory. Prerequisite: PHYS 202 or PHYS 212. Lab fee.

**PHYS 305. Wave Laboratory** (1) Spring. Introduction to advanced experimental techniques and data analysis; laboratory investigation of wave phenomena. One three-hour laboratory. Prerequisites: PHYS 212; or PHYS 202 and MATH 232. Co-requisite: PHYS 307. Lab fee.

**PHYS 306. Thermodynamics and Statistical Physics** (3) Fall alternate years. Thermodynamic laws, entropy, specific heat, kinetic theory; classical and quantum statistics. Three lecture-recitations. Prerequisites: MATH 232 and PHYS 202; or PHYS 212.

**PHYS 307. Mechanics and Wave Motion** (3) Spring. Mechanics of periodic systems including: the driven harmonic oscillator; and coupled oscillators. Fundamentals of wave motion and the propagation of waves in elastic media. Three lecture-recitations. Prerequisites: PHYS 212; or PHYS 202 and MATH 232.

**PHYS 309. Atomic and Nuclear Physics** (3) Fall alternate years. Phenomenological basis of our understanding of atomic phenomena, fundamental ideas of atomic structure, structure of nuclei and basic decay processes, elementary particles. Three lecture-recitations. Prerequisite: PHYS 301.

**PHYS 313. Modern Physics Laboratory** (1) Fall. Laboratory work designed to accompany material presented in PHYS 301. One three-hour laboratory. Prerequisite: PHYS 202 or PHYS 212. Co-requisite: PHYS 301. 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) Fall 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 MATH 232. Not open to students with credit for ASTR 321.

**PHYS 350. Musical Acoustics** (3) Spring 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) Fall. 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 MATH 232.

**PHYS 402. Methods of Theoretical Physics II** (3) Spring alternate years. Computational physics with applications of: Laplace's equation, wave and diffusion equations. Complex variable analysis, Eigenvalue problems. Three lecture-recitations. Prerequisite: PHYS 401.

**PHYS 403. Stellar Structure and Evolution** (3) Spring alternate years. Basic data, stellar interiors, theoretical models; advanced evolutionary states: red giants, white dwarfs, neutron stars, supernovas, black holes. Prerequisites: PHYS 301 and consent of instructor. Not open to students with credit for ASTR 403.

**PHYS 406. Modern Optics** (4) Spring. Principles of physical optics and modern spectroscopy; photodetectors; lasers and electro-optics. Three lecture-recitations and one three-hour laboratory. Prerequisite: PHYS 307, 301

**PHYS 410. Solid State Physics** (3) Spring alternate years. Continuum and atomic theories of solids, lattice vibrations, specific heat of solids, electron theory of metals and semi-conductors. Superconductivity. Three lecture-recitations. Prerequisite: PHYS 307, 301.

**PHYS 411. Physics of Materials** (3) Spring on demand. Structure and physical properties of ceramics, composites and metallurgically important alloys. Principles and methods of modern materials analysis. Three lecture-recitations. Prerequisite: PHYS 307, 301.

**PHYS 412. Infrared Molecular Spectra** (2) Spring on demand. Origin of spectra of simple molecules. Prerequisite: PHYS 301 or course in physical chemistry.

**PHYS 416. Classical Mechanics** (3) Fall. Newtonian particle mechanics in one-, two-, and three-dimensions; non-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) Spring 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. Prerequisites: PHYS 301, 401.

**PHYS 418. Electricity and Magnetism I** (3) Fall. 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) Spring alternate years. PHYS 418 continued with applications to guided waves and physical optics. Relativity. Prerequisite: PHYS 418.

**PHYS 427. Signal Processing** (3) Spring. Introduction to techniques of signal processing; data acquisition and reduction, spectral analysis of continuous signals, sampling, aliasing and discrete Fourier transform. Convolution, correlation and filtering. Prerequisite: PHYS 401 or equivalent.

**PHYS 428. Microcomputer Interfacing** (3) Fall. Medium and large scale integrated circuits such as peripheral interface adapters. Integrated circuits such as UARTS and A/D converters are used to interface a microcomputer to the external world of the laboratory. One class period and two three-hour laboratories. Prerequisites: CS 307 and PHYS 212 or 202, or permission of instructor. Lab fee.

**PHYS 429. Selected Topics in Microelectronics** (1-3) On demand. An individual, in-depth 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) Spring. 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 as PHIL 433.

**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** (1-3) On demand. Readings and research on recently developing topics chosen to fit needs of students.

## Political Science (POLS)

**¶ΔPOLS 201. American Government: Processes and Structure** (3) Fall, Spring. Constitutional basis and development, political processes (parties, nominations and elections, interest groups, public opinion), federalism and institutions of national government.

**ΔPOLS 221. Introduction to Public Administration** (3) Fall, Spring. 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 271. Introduction to Comparative Government** (3) Fall. 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) Fall. 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.

**ΔPOLS 290. Introduction to Political Inquiry** (3) Fall, Spring. Concepts and theories used by political scientists; traditional- and behavioral-political science; how political scientists establish and evaluate concepts and theories. Required of all majors; should be taken before any 300-level course. Nonmajors must receive permission of instructor.

**POLS 301. Modern Political Ideologies** (3) Fall, Spring. 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) Fall, Spring. Public policy agenda setting, formulation, adoption, implementation and evaluation. Selected contemporary policy areas and issues.

**POLS 304. American Political Thought** (3) Spring. As reflected in colonial, Federalist, Civil War and late 19th century political thought.

**ΔPOLS 331. State and Local Government** (3) Fall, Spring. Influence of culture and socioeconomic factors on state-local politics; state constitutions, municipal corporations and charters; political participation; institutions and processes; intergovernmental relations; policy issues and outcomes in state/local government with special reference to Ohio.

**POLS 335. Global Resource Politics** (3) Fall. Resource-related global political problems dealing primarily with energy and food questions for policymakers and citizens concerned with political determinants of energy and food security, in an interdependent world.

**POLS 336. Environmental Politics and Policies** (3) Spring. 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 341. Public Opinion** (3) Fall. Processes of opinion formation and change, political attitudes, belief systems, socialization and the operation of public opinion processes in democracy; models of linkages between public opinion and public policies.

**POLS 345. Legislative Process** (3) Spring. Legislative behavior and decision making; forces involved in formation of public policy; proposed reforms of Congress. Prerequisite: POLS 201 or consent of instructor.

**POLS 346. Presidency and Executive Process** (3) Fall. Organization, functions and powers of office of president and vice president; roles and presidential leadership psychology.

**ΔPOLS 347. Judicial Process** (3) Fall. American judiciary, particularly Supreme Court, as political institution; decision-making process and interaction of courts with rest of political system.

**POLS 351. Western European Politics** (3) Spring. Political systems and major policy problems of selected European countries. Political culture, governmental structures, political parties and interest group roles in policy development. Prerequisite: POLS 271, or permission of instructor.

**POLS 354. Governments and Politics of Eastern Europe** (3) Representative, contemporary Eastern and Central European states undergoing political change and economic restructuring in the context of resurgent ethnic nationalism.

**POLS 355. Governments and Politics of Latin America** (3) Fall. Influence of cultural and socio-economic factors on politics; violence and revolution; role of major interest groups such as the military, labor, the Catholic Church; political parties and elections; institutions; focus is on selected nation-states.

**POLS 361. Governments and Politics of Middle East** (3) Fall. 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.

**ΔPOLS 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.

**ΔPOLS 372. Contemporary World Politics** (3) Fall, Spring. Current global issues and problems such as the arms race, population control, disarmament and East-West, North-South rivalries are discussed and analyzed.

**ΔPOLS 374. American Foreign Policy Process** (3) Fall, Spring. 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** (1-4) On demand. Intensive educational experience on such selected topics as government public information work (agencies, departments, executive and legislative office), and other state, local, national and international political affairs. May be repeated if topics differ, on approval of adviser.

**ΔPOLS 400. Topics in Political Science** (1-3) Fall, Spring. On demand. Subject matter varies. New, one-time courses being offered experimentally. See schedule for listing. Prerequisite: POLS 201.

**POLS 402. Western Political Thought I** (3) Fall. Classics of political philosophy of ancient and medieval periods. Major ideas and concepts of western political tradition from Plato through Middle Ages to Machiavelli.

**POLS 403. Western Political Thought II** (3) Spring. 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) Fall or Spring. 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) Fall. Supreme Court cases relating to U.S. governmental structure, powers and relationships.

**ΔPOLS 417. Constitutional Law: Procedural Rights** (3) Fall. Due process, right to counsel, search and seizure, electronic surveillance, jury trial.

**POLS 418. Constitutional Law: Substantive Rights** (3) Spring. Freedom of speech, press and religion; equal protection of law, travel and privacy; right to vote.

**ΔPOLS 419. Jurisprudence** (3) Spring. Leading theories and theorists of law; Anglo-American thought and practice.

**POLS 420. Administrative Law** (3) Fall. Legal aspects of the administrative process and the effect of legal principles and processes upon administrative decision making. Emphasis on the limitation of administrative discretion and the judicial review of administrative decisions. Prerequisite: consent of instructor.

**POLS 421. Bureaucratic Politics** (3) Spring. 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) Fall. 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) Spring. Comparative study of administrative structures and processes in selected modern and modernizing political systems. Analysis includes the consideration of cultural, legal and political factors influencing the operation of bureaucratic institutions, developmental goals, and the methods of establishing and administering programs of social, economic and political development.

**POLS 424. Supreme Court and Contemporary Issues** (3) Spring. 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) Spring. Substantive knowledge 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. Local Government Management and Politics** (3) Fall, Spring. Socio-economic and political factors affecting local governments with an emphasis on governmental structure, problems, and administrative mechanisms, intergovernmental relations, service delivery, performance measures, and alternatives for improving governmental policy and management. Prerequisite: POLS 221 or permission of instructor.

**POLS 431. Regulatory Policy** (3) Spring. 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) Fall. 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) Spring. Democracy and political parties, party organization, primaries and conventions for nomination, campaigns and elections, patterns of election participation and factors affecting the voter's decision making.

**POLS 443. Politics and the Mass Media** (3) Political analysis of relationships between the media and the government and the effects on public policy issues and electoral campaigns.

**POLS 452. Political Violence and Revolution** (3) Spring. Seminar offered alternate years. Theories about causes, processes and consequences of violence as instrument of political competition and social change. Open to advanced social science undergraduate and graduate students or by consent of instructor.

**POLS 454. Soviet Political System** (3) Institutional development and behavior explored within the framework of perestroika, glasnost, and ethnic diversity.

**POLS 458. Soviet Foreign Policy** (3) Spring. Soviet foreign policy in post-war era; domestic and international determinants and consequences for Soviet-Western relations, socialist bloc and third world.

**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) Spring alternate years. Political and economic modernization problems; equity versus development; hunger and population; foreign aid, technology transfer and other selected topics.

**POLS 462. Japanese Politics and Foreign Policy** (3) On demand. Political culture, institutions, processes and issues in contemporary Japanese politics; Japan's foreign relations with emphasis on relations with Pacific/Asian nations. Prerequisite: POLS 271 or permission of instructor.

**POLS 470. Individual Readings** (1-3) Fall, Spring. On demand. Supervised individual readings to meet student's need for extended reading in familiar areas or for exploration in fields not covered by courses. Prerequisite: consent of supervising instructor. May be repeated to nine hours.

**POLS 473. International Law** (3) On demand. History, nature, sources and applications; relationship between law and society at international level.

**POLS 475. International Organization** (3) Spring. History, organization and function of international organizations within the context of world politics. Major emphasis on United Nations and issues facing it. 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 dealing with practice political experiences. Use of biographical material as sources.

**ΔPOLS 492. Field Study** (1-3) Fall, Spring, Summer. For students working on political internship programs and political campaigns. May be repeated to six hours.

**POLS 495. Honors Seminar in Contemporary Political Science** (4) Fall, Spring. 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)

**¶ΔPOPC 160. Introduction to Popular Culture** (3) Fall, Spring, Summer. Basic theories of, approaches to and topics within popular culture; several selected topics and use of various theories and approaches.

**¶ΔPOPC 165. Popular Culture and Media** (3) Fall, Spring, Summer. Some of the ways in which mass media (TV, film, recording industry, print, radio) have affected modern American culture. Media relationships and interactions.

**¶ΔPOPC 220. Introduction to Folklore and Folklife** (3) Fall, Spring, Summer. Study and collecting of folklore; ballads, myths, tall tales, heroes, folk medicines, superstitions, proverbs and crafts.

**POPC 231. Studies in Popular Culture** (1-3) Fall, Spring, Summer. Study of theme, era or issue in popular culture. Subject matter designated in class schedule. May be repeated once if topics differ.

**POPC 240. History of Popular Culture** (3) Alternate years. Relationship between society and its popular culture as it has changed over time.

**ΔPOPC 250. Introduction to Popular Film** (3) Fall, Spring, Summer. Popular film as mass entertainment medium; Hollywood studios, popular film formulae, genres, relationships between popular films and movie-going audience; viewing of appropriate films.

**POPC 270. Introduction to Contemporary Popular Literature** (3) Alternate years. Popular literary formulae, publishing industry, relationship between popular literature and reading public, functions of popular literature in society.

**POPC 280. Introduction to Popular Music** (3) Fall, Spring, Summer. Relationship between music world and listening-viewing audience; musical styles, trends in popular music, popular performers and entertainers and what they reveal about popular culture; appropriate music listening.

**POPC 290. Television as Popular Culture** (3) Fall, Spring, Summer. Relationship between popular television programming and American society; viewing of appropriate television.

**POPC 320. Folktale and Legend** (3) Alternate years. Intensive examination and collecting of oral narratives; theory and methods of collecting, organizing and interpreting such material as folktales, urban belief tales, supernatural legends, narrative jokes, tall tales, etc.; analysis of folk mythology.

**POPC 321. Folklife and Material Culture** (3) Alternate years. Study and analysis of nonverbal folklife; theory and methods of analysis of such forms of expressive folk culture as arts, crafts, architecture, foodways, festivals, customs and folk rituals; emphasis on modes of description and analysis commonly used by folklorists to understand and explain such materials.

**POPC 325. The Folk Group/Folk Region** (3) Alternate years. Intensive study of a single folk group or the folklore of a specific region (e.g. Women's Folk Culture, Folklore of the Great Lakes Region, etc.). Emphasis on the function of various types of folklore within the group or region. May be repeated once if content clearly differs.

**POPC 350. Advanced Studies in Popular Film** (3) Alternate years. 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 era, films of Depression, films of post World War II, etc. May be repeated once if topics are different; viewing of appropriate films. Two-hour lecture, two-hour lab.

**POPC 370. History of Popular Literature** (3) Alternate years. Detective, science fiction, western, mystery, best sellers, poetry, magazine fiction. Prerequisite: any 200-level literature course or permission of instructor.

**POPC 380. Contexts of Popular Music** (3) Alternate years. 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. Prerequisite: POPC 280.

**POPC 390. Electric 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.

**ΔPOPC 395. Workshop on Current Topics** (1-3). On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. Requirements usually completed within expanded time format. May be repeated if topics differ, on approval of adviser.

**ΔPOPC 424. Folklore Genres** (3) Alternate years. Intensive study and collecting of a single folk genre or distinctive type of folk materials (e.g. American Folk Music, Ethnic Foodways in America, The Urban Belief Tale, etc.). Emphasis on theory and method of collection and analysis. May be repeated once if content clearly differs.

**POPC 426. Popular Entertainments** (3) Alternate years. Cultural significance of popular entertainments, past and present; circuses, carnivals, parades, vaudeville, professional and amateur sports, camping, etc.

**POPC 460. Popular Culture Advanced Studies** (3) Spring. 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 department.

**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.

**ΔPOPC 490. Problems in Popular Culture** (1-3). For advanced student. Independent study. Prerequisite: consent of director of POPC program to proposal approved by faculty member three weeks prior to end of semester; and 6 hours POPC courses. May be repeated to eight hours.

## Psychology (PSYC)

**¶ΔPSYC 201. General Psychology** (4) Fall, Spring, Summer. Scientific approaches to the study of behavior of organisms. Application to personal and social behavior.

**PSYC 231. Research Methods in Psychology** (4) Fall, Spring. Experimental and non-experimental techniques for investigating psychological phenomena. For non-psychology majors. Three lecture hours; two laboratory hours. Prerequisite: PSYC 201.

**ΔPSYC 240. General Seminar** (1-3) Fall, Spring. Specific content areas offered depends on demand and interest of staff. May be repeated twice. Prerequisite: consent of instructor.

**PSYC 270. Quantitative Methods I** (4) Fall, Spring, Summer. Principles of measurement. Quantitative analyses of behavioral measures, including measures of typicality, individual differences, correlational methods and tests of significance. Three one-hour lectures and a one-hour lab. Prerequisite: PSYC 201 or consent of instructor.

**PSYC 290. Introduction to Laboratory Methods in Psychology** (4) Fall, Spring. 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: PSYC 201 and 270.

**PSYC 301. Brain Mechanisms of Behavior** (4) Fall, Spring. 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) Fall, Spring. (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.

**ΔPSYC 303. Psychology of Child Development** (3) Fall, Spring. Major concepts, theories and principles of child development. Coverage is from conception until adolescence. Prerequisite: PSYC 201.

**PSYC 304. Adolescent Development** (2) Spring. Major concepts, theories and principles of adolescent development. Prerequisite: PSYC 201.

**ΔPSYC 305. Psychology of Personality Adjustment** (2) Fall, Spring, Summer. Problems of personal adjustment. Related problems of theory and measurement of personality. Prerequisite: PSYC 201.

**PSYC 306. Psychology of Gender** (3) Fall. Psychological characteristics of women and men: personality, adjustment, identity formation, intellectual processes, sexuality; theories and data on gender development.

**PSYC 307. Human Sexuality** (3) Fall, Spring, Summer. Survey of the relationship of biological, psychological, cultural, and historical factors to typical and atypical sexual attitudes and behaviors.

**PSYC 308. Introduction to Clinical Psychology** (3) Spring. 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) Spring. 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.

**ΔPSYC 311. Social Psychology** (3) Fall, Spring, Summer. Social behavior covering theoretical issues and recent empirical findings: social influence and conformity processes, attitudes and attitude change, interpersonal attraction, social perception, group processes, sexual behavior, environmental influences on social behavior. Prerequisite: PSYC 201 or SOC 101.

**PSYC 312. Principles of Social Interaction** (2) Spring. 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) Spring. 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) Fall. 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) Fall, Spring. Principles and theories of human learning and memory, applied to the acquisition of knowledge and skills. Three lecture hours; two laboratory hours. Prerequisites: PSYC 270 and 290.

**PSYC 322. Cognitive Psychology II: Thinking and Problem Solving** (4) Fall, Spring. 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) Fall, Spring. Basic vocabulary and grammatical structure of the visual language system used by deaf persons in North America. Implications of deafness for language and communication, psycholinguistic studies of Sign.

**PSYC 328. Psychophysiology** (4) Fall, Spring. 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) Spring. 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) Spring. An historical introduction 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) Fall, Spring. 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) Spring. 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 Effectiveness** (3) Spring. Emphasis on the design, measurement and evaluation of human and machine performance and productivity. Assessment of factors related to training, efficiency and safety. Prerequisites: PSYC 270 and one other course in PSYC, or consent of instructor.

**PSYC 370. Quantitative Methods II** (3) Fall, Spring. Analysis of variance and other multivariate methods for analyzing behavioral measurements. Prerequisite: PSYC 270.

**ΔPSYC 395. Workshop on Current Topics** (1-5) On demand. Intensive educational experience on selected topics. Typically an all-day or similar concentrated format. Requirements usually completed within time format. May be repeated on approval of adviser.

**PSYC 401. History of Psychology** (3) Fall. 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) Spring. Scientific constructs in personality theory; contemporary theories with historical antecedents; assessment of relationship to general psychology. Prerequisite: eight hours in PSYC.

**ΔPSYC 405. Psychology of Abnormal Behavior** (3) Fall, Spring, Summer. Data and concepts used in understanding, labeling and modifying deviant behavior. Prerequisite: PSYC 201.

**ΔPSYC 406. Behavior Pathology in Children** (3) Spring. Major behavioral disorders of childhood: description, etiological implications, treatment issues, approaches and problems, and related research. Prerequisite: PSYC 201 or consent of instructor.

**PSYC 421. Psychology of Language** (3) Spring. Theoretical and empirical issues in psycholinguistics, speech perception and language development. Prerequisite: PSYC 201 or consent of instructor.

**PSYC 425. Community Mental Health** (3) Fall, Summer. 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) Fall. One of two prerequisites for field placement as mental health worker, taken simultaneously with PSYC 432. Relationship enhancement and behavioral analysis and intervention skills. Field experiences. Prerequisites: PSYC 201 and consent of instructor.

**PSYC 432. Principles of Mental Health Work** (4) Fall. 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) Spring. 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) Spring. 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) Fall. 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) Fall, Spring, Summer. 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) Fall. 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) Spring. 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) Fall. Sources and effects of psychological stress at work and research on stress reduction. Topics include perceived work loads, role demands and ambiguities, job involvement and career stresses such as those in dual-career families.

**PSYC 460. Introduction to Psychological Testing** (3) Fall, Spring. Theory and methods of measuring human behavior. Basic measurement principles and applications; representative standardized tests of intelligence, interest, aptitude and personality. Prerequisites: PSYC 201 and 270 or equivalent.

**PSYC 490. Special Problems in Psychology** (1-3) Fall, Spring, Summer. Supervised independent minor research or intensive reading on selected problems. No student may register for course without written approval of staff member concerned. May be repeated to six hours. Prerequisite: 7 hours of psychology. Graded S/U.

**PSYC 495. Senior Honors Seminar** (3) Fall. Seminar in general psychology for senior major. Student required to plan and carry out research project under direction of faculty member. Prerequisite: senior major, approval by department undergraduate committee.

**PSYC 496. Senior Honors Seminar** (3) Spring. Seminar in general psychology for senior major. Student required to plan and carry out research project under direction of faculty member. Prerequisite: senior major, approval by department undergraduate committee.

## Radio-Television-Film (RTVF)

**RTVF 103. Introduction to Mass Communications** (3) Fall, Spring, Summer. Survey of broadcasting and other mass media; mass communication media and effects; role and influence of radio, television, film, print media, advertising and public relations. No credit for both JOUR 103 and RTVF 103. Open to non-majors.

**RTVF 250. Radio and Television Production 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 majors.

**RTVF 255. International Telecommunication Systems** (3) Spring, Summer. Survey of telecommunication systems worldwide. A comparison of technical bases, economics, politics, programming, regulation, and audience research. No prerequisites. Intended for majors.

**¶RTVF 261. Introduction to Film** (3) Fall, Spring, Summer. Film as art. Essential elements of film; editing, camera work, sound and composition explored in some classic motion pictures. Various approaches to looking at movies and writing about them.

**RTVF 262. Radio Writing, Announcing and Producing** (4) Fall. 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) Spring. 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. 8mm Film Making** (3) Fall, Spring. Basic techniques of 8mm 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) Spring. Portrayal and/or participation of minorities in film. Topic varies. No prerequisite.

**RTVF 360. Applied Research in Telecommunication** (3) Fall, Spring, Summer. 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.

**RTVF 364. Producing and Directing for Television** (3) Fall. Theories and processes of producing and directing video programs, including scripting, visualization, personnel management and budgeting. Includes multi-camera and single-camera productions, video editing techniques. Laboratory hours. Prerequisite: RTVF 263 or equivalent experience.

**RTVF 365. Broadcast History** (3) Fall. Current U.S. broadcasting with view of antecedents in regulations, economics, programs, audiences, stations, networks, technology and employment. Prerequisite: eight hours of RTVF.

**RTVF 366. Media Effects** (3) Fall, Spring, Summer. Overview of theories and research studies of media effects. Critical examination of opposing viewpoints.

**RTVF 368. Radio Workshop** (1) Fall, Spring. 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** (1-3) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated format. Requirements usually completed within time format. May be repeated if topics differ, on approval of adviser.

**RTVF 350. Scriptwriting** (3) Spring. Study and practice of writing for radio, television, and film, including the study of treatment, format, audience requirements, and production techniques.

**RTVF 340. Performance for Television** (3) Fall. Introduction to the skills and business of performing for television. Provides practical studio training in interviewing skills, entertaining performance, and newscasting.

**RTVF 441. Broadcast Computer Applications** (3) Spring. Microcomputer-based software applications for radio and television stations. The purpose of the course is to prepare majors to function in the PC-based job environment. Prerequisite: RTVF computer requirement or consent of instructor.

**RTVF 451. New Electronic Media** (3) Fall, Summer. 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) Fall, Spring. Function, organizational structure and procedures involved in the operation of radio and television stations.

**RTVF 460. Regulation of Broadcasting** (3) Spring. 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) Fall. Modern radio program formats in the United States.

**RTVF 463. Television Programming** (3) Fall. Structure and appealing characteristics of television and cable programs.

**RTVF 464. 16mm Film Making** (3) Spring. 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) Spring. Historical development of theatrical, documentary and avant-garde films. Function, content and style of film criticism.

**RTVF 468. Television Workshop** (3) Fall, Spring. 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-Television-Film** (1-6) Fall, Spring. 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) Fall, Spring. 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 and Dance (RED)

**RED 178. Camp Leadership** (2) Spring. Organized camp movement; uniqueness of the camping experience and setting; role of the counselor; programming and counseling principles.

**RED 190. Recreation Leadership** (3) Fall, Spring. 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** (3) Fall, Spring. 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) Fall, Spring. 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) Spring. Knowledge and leadership in outdoor living skills, backpacking, bicycle touring and canoe tripping. One weekend trip required.

**RED 304. Outdoor Recreation** (3) Fall. 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) Spring. 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) Fall alternate years. Outdoor education through school curricula, interpretive services, recreation agencies and community action; philosophical bases; identification and utilization of resources; the methods associated with the learning process: field-based experiences.

**RED 384. Organization and Administration of Leisure Services** (3) Fall, Spring. Basic concepts of administration, personnel management, fiscal management, public relations techniques, motivation theory, grant writing and fund raising, marketing, legal aspects of administration; budget proposal preparation and development of employment seeking skills. Prerequisites: RED 190, 210 and 30 hours.

**RED 385. Recreation Program Development** (3) Fall, Spring. Principles of program planning, organization and administration; operation of areas and facilities; current practices in publicity and public relations; supervision of program and staff; tournament scheduling; program budgeting. Prerequisites: RED 190, RED 210 and 30 hours.

**RED 386. Internship Preparation** (1) Fall, Spring. 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) Fall, Spring, Summer. Application of leadership and program theory to field setting. Prerequisite: approval of adviser.

**RED 395. Workshop on Current Topics** (1-3) On demand. Intensive educational experience on selected topics related to enrichment of curricular content.

**RED 470. Independent Study** (1-3) Fall, Spring, Summer. An in-depth project of significance to the student. Credit allocation by project supervisor and approval by chair prior to registration. Prerequisite: Permission of instructor.

**RED 482. Evaluation of Recreation Services** (3) Fall, Spring. Methods, techniques and application of evaluation processes. Prerequisites: RED 384, RED 385 and 2.5 GPA.

**RED 483. Recreation Areas and Facilities** (3) Fall, Spring. Planning and design principles; acquisition, development, construction and maintenance of specific types of recreation areas and facilities. Prerequisites: RED 384, RED 385 and 2.5 GPA.

**RED 484. Contemporary Issues in Recreation** (2) Fall, Spring. Seminar in current issues. Prerequisite: 90 hours.

**RED 487. Practicum: Supervision/Administration** (1-5) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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.

## Rehabilitation Counseling (REHB)

**REHB 401. Introduction to Rehabilitation Counseling** (3) Characteristics and principles of the rehabilitation process; disabilities and agencies serving the disabled.

## Respiratory Care Technology (RT)

**†RT 101. Basic Human Anatomy and Physiology for Allied Health** (5) Fall. A one-semester course developed especially for students in allied health programs who have had no prior college course in introductory biology. Includes study of structure and function of cells and tissues, general body organization, and organ systems. Does not transfer as biology credit. Three hours of lecture, two hours of lab, and one hour of recitation.

**†RT 102. Pharmacology for Respiratory Therapy** (3) Fall. General pharmacologic principles, including drug dosage calculations and dispensing systems. Study of major drug groups related to practice of respiratory care. Emphasis on aerosolized drugs administered by the therapist. Three hours of lecture.

**†RT 120. Principles of Respiratory Therapy** (3) Spring. Basic scientific principles of gases, humidity, aerosols and fluid flow as applied to respiratory care. Devices for measuring oxygen levels and regulating pressure and flow of therapeutic gases, as well as equipment for delivering humidity and medical aerosols. Sterilization and therapeutic application of respiratory care equipment. Certification in CPR. Two hours of lecture and three hours of lab. Prerequisite: RT 101 and CHEM 115 or permission of instructor.

**†RT 150. Respiratory Therapy Procedures I** (4) Summer. Basic nursing care and patient assessment, incentive spirometry, IPPB, chest physiotherapy, isolation techniques, manual resuscitators, 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

**†RT 151. Respiratory Therapy Clinical Applications I** (2) Summer. 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.

**†RT 152. Respiratory Therapy Procedures II** (4) Fall. Mechanical ventilation, pulmonary function testing, hemodynamic and other physiologic monitoring, EKG interpretation, neonatal 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 250.

**†RT 200. Cardiopulmonary/Renal Anatomy and Physiology** (3) Spring. Anatomy and physiology of respiratory, cardiovascular and renal systems are studied in depth. Topics include ventilatory mechanics and control, gas diffusion, transport, and exchange, acid-base balance, fluid and electrolyte balance, and blood gas interpretation. Two hours of lecturer and two hours of recitation. Prerequisite: RT 101 and CHEM 115 or permission of instructor.

**†RT 204. Pulmonary Pathophysiology** (4) Fall. 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.

**†RT 250. Respiratory Therapy Clinical Applications II** (4) Fall. 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.

**†RT 251. Respiratory Therapy Clinical Specialties** (4) Spring. 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)

**ROML 200. European and Latin American Cinema** (3) Films of cultural and literary significance from Mediterranean and Latin American countries seen through study of selected topics, themes or movements. Taught in English. Includes viewing of films with subtitles.

**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 instructor. From French, Spanish, Italian and Portuguese. Open to majors, minors and graduate students in French and in creative writing and graduate students in Spanish. Prerequisite: 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. Lecture-reading course in English introducing students to the cultural development of the Russian language.

**¶RUSN 101. Elementary Language and Culture I** (4) Fall. Introduction to the Russian language in its cultural and social context with emphasis on speaking, listening and reading skills. Four class periods and laboratory practice each week.

**¶RUSN 102. Elementary Language and Culture II** (4) Spring. RUSN 101 continued. Four class periods and laboratory practice each week. Increased use of authentic reading materials. Completion of elementary grammar study. Prerequisite: RUSN 101, or by placement.

**¶RUSN 201. Intermediate Russian I** (4) Fall. Further development in reading, narrating and describing. Writing common documents. Review of elementary grammar. Four class periods and laboratory practice each week. Prerequisite: RUSN 102, or by placement.

**¶RUSN 202. Intermediate Russian II** (4) Spring. RUSN 201 continued. Introduction to reading Russian fiction. Completion of basic grammar. Four class periods and laboratory practice each week. Prerequisite: RUSN 201, or by placement.

**RUSN 215. Russian Culture** (3) Fall. Culture and civilization of the Russian people from their origins to the recent past. Lectures, audio-visual presentations and readings in English.

**RUSN 216. The Soviet Union Today** (3) See SOVT 216.

**RUSN 303. Introduction to Scientific Russian** (2) Spring. 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 Beginnings to Dostoevsky** (3) Literary trends from 11th to mid-19th century; medieval and baroque periods, 18th century classicism and sentimentalism, and the Golden Age. Writers include Pushkin, Gogol, Goncharov, Lermontov and Turgenev. Lectures and reading in English.

**RUSN 312. Russian Literature from Dostoevsky to Solzhenitsyn** (3) Social, political and cultural trends of pre- and post-revoluntionary periods. Writers include Dostoevsky, Tolstoy, Cherkhov, Gorki, Zoshchenko, Bulgakov, Pasternak and Solzhenitsyn. Lecture and readings in English.

**RUSN 313. Contemporary Russian Literature** (3) Exploration of themes, styles and genres of Russian writing since the 1950s. Includes Russian women writers and examples of non-Russian Soviet writers. In translation. Class discussions and ample English writing practice.

**RUSN 317. Composition and Conversation I** (3) Fall. Intensive oral and written practice; emphasis on mastery of basic structural patterns employed in conversation and writing. Prerequisite: RUSN 202, or by placement.

**RUSN 318. Composition and Conversation II** (3) Spring. 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). Readings selected to elucidate themes in Russian cultural and social thought. Guidance in advanced reading techniques. Prerequisite: RUSN 202 or consent of instructor.

**RUSN 331. Workshop in Translation** (1-3) On demand. Individualized and/or small group work in translation of scientific, technical or business writing, or other types of expository prose in the student's area of specialty. May be repeated to six hours. Prerequisite: RUSN 202.

**RUSN 401. Russian Poetry** (3) On demand. Russian lyric from the mid-18th century through contemporary Soviet verse. Prerequisite: RUSN 202.

**RUSN 402. Russian Novel** (3) Fall. 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) Spring. 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—expressionism, socialist realism, psychological realism.

**RUSN 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 advanced student. Prerequisite: arrangement with instructor and consent of department chair prior to registration.

## Social Science (SOSC)

**†SOSC 101. Introduction to the Social Sciences** (3) Fall, Spring. Fundamental concepts and methods in the social sciences.

**†SOSC 289. Human Services Practicum** (3-4) Spring. Supervised field experience in an approved agency combined with a seminar designed to integrate theory and practice. Capstone course to the human services curriculum; students must be near completion of the degree in human services and be in good standing academically. Prerequisite: SOWK 220 or consent of instructor.

## Social Work (SOWK)

**ΔSOWK 110. Survey of Social Services** (3) Fall, Spring. Social service programs; functions of social workers within these programs.

**ΔSQWK 220. Observation and Interviewing in Social Work** (3) Fall, Spring. Development of observational, interviewing and recording skills through classroom experiences and volunteer experiences in community social agencies. Prerequisite: SOWK 110.

**SOWK 227. Ethnic and Cultural Diversity in Social Work Practice** (3) Fall, Spring. Issues and concepts important to understanding problems surrounding ethnicity and relationship to social work. Prerequisite: sophomore standing.

**SOWK 230. Social Welfare Institutions** (3) Fall. 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) Fall, Spring. 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) Fall, Spring. Builds upon SOWK 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) Spring. 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) Fall, Spring. 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) Fall, Spring, Summer. Social work practice models, strategies for community organization and change. Prerequisites: junior standing and social work major.

**SOWK 332. Law for Social Workers** (3) Fall. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. Student designs and carries out study or special project in area of interest. Prerequisites: junior standing, social work major, and faculty sponsor. May be repeated up to six hours.

## Sociology (SOC)

**¶ΔSOC 101. Principles of Sociology** (3) Fall, Spring, Summer. Elements and concepts of social organization, social change and group relationships.

**¶ΔSOC 202. Social Problems** (3) Fall, Spring, Summer. Sociological analysis of contemporary social problems. Prerequisite: SOC 101.

**ΔSOC 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.

**¶ΔSOC 231. Cultural Anthropology** (3). Basic concepts and objectives in study of culture. Range of cultural phenomena and approaches to their study.

**ΔSOC 289. Field Study in Applied Sociology** (1-3) Fall, Spring, Summer. 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.

**ΔSOC 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.

**ΔSOC 301. Social Psychology** (3). Social behavior; process of interaction and interpersonal influence. Prerequisite: SOC 101.

**SOC 302. Introduction to Classical 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, folk 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.

**ΔSOC 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; educational-occupational opportunities, racial-ethnic 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). Culture 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). Cross-cultural 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.

**ΔSOC 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.

**ΔSOC 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) Fall, Spring. 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) Fall, Spring. Survey course on research methods in sociology: nature of science, theory construction, operationalization of a research problem, alternative research

designs (including evaluation), instrumentation, data collection and data analysis. Prerequisite: SOC 101 or consent of instructor.

**SOC 371. Applied Survey Research** (3). Practical experience in survey research in an applied context: policy issues, problem formulation, measurement, questionnaire-interview design, sampling procedures, data collection, electronic data processing, interpretation and report writing. Prerequisites: SOC 101, 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. Political Sociology** (3). Political behavior in society from standpoint of both classical and contemporary sociology. Prerequisite: SOC 101.

**SOC 417. Sociology of Sport** (3). Sociological concepts and theories to investigate sport as social institution and relationship to other social institutions; organizational theory and small group research applied to sport; social psychological aspects of sports. Prerequisite: SOC 101.

**ΔSOC 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.

**ΔSOC 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 S/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 Socialization** (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 Internship** (1-8) Fall, Spring, Summer. 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 hours. 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) Fall, Spring, Summer. 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) Spring. Contemporary life in the Soviet Union, Soviet culture and societal values. Reading of primary souces 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 schol 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.

**¶ΔSPAN 101. Elementary Spanish I** (4) Fall, Spring. Beginning oral-aural study of language with attention to grammar. Four class periods and scheduled oral practice each week.

**¶ΔSPAN 102. Elementary Spanish II** (4) Fall, Spring. 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.

**¶ΔSPAN 201. Intermediate Spanish I** (3) Fall, Spring. 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.

**¶ΔSPAN 202. Intermediate Spanish II** (3) Fall, Spring. SPAN 201 continued. Three class periods and laboratory practice each week. Prerequisite: SPAN 201 or three years of Spanish in high school.

**¶SPAN 211. Hispanic Cultural Series I** (3) Fall, Spring. Development of reading comprehension in Spanish using cultural materials concerning Spain and Spanish America. Conducted in English. Prerequisite: SPAN 102 or two years in high school. Cannot be taken for credit if 201 credit has been received.

**¶SPAN 212. Hispanic Cultural Series II** (3) Fall, Spring. Development of reading comprehension in Spanish using cultural materials concerning Spain and 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.

**ΔSPAN 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.

**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.

**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. Contemporary Spanish Literature** (3). Outstanding works from the generation of 1898 to the present; poetry and prose. Prerequisite: SPAN 367.

**SPAN 450. Advanced Grammar and 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 II: 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 clearly different. Prerequisite: SPAN 367 or SPAN 368.

## Applied Statistics (STAT)

STAT courses are listed under the heading Applied Statistics. See page 160.

## Special Education (EDSE)

**EDSE 311. The Exceptional Child in the Regular Classroom** (2) Fall, Spring, Summer. Teaching exceptional handicapped children in alternative settings. C/F hrs.: 10.

**EDSE 395. Workshop on Current Topics** (1-3) On demand. Intensive educational experience on selected topics related to skill development, content update, 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 Children With Special Needs In Early Childhood Programs** (3) Fall. Understanding of infant, toddler, and preschool children with special needs in integrated learning environments. Awareness of specific disabilities and their impact on development, family life and education.

**EDSE 431. The Education of Exceptional Students** (3) Fall, Spring, Summer. 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 Students** (3) Fall, Spring, Summer. 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) Fall, Spring, Summer. Responsibilities of special class teacher for developing employable skills. Prerequisites: 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) Fall, Summer. Materials and techniques emphasizing development and appropriate skills with practical applications. Prerequisites: EDSE 431, EDSE 433; or consent of instructor. C/F hrs.: 25.

**EDSE 441. Education of the Gifted and Talented Child** (3) On demand. Nature and needs of gifted/talented; identification techniques, curriculum planning and development, teaching strategies and techniques, resources and materials available to teachers; program evaluation for gifted/talented. C/F hrs.: 10.

**EDSE 442. Applied Classroom Management with Exceptional Students** (3) Fall, Spring, Summer. Arrangement of environments for handicapped individuals which facilitate 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) Fall, Spring. 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) Fall. Sheltered workshops in rehabilitation 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 Mildly and Moderately Handicapped Student** (3) Fall, Spring. 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) Fall, Spring. 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) Fall, Spring, Summer. Multiple origins and educational significance of specific learning disabilities. Prerequisite: EDSE 431 or concurrentiy. C/F hrs.: 15.

**EDSE 453. Educational Evaluation of Exceptional Children and Youth** (3) Fall, Spring. 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 Behaviorally Handicapped Students** (3) Fall, Spring, Summer. 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) On demand. Theories and research related to the function and development of the brain as related to language, speech, reading, writing, spelling, mathematics. Major attention given to brain dysfunction, assessment, instructional approaches. Prerequisites: EDSE 431, 433, 451. C/F hrs.: 10.

**EDSE 457. Parent Education and Interaction** (3) Fall, Spring, Summer. Approaches for educators in communicating with parents of handicapped children. Counseling parents and families; understanding legislated 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) Fall, Spring. 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) Fall, Spring. Investigation of linguistics of manual English in classroom use, implementation procedures for older students and parents. Development of advanced skills in manually coded English. Prerequisites: EDSE 459 or consent of instructor.

**EDSE 461. Introduction to Education of the Deaf** (3) Spring. 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) Fall. Observation through public schools; review of commercial textbooks (K-HS). Developing lesson plans, unit plans, IEPs plus techniques of teaching supplemented by audio-visual workshops and demonstrations. Prerequisites: EDSE 431, 451, PSYC 324 or EDSE 459 or EDSE 460.

**EDSE 463. Curriculum Development and Instructional Strategies for Hearing Impaired** (3) Spring (part two of two-part sequence). This course stresses a mini-practicum 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 I** (3) Fall (part one of two-part 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) Spring (part two of two-part sequence). Teaching structured language—Fitzgerald Key; teaching language patterns; developing spontaneous language, language charts, stories through oral/written form. Students will analyze and compare language samples of hearing impaired children. Prerequisites: EDSE 431, 451, 461, 464. C/F hrs.: 15.

**EDSE 466. Orthographic Systems of the Deaf and Phonetic Transcriptions** (3) Fall. 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) Spring. 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. Education of Multi-Handicapped Students** (3) Fall, Summer. 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) Fall, Spring. Observations 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.

**EDSE 490. Problems in Education** (3) Fall, Spring, Summer. For advanced students wanting to conduct intensive study of selected problems in education. May be repeated to six hours; undergraduate credit only. Prerequisite: consent of department.

**EDSE 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching 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) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Sport Management (SMD)

**ΔSMD 201. Introduction to Sport Management** (3) Fall, Spring. Basic concepts of sport management; career preparation; professional opportunities.

**SMD 229. Lifeguard Training** (2) Spring. Red cross lifeguard training in hazards, distress recognition, rescue, patron and employer relationships, and responsibilities. Prerequisites: Standard First Aid and CPR certificates. Eligibility skills exam conducted first week of course.

**SMD 231. Aquatic Games and Activities** (1) On demand. An overview of aquatic games and activities applicable to a variety of aquatic programs. Prerequisite: intermediate swimming skill level.

**SMD 240. The Handicapped Client in Sport and Recreation** (3) Fall, Spring. Introduction to knowledges and skills that will enable future sport and recreation management professionals to identify, assess, organize, supervise and promote sport and recreational programs for the disabled population.

**SMD 245. Aquatics Operation and Management** (3) Fall even years. Designing, construction, planning, programming, operating and administering aquatic facilities. Prerequisites: CHEM 115 and BUSE 101.

**SMD 250. Computer Utilization in HPER Services** (3) Fall, Spring. Manipulation and application of microcomputer software to selected problems in sport management, recreation and activity settings; two lectures, two lab hours per week.

**ΔSMD 298. Principles of Sport Management** (3) Fall, Spring. Practical applications of various techniques of management and marketing required in a sports enterprise setting. Areas of study include: marketing, promotions, employee relations, personnel, finances and legal considerations. Prerequisite: matriculation in sport management program or consent of instructor.

**SMD 310. Care and Prevention of Sports Injuries** (3) Fall, Spring. 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 311. Evaluation of Athletic Injuries** (3) Fall even years. Commonly accepted techniques and procedures for clinical evaluation and recognition of the signs and symptoms of athletic injuries. Prerequisite: PEP 164, PEP 230, and SMD 310.

**SMD 324. Adapted Aquatics Instructor** (1) On demand. Experiences, knowledges and competencies leading to the test for Red Cross certification to conduct adapted aquatics programs. Prerequisite: Current Water Safety Certificate.

**SMD 361. Applied Exercise Physiology** (3) Spring. Metabolism, body composition, cardiac pathophysiology, training for fitness, exercise prescription and instrumentation. Practical applications and assessments are presented. Prerequisite: PEP 360.

**SMD 365. Foundations of Sport Psychology** (3) Fall, Spring. A non-clinical approach for athletes, teachers and coaches regarding the role of psychological aspects of human behavior as it affects performance in sport and physical activity; psychological well-being, interpersonal skill development and fitness adherence will also be emphasized.

**SMD 375. Sport Facility Planning and Management** (3) Fall, Spring. 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) Fall, Spring, Summer. Under supervision of SMD Division of School of HPER; petitioning required before registration; credit hours approved separately by program area. Prerequisites: formal matriculation into the sport management program and approval of appropriate division faculty.

**SMD 390. Legal Aspects of Sport and Recreation** (3) Fall, Spring. 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) Fall, Spring. 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 PEP 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 PEP 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** (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.

**SMD 410. Pathology of Athletic Injuries** (3) Spring odd years. Normal physiological responses of the human body to trauma and inactivity, physiological process of wound healing and tissue repair, and the relationship between typical symptoms and clinical signs and injury/illness pathologies. Prerequisites: SMD 310, SMD 311.

**SMD 411. Therapeutic Athletic Exercise** (3) Spring even years. Essential components of a comprehensive rehabilitation program including goals and objectives, exercise selection, methods of evaluating and recording progress, and development of criteria for progression and return to competition. Prerequisites: SMD 410, SMD 429 or permission of instructor.

**SMD 413. Therapeutic Athletic Training Modalities** (3) Fall odd years. Examination of the application and physiological response to selected therapeutic modalities available to the athletic trainer. Prerequisites: SMD 410 or permission of instructor.

**SMD 421. History and Philosophy of Sport** (3) Fall, Spring. Major historical and philosophical developments in sport.

**SMD 423. Scientific Foundations of Physical Fitness** (3) Spring. Assessment and development of physical fitness. Prerequisite: PEP 360.

**SMD 425. Women and Sport** (3) Spring. Historical, cultural and physiological considerations of women's participation in sport.

**SMD 429. Principles and Problems of Athletic Conditioning** (3) Fall, Spring. Physiological foundations of conditioning and the basic fundamentals of conditioning techniques based on principles of strength, power, endurance, speed, etc., relevant to athletic fitness and performance. Prerequisites: BIOL 332 or PEP 360 or consent of instructor.

**SMD 431. Program Planning and Management for Recreational and Youth Sports** (3) Spring. Planning, management, financing, promotion of intramural, club, youth, community and special sport programs. Prerequisite: junior standing or permission of instructor.

**SMD 440. Designing and Directing of Fitness and Sport Programs** (3) Fall, Spring. 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) Fall, Spring, Summer. 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) Fall, Spring, Summer. Under supervision of Sport Management Division of School of HPER, petitioning required before registration; credit hours approved separately by program area. Prerequisites: SMD 387 and approval of appropriate division faculty.

**SMD 489. Internship in Sport Management** (15) Fall, Spring, Summer. Field experience for sport management majors only. Petitioning required before registration. Prerequisites: 52 hours in major field, satisfactory completion of SMD 387, GPA of 2.5, an average of 2.7 in the major field, approval of appropriate division faculty and HED 313. (Option I majors must complete HED 313 as prerequisites.)

**SMD 490. Professional Resources in Sport Management** (3) Fall, Spring. Professional resources for leadership roles in sport and physical activity. Prerequisite: SMD 387.

## Technology (TECH)

(Additional costs for materials in all laboratory courses)

**TECH 101. Technology I** (3) Fall, Spring and Summer on demand. Communication processes and methods will be defined by the technology system model. Problem solving techniques will be introduced and developed. Students will use several application software packages on microcomputers to solve communication problems. No prerequisites.

**TECH 102. Technology II** (3) Fall, Spring and Summer on demand. The study of technology systems, elements and applications to meet industrial or commerical objectives. Course applies the technology systems model and explores the basic human adaptive skills required to operate, build, maintain, test and develop technology systems. No prerequisites.

**TECH 223. Mechanical Power Transmission** (3) Spring even-numbered 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 instructor.

**ΔTECH 289. Cooperative Education** (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved, paid, full-time position related to student's intended areas of concentration. A minimum of 520 hours of employment during one semester is required. Prerequisites: consent of department and successful completion of co-op workshop. Graded S/U.

**TECH 302. Technology Systems in Societies** (3) Fall, Summer on demand. Current issues and their relationship to technology and systems in various cultures throughout the world; emphasis on explaining technological behaviors, and on showing how technology permeates all human affairs. Prerequisites: TECH core and junior status or consent of instructor.

**TECH 313. Handicrafts** (3) On demand. 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 education. Four hours of lecture and laboratory.

**TECH 323. Fluid Power Transmission** (3) Spring even-numbered years. Pumps, motors, valves, curcuits, applications of hydraulic and pneumatic power systems. Design, operation, maintenance of fluid power systems used in industry. Four hours of lecture and laboratory. Prerequisite: ET 191 or consent of instructor.

**TECH 389. Cooperative Education** (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved paid, full-time position related to student's area of concentration. A minimum of 520 hours of employment during one semester is required. Prerequisites: TECH 289 and consent of department. Graded S/U.

**TECH 391. Internal Combustion Engines** (3) Fall, Spring, Summer on demand. Otto (gasoline) or diesel cycles engines; emphasizes assembly, disassembly, testing and measurement procedures. One one-hour lecture and two two-hour 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 all-day or concentrated format. Requirements usually completed within time format. May be repeated.

**TECH 402. Innovation in Technology** (3) On demand. Techniques and procedures involved in innovation and experimentation related to technology; emphasis on product and prototype innovation, experimentation, problem solving, research and development, diffusion and 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) On demand. 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 of instructor.

**TECH 480. Topics in Technology** On demand. Current trends and developments in industry and business, particularly as they have significance to equipment, materials, processes, systems and facilities related to the education of technologists. May be repeated on approval of adviser.

**TECH 489. Cooperative Education** (4) Fall, Spring, Summer. Work and study in business, industry, service or government agency in college-approved paid, full-time position related to student's intended areas of concentration. May be repeated to eight hours. A minimu of 520 hours of employment during one semester is required. Prerequisites: TECH 389 and consent of department. Graded S/U.

**TECH 490. Problems in Technology** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in technology. Prerequisite: consent of college.

## Technology Education (TE)

(Additional costs for materials in all laboratory courses)

**TE 252. Elements of Instruction** (3) Fall. Models of instruction as related to learner and functions and purposes of specialized career and technology education programs on all educational levels including individual observation and participation at various levels.

**TE 352. Instructional Scope and Sequence** (3) Spring. Design and implementation of instructional systems including performance objectives, appropriate content, teaching-learning strategies and evaluation in specialized career and technology education program on all educational levels including individual observation and participation at various levels. Prerequisite: TE 252.

**TE 428. Development of Training Program** (3) Spring 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 Systems** (3) Spring. Integration and use of principles developed in previous methods courses and laboratory settings; selection, organization, adaptation and use of instructional materials or curriculum projects related to industrial technology systems. Prerequisites: MFG 112, CONS 235.

**TE 449. Organization and Administration** (3) Fall. Financial and business procedures, program, laboratory and equipment planning; maintenance programs, classroom and laboratory management systems; purchasing, storage, dispensing and inventory control procedures; public relations, cocurricular responsibilities, innovative programs. Prerequisites: TE 352 and TE 497.

**TE 462. Career and Technology Education in Elementary Schools** (3) Spring on demand. Development and evaluation of instructional activities to facilitate career development and understanding of technology among elementary children.

**TE 470. Coordinating Cooperative Education Programs** On demand. Prepares coordinator of cooperative work education programs in all phases of career and technology education. Readings, discussion and field experiences designed to develop understanding of various types of cooperative programs, role of coordinator and related instruction.

**TE 490. Problems in Technology Education** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in technology education. Prerequisite: consent of college.

**TE 492. Student Teaching** (1-10) Fall, Spring. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required for elementary and/or kindergarten-primary certification. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

**TE 497. Student Teaching** (1-10) Fall. Classroom teaching under supervision on full-day basis. Conferences and seminars supplement program. Required of students in secondary school or special certification program. Fee: $5 per credit hour. Eligibility requirements must be met. C/F hrs.: 300. May be repeated. Graded S/U.

## Theatre (THEA)

**THEA 110. Interollegiate Forensic Activities** (1) Fall, Spring. 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) Fall, Spring. 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.

**¶ΔTHEA 141. The Theatre Experience** (3) Fall, Spring, Summer. 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) Fall, Spring, Summer. Laboratory course for student who participates as performer or technician in University Theatre productions. May be repeated to two hours. Prerequisite: consent of theatre program. Graded S/U.

**ΔTHEA 201. Playscript Analysis** (3) Fall. Methods of reading, studying and analyzing playscripts for production on stage. Concentration on script as vehicle for performance and the understanding of it from the perspective of the actor, director, designer and technician.

**¶ΔTHEA 202. Oral Interpretation** (3) Fall, Spring, Summer. 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.

**ΔTHEA 241. Principles of Acting** (3) Fall, Spring. Basic techniques of acting applied to creating contemporary characters in realistic situations; imaginative, emotional and sensory responsiveness. Three two-hour meetings per week.

**THEA 243. Basic Theatre Technology I** (3) Fall. Introduction to 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) Spring. Introduction to costuming, lighting and sound technology. Concentration on tools, techniques and materials of costume construction, lighting and sound equipment, their mechanics and application in production. Laboratory hours required.

**THEA 266. Introduction to Theatre Design** (3) Fall. Exploration and appication of design principles as they affect the theatre. Introduction to rendering, studio tools, and media used by the various designers working in the theatre. Laboratory work on University productions required.

**THEA 290. Studies in Theatre** (1-3) Fall, Spring, Summer. For the intermediate student who wishes to do independent study, through a faculty advisor, on a variety of theatre topics. May be repeated. Prerequisite: consent of the theatre program.

**ΔTHEA 302. Advanced Oral Interpretation** (3) Spring. Practice in the analysis and solo performance of selected texts. Emphasis on programming and performance in social contexts. Prereaquisite: THEA 202 or consent of instructor.

**THEA 310. Intercollegiate Forensic Activities** (1) Fall, Spring. Similar to THEA 110 for juniors and seniors. May be repeated to two credits.

**ΔTHEA 330. Theatrical Makeup** (3) Fall alternate years. Theory and application of makeup for stage, television and film, corrective and character makeup; prosthetics; facial hair.

**†THEA 339. Dramatic Production** (3) Fall, Spring. 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.

**ΔTHEA 340. Creative Dramatics** (3) Fall, Spring, Summer. 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.

**ΔTHEA 341. Directing** (3) Fall. Theory and techniques of play direction. Laboratory hours arranged. Prerequisites: THEA 141, 241 and 243 or consent of instructor.

**THEA 342. Advanced Directing** (3) Spring. THEA 341 continued. Each student directs at least one short play or series of short scenes. Prerequisite: THEA 341. Laboratory hours arranged.

**THEA 343. Lighting Design** (3) Fall. Theories and techniques of lighting stage productions; lighting instruments and equipment. Prerequisite: THEA 244 or permission of instructor.

**ΔTHEA 344. Intermediate Acting** (3) Offered once a year. Understanding and creating characters that are different from the actor in style or idiom; expressing the inner life of the character; particularizing the role. Prerequisite: THEA 241 or consent of instructor. Three two-hour meetings per week.

**THEA 345. Advanced Acting** (3) Spring. Intensive and individualized laboratory work for advanced acting students. Three two-hour meetings per week. Prerequisite: THEA 241 and 344 or consent of instructor.

**THEA 346. Dramatic Production** (1) Fall, Spring, Summer. 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) Fall. History of theatrical production, major dramas and dramatists from primitive time through 1700.

**THEA 348. Theatre History and Literature: 1700-Present** (3) Spring. History of the theatrical production, major dramas and dramatists from 1700 to the present.

**THEA 349. Costume Design** (3) Spring. Basic principles of costume design for the stage; development and rendering of design concepts; use of historic, stylistic and fantasy elements in stage character realization. Prerequisite: Theatre 266.

**THEA 350. Milestones in Black Theatre** (3) Spring. Read, research and discuss/report on the aesthetics, dramatic intent, historical significance and production history of milestone black plays.

**THEA 352. Musical Theatre** (3) Spring. The history, theory and staging techniques of musical theatre production in the United States.

**THEA 395. Workshop on Current Topics** (1-3) On demand. Intensive educational experience on selected topics. Typically, an all-day or similar concentrated time format. Requirements usually completed within time format. May be repeated if topics differ, on approval of adviser.

**ΔTHEA 440. Theatre for Young Audiences** (3) Fall. Producing plays for child audiences; application of concepts of child development to aesthetic problems of theatre for young audiences, through reading, discussion and participation.

**THEA 443. Playwriting** (3) Fall. 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 446. Summer Theatre Performance** (1-6) Summer 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** (1-6) Summer 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) Summer 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 460. Period, Style and Form** (3) Fall alternate years. Historical overview of decorative arts in their social context for application in theatrical staging.

**THEA 466. Scene Design** (3) Spring alternate years. Advanced study in design for the stage. Dramatic action as organic element in design. The effects of line, mass, color, and texture on the scenic environment. Lab work on university productions required. Prerequisite: Theatre 266 or consent.

**THEA 470. Stage Management** (3) Spring alternate years. A practical approach to the tools and techniques involved in stage management for drama, musicals, ballet and dance, and opera; including building prompt scripts, sight reading musical scores, dance notation, and basic music and dance terminology.

**THEA 489. Theatre Internship** (1-12) Fall, Spring, Summer. Supervised field experience in theatre. Contract-based study of theatre principles as intern in public or commercial theatre company. Student must be recommended by adviser and approved by chair of theatre department. Only nine hours applicable to the specialized program of a BAC. Graded S/U.

**THEA 490. Problems in Theatre** (1-3) Fall, Spring, Summer. For advanced student who wishes to do intensive study in theatre, independently, or in conjunction with courses regularly offered. May be repeated. Prerequisite: consent of theatre program.

## Visual Communication Technology (VCT)

(Additional costs for materials in all laboratory courses)

**VCT 203. Visual Communication Technology** (3) Fall, Spring, Summer. Visual communication theory and processes; video production, visual presentation, display theory, slide presentations, multimedia production and image transfer systems. Four hours of lecture/laboratory. Lab fee.

**VCT 208. Graphic Communications** (3) Fall, Spring, Summer. Major printing processes; concentration in offset lithography and computer applications in line-photography, image design, image assembly, photo conversion, image carrier preparation and image transfer. Four hours of lecture/laboratory. Lab fee.

**VCT 209. Screen Process Printing** (3) Fall, Summer on demand. 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) Fall, Spring, Summer. Basic camera and darkroom techniques. Experiences in film processing and printing techniques as well as basic camera operation. Four hours of lecture/laboratory. Lab fee.

**VCT 308. Photo Offset Printing I** (3) Fall, Spring, Summer. Computer applications in "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 Offset Printing II** (3) Spring and Summer on demand. Computer and manual image assembly, imposition procedures and platemaking; offset lithographic printing press theory 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) Spring and Summer on demand. 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) Fall. 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 proofing systems. Four hours lecture/laboratory. Prerequisite: VCT 208. Lab fee.

**VCT 460. Photography** (3) On demand. 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) On demand. 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 photogra-

phy. Four hours lecture/laboratory. Prerequisites: VCT 282, 382 and ART 211. Lab fee.

**VCT 466. Projected Communication** (3) Fall, Spring. Exploration and experimentation in 35mm slide presentations; techniques in multiscreen, multi-image and multimedia as well as visual presentation using a variety of techniques. Four hours lecture/laboratory. Prerequisites: VCT 208, 282 and 382. Lab fee.

**VCT 467. Visual Communications Technology Synthesis** (3) Spring, Summer on demand. Techniques of visual communication problem solving; project coordination, scheduling, cost and estimating for visual presentations; aesthetic and technical qualities of graphic presentation. Four hours lecture/laboratory. Prerequisites: VCT 208, ART 211, senior standing. Lab fee.

**VCT 468. Video Tape Recordings in Visual Communications Technology** (3) Fall, Spring, Summer. Both 1/2" and 3/4" 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 of the zone system to all areas of photography. Designed to raise the student's level of 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 color negatives, prints and transparencies for commercial and industrial photographic applications; emphasizes basic color sensitometry, quality control techniques and use of laboratory color films. Four hours lecture/laboratory. Prerequisite: VCT 382. Lab fee.

**VCT 490. Problems in Visual Communication Technology** (1-3) On demand. For advanced students wanting to conduct intensive study of selected problems in visual communication technology. Prerequisite: consent of college and instructor. Graded S/U.

## Women's Studies (WS)

**¶ΔWS 200. Introduction to Women's Studies: Perspectives on Gender, Class, and Ethnicity** (3) Fall, Spring, Summer. Multidisciplinary survey of the new scholarship on women. Emphasis on the interconnectedness of gender, class, and ethnicity in women's experiences and viewpoints.

**WS 300. Topics in Women's Studies** (3) Fall, Spring. Topics of interest in studying women in subject area not offered in regular college course offerings. May be repeated twice if topics differ. No prerequisite.

**WS 400. Senior Seminar in Women's Studies** (3) Fall, Spring. Theories, methods, approaches to women's studies. Interdisciplinary research project required. Required of all women's studies majors and minors. Prerequisite: junior or senior standing or permission of instructor.

**WS 470. Independent Study in Women's Studies** (1-3) Fall, Spring. Study project to be designed by student and member(s) of women's studies faculty in subject area not offered in regular course offering. Prerequisite: junior or senior standing or permission of instructor.

# Administration and Faculty

## Board of Trustees

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## President

Paul J. Olscamp

## Faculty*

**Jan E. Adams**, 1983. B.S., Ph.D., Ohio State University. Assistant Professor of Electrical/ Electronic Engineering Technology, Department of Applied Sciences, Firelands College.

**Judy Adams**, 1979. B.S., Indiana State University; M.S., Ph.D. Bowling Green State University. Associate Professor of Medical Technology.

**Delia Aguilar**, 1990. A.B., University of Philadelphia; M.A., Boston College; M.A., University of Connecticut; Ph.D., Union Institute. Assistant Professor of Ethnic Studies with joint appointment in Women's Studies.

**Hassoon S. Al-Amiri**, 1964. Mathematics License, Higher Teachers Training College, Iraq; M.S., Ph.D., University of Michigan. Professor and Chair of Mathematics and Statistics.

**James H. Albert**, 1979. B.S., Bucknell University; M.A., Ph.D., Purdue University. Professor of Mathematics and Statistics.

**William Albrecht**, 1990. B.A., M.A., University of Iowa. Assistant Professor of Accounting and Management Information Systems.

*Year following name is year of first appointment at BGSU.
**Service on faculty is not continuous.
Information correct as of April 30, 1991.

**Phil Alkire**, 1986. B.S., M.A., Ohio State University; Ed.D., University of South Dakota; Assistant Professor of Educational Administration and Supervision.

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**Janet Ballweg**, 1990. B.S., University of Wisconsin; M.F.A., University of Illinois. Assistant Professor of Art.

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**Vasile Beluska**, 1986. Baccalaureate Degree, Liceul de Muzica (Romania); M.M., Southern Methodist University. Associate Professor, Music Performance Studies.

**Mary Ellen Benedict**, 1991. B.A., Waynesburg College; M.S., Ph.D., Carnegie-Mellon University. Assistant Professor of Economics.

**Roger V. Bennett**, 1986. B.S., M.S., Ph.D., University of Wisconsin. Professor and Dean of the College of Education and Allied Professions.

**Thomas L. Bennett**, 1966. B.S., Southeast Missouri State University; M.Ed., Ph.D., University of Missouri. Associate Professor of Educational Foundations and Inquiry.

**Mark L. Bennion**, 1983. B.S., M.B.A, Ohio State University; Ph.D., Michigan State University. Associate Professor of Marketing.

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**Judith Bentley**, 1986. B.M., Oberlin Conservatory; M.M., University of Michigan. Professor of Music Performance Studies.

**Robert Berg**, 1990. B.A., Northern Illinois University; M.A., Ph.D., University of Illinois. Assistant Professor of Romance Languages.

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**Edwin R. Betts**, 1962. B.M., M.M., Eastman School of Music. Professor of Music Performance Studies.

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**Verner Bingman**, 1989. B.S., University of Wisconsin; M.S., Ph.D., State University of New York at Albany. Assistant Professor of Psychology.

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**Robert B. Blackwell**, 1969. A.B., Western Michigan University; M.A., Ed.D., University of Northern Colorado. Professor of Special Education and Interim Director of Rehabilitation and Counseling Programs.

**Josef Blass**, 1970. M.A., Warsaw University, Poland; M.A., Ph.D., University of Michigan. Professor of Mathematics and Statistics.

**Elliot L. Blinn**, 1968. B.S., University of Pittsburgh; M.S., Ph.D., Ohio State University. Professor of Chemistry.

**Anna Belle Bognar**, 1975. B.M., Oklahoma State University; M.M., Bowling Green State University. Associate Professor of Music Education.

**Steven Boone**, 1987. B.A., University of Alabama; M.F.A., Ohio State University. Assistant Professor of Theatre.

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**Frank Bosworth III**, 1989. B.A., Virginia Polytechnic Institute and State University; B.S., Rensselaer Polytechnic Institute. Assistant Professor, Visual Communication Technology and Education.

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**David L. Cayton**, 1964 **. B.F.A., M.F.A., Bowling Green State University. Professor of Art.

**Stephen A. Cernkovich**, 1975. B.A., M.A., Ph.D., Southern Illinois University. Professor of Sociology.

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**Travis Chapin**, 1989. B.S., M.S., Purdue University. Assistant Professor of Technology Systems.

**D.S. Chauhan**, 1979. B.A., B.R., College (Agra); M.A., D.P.A., Ph.D., University of Lucknow; M.P.A., Kent State University. Professor of Political Science.

**Edward Chen**, 1966. B.A., National Taiwan University; M.A., Ph.D., University of Pennsylvania. Associate Professor of History.

**Hanfeng Chen**, 1990. B.S., M.A., Wahan University; Ph.D., University of Wisconsin. Assistant Professor of Mathematics and Statistics.

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**James Child**, 1988. M.A., Ph.D., Indiana University; J.D., Harvard Law School. Associate Professor of Philosophy.

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**Charles Chittle**, 1965. B.A., Hiram College; M.S., Ph.D., Purdue University. Professor of Economics.

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**John W. Chun**, 1975. B.A., M.S., Ph.D., Ohio State University. Associate Professor of English, Department of Humanities, Firelands College.

**Kun Y. Chung**, 1988. M.S., University of Wisconsin-Milwaukee; M.B.A., Ph.D., University of Wisconsin-Madison. Assistant Professor of Accounting and Management Information Systems.

**Richard Cioffari**, 1967. B.M., M.M., University of Michigan. Professor and Chair of Music Performance Studies.

**Eloise E. Clark**, 1983. B.A., Mary Washington College; Ph.D., University of North Carolina. Professor of Biological Sciences and Vice President for Academic Affairs.

**George B. Clemans**, 1967. B.S., Virginia Polytechnic Institute and State University; M.A., Ph.D., Duke University. Professor of Chemistry.

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**George Comer Duncan,** 1970. B.S., M.S., North Carolina State University; Ph.D., Brandeis University. Professor of Physics and Astronomy.

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## Alphabetical Index



## Numerical Index



## Accessibility Code

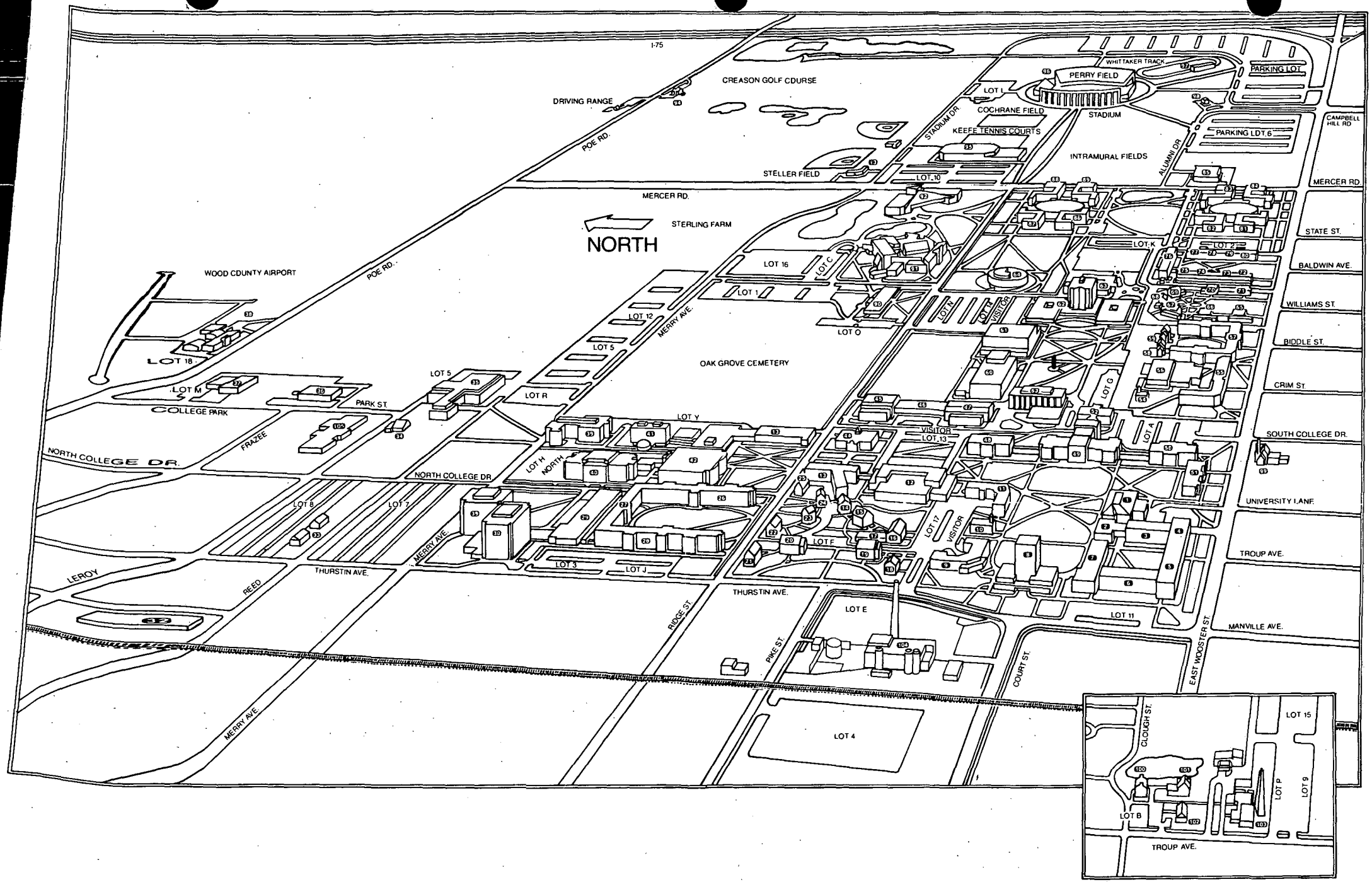
**AA** Totally accessible

**A** Accessible with telephones, fountains, no accessible restrooms

**B** Accessible first floor only, limited facilities

**C** Totally accessible, limited facilities

*Buildings with no designation are considered nonaccessible.*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CREASON GOLF COURSE
DRIVING RANGE
POE RD.
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PARKING LOT
LOT L
COCHRANE FIELD
STADIUM
STADIUM DR.
KEEFE TENNIS COURTS
PARKING LOT 6
CAMPBELL HILL RD
INTRAMURAL FIELDS
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LOT E
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PIKE ST.
COURT ST.
EAST WOOSTER ST.
MERRY AVE.
LOT 4
CLOUGH ST.
LOT 15
LOT P
LOT 9
LOT B
TROUP AVE.

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