

1976

1976-1978 Xavier University College of Arts and Sciences, College of Business Administration, The College of Continuing Education, Graduate School Course Catalog

Xavier University, Cincinnati, OH

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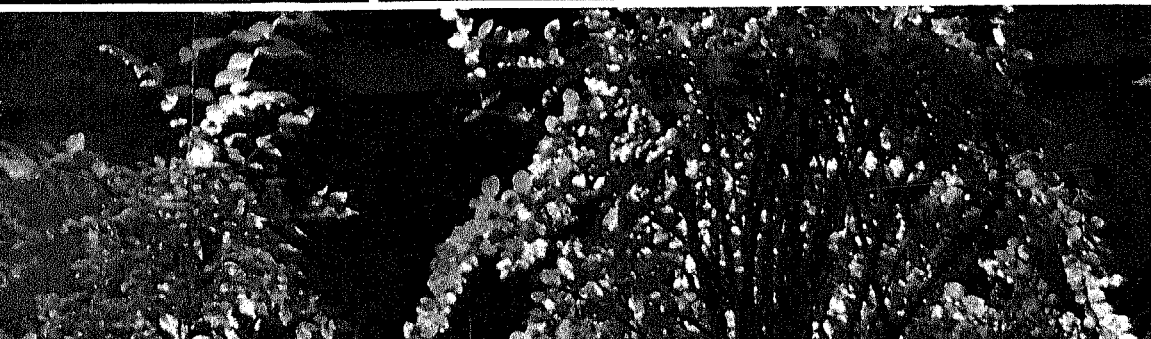
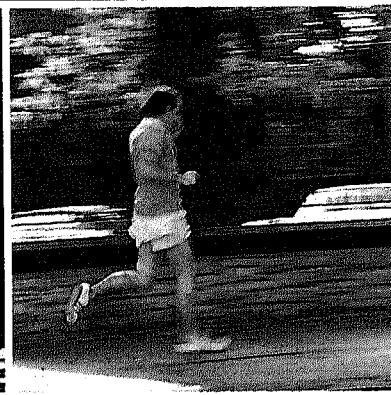
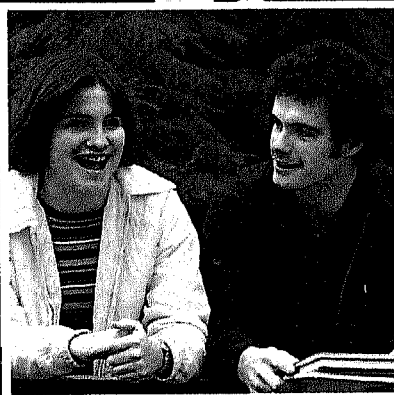
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Bookings Dept

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UNIVERSITY 1976-78



Suggestions for Obtaining Information

Requests for information should be directed to the officer indicated,
Xavier University, Victory Parkway, Cincinnati, Ohio 45207.

Telephone: (Area 513) 745-3000

Admission blanks and entrance requirements:

Director of Admissions

Alumni affairs:

Executive Director, X. U. Alumni Association

Bulletins and catalogues (undergraduate):

Director of Admissions

Bulletins and catalogues (graduate):

Dean of the Graduate School

College of Continuing Education:

Dean of the College of Continuing Education

Counselling Services:

Director of Counselling Services

For part-time and after graduation placement:

Director of Placement

Freshman interests:

The Assistant Dean, College of Arts and Sciences,
or the Associate Dean, College of Business
Administration

Graduate study:

Dean of the Graduate School

Honors Course:

Director of the Honors Course

Housing on campus:

Director of Student Housing

Refunds:

The Bursar

Reservation fees:

Director of Admissions

Room reservations:

Director of Housing

Scholars' Program

Director of Scholars' Program

Student health:

Chairman of Student Health Service

Summer Sessions information:

Dean of Summer Sessions

Teachers' certification requirements:

Chairman of the Department of Education

Transcripts and certificates of honorable dismissal:

The Registrar

Tuition and payment of bills:

The Bursar

Veterans' education:

Director of Veterans' Education

Xavier University

Co-Educational

Cincinnati's Jesuit University



Catalogue 1976-1978

**The College of Arts and Sciences
The College of Business Administration
The College of Continuing Education
The Graduate School**

Victory Parkway, Cincinnati, Ohio (Area 513) 745-3000

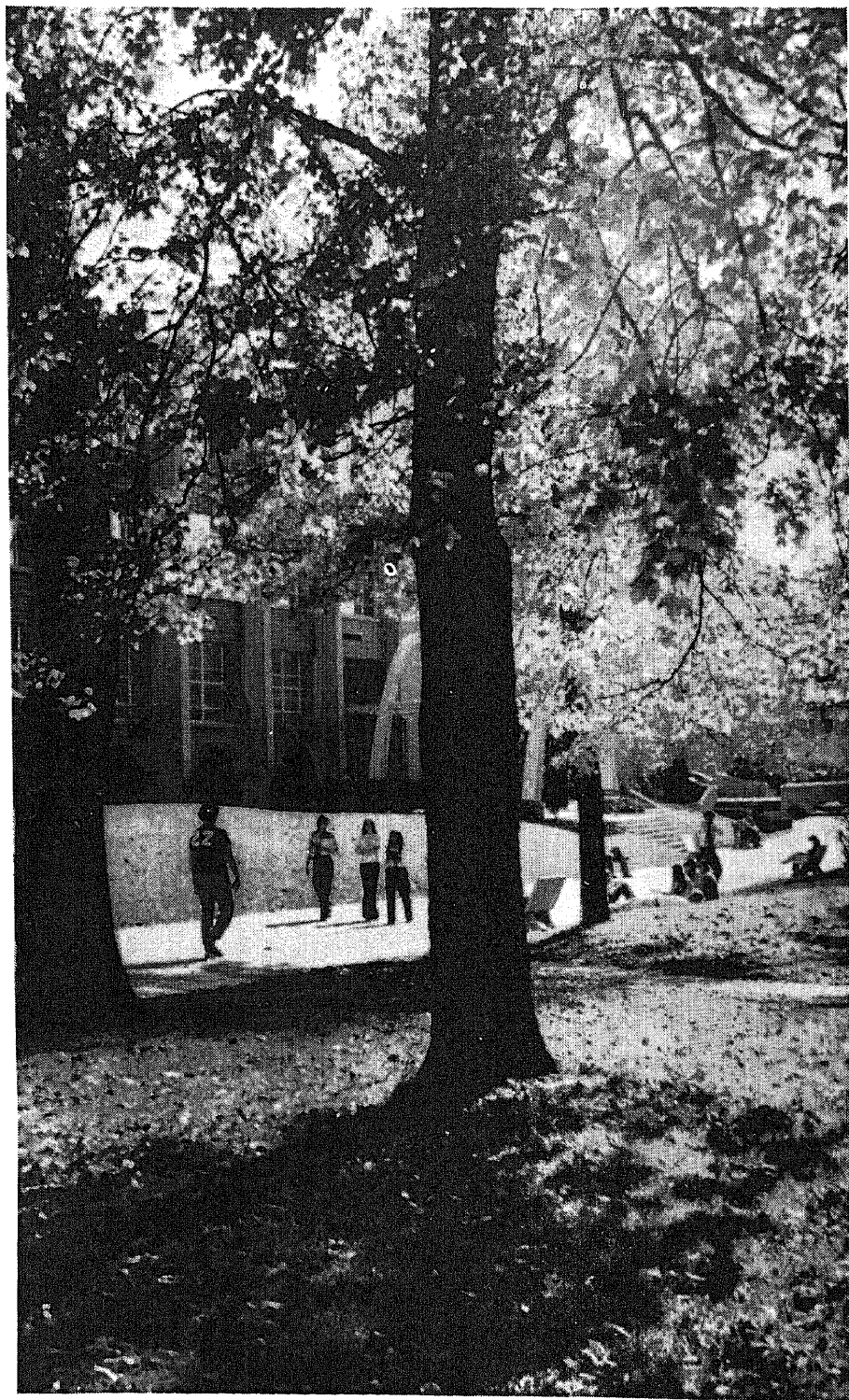


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1976

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UNIVERSITY CALENDAR, 1976-1977

Fall Semester

Sept. 6, Monday through Sept. 11, Saturday	Mail registration, Graduate School.
Sept. 16, Thursday	Registration local seniors (90 or more hours), 9:00-11:30 A.M. Registration local juniors (55 to 89 hours), 1:00-3:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 17, Friday	Registration, local sophomores (29 to 54 hours), 9:00-11:30 A.M. Registration freshmen, as assigned, 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 18, Saturday	Registration, Graduate School, 9:00 A.M.-2:00 P.M. Registration, College of Continuing Education, 10:00 A.M.-1:00 P.M.
Sept. 20, Monday	Registration freshmen, as assigned, 9:00-11:30 A.M.; 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 21, Tuesday	Registration, out-of-town sophomores, juniors, seniors, 9:00-11:30 A.M.; 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 22, Wednesday	Instruction begins, all divisions.
Sept. 26, Sunday	Mass of the Holy Spirit, 5:00 P.M.
Sept. 29, Wednesday	Last day for late registration or changes in registration in the undergraduate day colleges. Last day for course changes, College of Continuing Education students only.
Oct. 25, Monday	Veterans Day, holiday, all divisions.
Nov. 1, Monday	All Saints Day. (Not a University holiday.)
Nov. 6, Saturday	Graduate School, Foreign Language Examinations, and FORTRAN Examination, 2:00 P.M.
Nov. 15, Monday	Mid-semester grades for undergraduate students—day and evening—due in respective offices by 5:00 P.M.
Nov. 24, Wednesday	Thanksgiving Vacation begins—holiday, all divisions.
Nov. 29, Monday	Classes resume, all divisions, 8:30 A.M.
Dec. 1, Wednesday through Dec. 14, Tuesday	Pre-registration, undergraduate colleges, day division. Early registration, College of Continuing Education students.
Dec. 8, Wednesday	The Feast of the Immaculate Conception. (Not a University holiday.)
Dec. 16, Thursday	Final date for withdrawal from courses without failure, undergraduate colleges only.
Dec. 20, Monday	Christmas Vacation begins—holiday, all divisions.

1977

Jan. 3, Monday	Classes resume, all divisions, 8:30 A.M.
Jan. 4, Tuesday	Final date for submission of theses for January graduates, undergraduate colleges.
Jan. 8, Saturday	Senior Comprehensive Exams, undergraduate colleges. M.Ed. and M.B.A. Comprehensive Examinations.
Jan. 17, Monday	Martin Luther King Day. (Not a University holiday.)
Jan. 17, Monday through Jan. 21, Friday	Semester Examinations, day undergraduate colleges.
Jan. 18, Tuesday through Jan. 24, Monday	Semester Examinations, Graduate School and College of Continuing Education.
Jan. 24, Monday	End of first semester, all divisions.

Spring Semester, 1977

Jan. 17, Monday through Jan. 22, Saturday	Mail registration, Graduate School.
Jan. 28, Friday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Jan. 29, Saturday	Registration, Graduate School, 9:00 A.M.-2:00 P.M. Registration, College of Continuing Education, 10:00 A.M.-1:00 P.M.
Jan. 31, Monday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M. Registration, local seniors (90 or more hours), 9:00-11:30 A.M. Registration, local juniors (55 to 89 hours), 1:00-3:30 P.M.
Feb. 1, Tuesday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M. Registration, local sophomores (29 to 54 hours), 9:00-11:30 A.M. Registration, local freshmen (28 or fewer hours), 1:00-3:30 P.M.
Feb. 2, Wednesday	Instruction begins, Graduate School and College of Continuing Education. Registration, out-of-town undergraduates, 9:00-11:30 A.M.; 1:00-3:30 P.M.
Feb. 3, Thursday	Instruction begins, undergraduate day colleges, 8:30 A.M.
Feb. 10, Thursday	Last day for late registration or changes in registration, day undergraduate colleges. Last day for course changes, College of Continuing Education students.
Feb. 21, Monday	Lincoln-Washington Birthday, holiday, Day-undergraduate colleges ONLY.

Mar. 19, Saturday	Graduate School, Foreign Language Examinations, and FORTRAN Examination 2:00 P.M.
Mar. 25, Thursday	Final date for filing applications for degrees to be granted in June, all divisions.
Mar. 28, Monday	Mid-semester grades for undergraduate students—day and evening—due in respective offices by 5:00 P.M.
Apr. 8, Friday	Easter Vacation begins, holiday, all divisions.
Apr. 16, Saturday	Classes resume, Graduate School and College of Continuing Education, 8:30 A.M.
Apr. 18, Monday	Classes resume, day undergraduate colleges, 8:30 A.M.
Apr. 25, Monday	Final date for withdrawal from courses without failure, undergraduate colleges only.
May 2, Monday through May 13, Friday	Pre-registration, day undergraduate colleges. Early registration, College of Continuing Education students.
May 6, Friday	Final date for submission of senior theses, June graduates.
May 7, Saturday	Senior Comprehensive Examinations. M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
May 9, Monday	Honors Convocation, 1:30 P.M.
May 18, Wednesday through May 24, Tuesday	Semester Examinations, Graduate School and College of Continuing Education.
May 19, Thursday	Ascension Thursday. (Not a University holiday.)
May 23, Monday through May 27, Friday	Semester Examination, day undergraduate colleges.
May 27, Friday	End of Spring semester, all divisions.
June 2, Thursday	Commencement Exercises, Graduate School.
June 4, Saturday	Commencement Exercises, all undergraduate colleges.

Summer Sessions, 1977

June 13, Monday through June 18, Saturday	Intersession.
June 20, Monday	First Summer Session begins, all divisions.
July 4, Monday	Independence Day. Holiday, all divisions.
July 6, Wednesday	Graduate School, Foreign Language Examinations.
July 14, Thursday	M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
July 22, Friday	First Summer Session ends, all divisions.
July 25, Monday	Second Summer Session begins, all divisions.
Aug. 18, Thursday	M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
Aug. 26, Friday	Second Summer Session ends, all divisions.

UNIVERSITY CALENDAR, 1977-1978

Fall Semester

Sept. 5, Monday through Sept. 10, Saturday	Mail registration, Graduate School.
Sept. 15, Thursday	Registration, local seniors (90 or more hours), 9:00-11:30 A.M. Registration, local juniors (55 to 89 hours), 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 16, Friday	Registration, local sophomores (29 to 54 hours), 9:00-11:30 A.M. Registration, freshmen, as assigned, 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 17, Saturday	Registration, Graduate School, 9:00 A.M.-2:00 P.M. Registration, College of Continuing Education, 10:00 A.M.-1:00 P.M.
Sept. 19, Monday	Registration, freshmen, as assigned, 9:00-11:30 A.M.; 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 20, Tuesday	Registration, out-of-town sophomores, juniors, seniors, 9:00-11:30 A.M.; 1:00-3:30 P.M. Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Sept. 21, Wednesday	Instruction begins, all divisions.
Sept. 25, Sunday	Mass of the Holy Spirit, 5:00 P.M.
Sept. 28, Wednesday	Last day for late registration or changes in registration in the undergraduate day colleges. Last day for course changes, College of Continuing Education students only.
Oct. 24, Monday	Veterans Day. Holiday, all divisions.
Nov. 1, Tuesday	All Saints Day. (Not a University holiday.)
Nov. 5, Saturday	Graduate School, Foreign Language Examinations, and FORTRAN Examination, 2:00 P.M.
Nov. 14, Monday	Mid-semester grades for undergraduate students—day and evening—due in respective offices by 5:00 P.M.
Nov. 23, Wednesday	Thanksgiving Vacation begins—holiday, all divisions.
Nov. 28, Monday	Classes resume, all divisions, 8:30 A.M.
Dec. 1, Thursday through Dec. 14, Wednesday	Pre-registration, undergraduate colleges, day division. Early registration, College of Continuing Education students.
Dec. 8, Thursday	The Feast of the Immaculate Conception. (Not a University holiday.)
Dec. 16, Friday	Final date for withdrawal from courses without failure, undergraduate colleges only.

Dec. 21, Wednesday	Christmas Vacation begins, holiday, all divisions.
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1978

Jan. 4, Wednesday	Classes resume, all divisions, 8:30 A.M.
Jan. 5, Thursday	Final date for submission of theses for January graduates, undergraduate colleges.
Jan. 7, Saturday	Senior Comprehensive Examinations, undergraduate colleges; M.Ed. and M.B.A. Comprehensive Examinations.
Jan. 16, Monday	Martin Luther King Day. (Not a University holiday.)
Jan. 16, Monday through Jan. 20, Friday	Semester Examinations, day undergraduate colleges.
Jan. 17, Tuesday through Jan. 23, Monday	Semester Examinations, Graduate School and College of Continuing Education.
Jan. 23, Monday	End of first semester, all divisions.

Spring Semester, 1978

Jan. 16, Monday through Jan. 21, Friday	Mail registration, Graduate School.
Jan. 27, Friday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M.
Jan. 28, Saturday	Registration, Graduate School, 9:00 A.M.-2:00 P.M. Registration, College of Continuing Education, 10:00 A.M.-1:00 P.M.
Jan. 30, Monday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M. Registration, local seniors (90 or more hours), 9:00-11:30 A.M. Registration, local juniors (55 to 89 hours), 1:00-3:30 P.M.
Jan. 31, Tuesday	Registration, Graduate School, 8:30 A.M.-5:00 P.M.; 6:30-8:30 P.M. Registration, College of Continuing Education, 1:30-3:30 P.M.; 6:30-8:30 P.M. Registration, local sophomores (29 to 54 hours), 9:00-11:30 A.M. Registration, local freshmen (28 or fewer hours), 1:00-3:30 P.M.
Feb. 1, Wednesday	Instruction begins, Graduate School and College of Continuing Education. Registration, out-of-town undergraduates, 9:00-11:30 A.M.; 1:00-3:30 P.M.
Feb. 2, Thursday	Instruction begins, undergraduate day colleges, 8:30 A.M.
Feb. 9, Thursday	Last day for late registration or changes in registration, day undergraduate colleges. Last day for course changes, College of Continuing Education students.
Feb. 20, Monday	Lincoln-Washington Birthday, holiday, day-undergraduate colleges ONLY.

Mar. 18, Saturday	Graduate School, Foreign Language Examinations, and FORTRAN Examination, 2:00 P.M.
Mar. 20, Monday	Mid-semester grades for undergraduate students—day and evening—due in respective offices by 5:00 P.M.
Mar. 21, Tuesday	Final date for filing applications for degrees to be granted in June, all divisions.
Mar. 24, Friday	Easter Vacation begins, holiday, all divisions.
Apr. 1, Saturday	Classes resume, Graduate School and College of Continuing Education, 8:30 A.M.
Apr. 3, Monday	Classes resume, day undergraduate colleges, 8:30 A.M.
Apr. 24, Monday	Final date for withdrawal from courses without failure, undergraduate colleges only.
May 1, Monday through May 12, Friday	Pre-registration, day undergraduate colleges. Early registration, College of Continuing Education students.
May 4, Thursday	Ascension Thursday. (Not a University holiday.)
May 5, Friday	Final date for submission of senior thesis, June graduates.
May 6, Saturday	Senior Comprehensive Examinations. M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
May 8, Monday	Honors Convocation, 1:30 P.M.
May 17, Wednesday through May 23, Tuesday	Semester Examinations, Graduate School and College of Continuing Education.
May 22, Monday through May 26, Friday	Semester Examinations, day undergraduate colleges.
May 26, Friday	End of Spring semester, all divisions.
June 1, Thursday	Commencement Exercises, Graduate School.
June 3, Saturday	Commencement Exercises, all undergraduate colleges.

Summer Sessions, 1978

June 12, Monday through June 17, Saturday	Intersession.
June 19, Monday	First Summer Session begins, all divisions.
July 4, Tuesday	Independence Day. Holiday, all divisions.
July 5, Wednesday	Graduate School, Foreign Language Examinations.
July 13, Thursday	M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
July 21, Friday	First Summer Session ends, all divisions.
July 24, Monday	Second Summer Session begins, all divisions.
Aug. 17, Thursday	M.Ed. and M.B.A. Comprehensive Examinations, 1:30 P.M.
Aug. 25, Friday	Second Summer Session ends, all divisions.

The University

History

Xavier University was established in 1831 when the first bishop of Cincinnati, Edward Fenwick, raised a two story building near the Cathedral in downtown Cincinnati and opened its doors to educate seminarians and other young men in the Ohio area. This institute of arts and sciences was the first Catholic institution of higher learning in the entire Northwest Territory. The original name of the college was The Athenaeum, but it was dedicated from the beginning to the patronage of St. Francis Xavier.

At first, the college was administered by the bishop and his diocesan priests, but as it grew it began to require professional academic leadership. In 1840 Father Roothan, the Jesuit General, responded to the bishop's request and appointed three Jesuit priests, two brothers and two scholastics to assume the leadership of the college. Its name was changed to St. Xavier College in honor of the Jesuit educator under whose patronage the college was originally placed.

It was during these first few years as a Jesuit institution that Xavier began to take on the unique character and special role that it fulfills today, over 130 years later. For example, a mercantile program was added to the curriculum in 1840 because the Jesuit educators recognized the need to supplement the traditional humanities education with a sound business program. Today, the university is recognized for its development of an excellent College of Business Administration, established in 1961, which, together with the other undergraduate colleges,—the College of Arts and Sciences and the College of Continuing Education,—provide students with a broad based learning experience. In 1841, Xavier offered its first night courses, beginning a tradition of serving the unique needs and schedules of professionals in the Cincinnati community, a tradition it proudly continues today.

St. Xavier College moved to its present 65 acre location in the geographic center of the city in 1919, when its growth and development called for new and larger facilities. To reflect that growth and development, the name was changed to Xavier University in 1930. Since that time, the University has become co-educational (1970) and implemented a host of new academic programs, facilities, community projects and student services.

Objectives

The primary goal of Xavier University is to help its students develop and equip themselves for a mature, intelligent and richly human response to contemporary life. Xavier attempts this task by providing an excellent academic curriculum, a student life with rich opportunity and variety, and a commitment to human and spiritual values.

Xavier's undergraduate curriculum is characterized by a delicate balance between variety and an intense concentration in special areas of knowledge. The student who pursues the bachelor's degree at Xavier will be challenged by an in-depth study of his particular area of concentration, such as English, marketing or physics. But his education will also include a significant number of courses in other areas, such as literature, philosophy, theology, and the sciences.

Maturation and growth also require pursuing one's interests and developing one's talents outside the academic sphere. Xavier is proud of its rich student life which includes over 60 student activities and organizations which cover a wide range of areas: politics, the performing arts, athletics and social life, to name a few.

Although the academic curriculum and student life reflect considerable diversity, there is a commitment to human and spiritual values that gives unity to the Xavier experience and underpins everything the university works to accomplish. The faculty and administration at Xavier aim to develop graduates who demonstrate intelligence and competency, but they also strive to foster concern for others and dedication to Christian ideals. Students are prepared not only for further intellectual endeavors and successful performance in a career field, but also for a more meaningful and mature experience of life itself.

The College of Arts and Sciences

The College of Arts and Sciences, Xavier's largest and oldest undergraduate college, offers its students all the advantages of a quality liberal education. This type of education, which has always been the core of the Jesuit university, is called liberal because it liberates the human mind from a consideration of solely immediate concerns. It frees the individual to explore the amazingly diverse achievements of man while developing and expanding his own vast potential as a human person.

It is the conviction that man possesses the unusual and distinctively human powers to think, to reflect on his experiences, to fill human emotions and to make moral judgements that has upheld the general study of the arts and sciences from the days of ancient Greece to our own day. This type of education, which helps the student become a generalist who can understand all the components of a problem and how each component relates to the whole, is most valuable in a society such as ours which is characterized by rapid change and explosive expanse of human knowledge.

The student who has achieved an overview of the diverse branches of knowledge in addition to a more detailed understanding of a particular area, is well-equipped to adapt to new modes of thinking and operating. Specific areas of expertise will become more and less valuable with the passage of time, but the person who can adapt and learn quickly will be forever valuable in any career field. The ability to communicate effectively in oral and written form, another quality prized in any area of work, is also given a primary emphasis by the deans and faculty of the College of Arts and Sciences.

The College of Business Administration

After operating its business departments for many years as a part of the College of Arts and Sciences, the University established the College of Business Administration on September 1, 1961.

The College of Business Administration conforms to the general principles and objectives of the University in particular, and of Jesuit education in general. It recognizes the indispensability of cultural subjects which motivate the higher powers of the mind and spell the difference between an educated man and a mere technician.

The objectives, therefore, of the College of Business Administration are threefold: 1. To develop the cultural, intellectual, and the moral qualities of the student; 2. To provide a solid undergraduate base for those students who wish to continue study at the graduate level; 3. To prepare the student in the area of business so that he may be more qualified to accept a position of responsibility and leadership in the business community.

The College of Continuing Education

The purpose of the College of Continuing Education is to aid adults of Greater Cincinnati in obtaining a more advanced education by means of courses of cultural and practical value. This division renders particular service to those who wish to carry college work toward a degree while working during the day and to those who wish to pursue subjects which will better fit them for special services or vocations.

In addition to the liberal arts courses, business, technical and vocational courses are offered. All courses are open to men and women. Besides the individual course offerings, there are groupings and programs of courses leading to certificates, diplomas, and degrees, including state requirements for teacher certification.

The College offers also the Bachelor of Science in Business Administration (General Business) and the Bachelor of General Studies (BGS). The BGS is a nonmajor degree program for the mature student of multi-interests and is limited to individuals 21 years of age or older.

The College of Continuing Education offers two-year associate degree programs in a number of fields. Students should consult the special publications of the College for information about these two-year associate degree programs. Special note is made about the Associate Degree Program in Radiologic Technology which the College offers in conjunction with various local hospitals in the Greater Cincinnati area. Additionally, degree programs in art and music are available through a cooperative program between Xavier University and Edgely College.

The Graduate School

The Graduate School has offered programs leading to graduate degrees since 1946. Degrees conferred are the Master of Arts, the Master of Science, the Master of Education, the Master of Business Administration, and the Master of Hospital and Health Administration. Information about the Graduate School follows the undergraduate section of this Catalogue.

Accreditation

The University is accredited by the North Central Association of Colleges and Secondary Schools as a degree-granting institution, and is approved by the Department of Education of the State of Ohio and by the Board of Regents of the University of the State of New York. It is also approved by the American Chemical Society for its training in chemistry.

The Graduate Program in Hospital and Health Administration is accredited by the Accrediting Commission on Graduate Education for Hospital Administration.

Institutional Memberships

The University maintains membership in these educational and learned organizations:

Association of Jesuit Colleges and Universities; The National Catholic Educational Association; The North Central Association of Colleges and Secondary Schools; The North Central Conference of Summer Sessions; The North American Association of Summer Sessions; The American Council on Education; The Association of American Colleges; The Association of Urban Universities; The National Education Association; The Ohio College Association; The Association of University Evening Colleges; The American College Public Relations Association; The American Catholic Philosophical Association; The American Catholic Historical Society of Philadelphia; The American Historical Association; The United States Catholic Historical Society; The Mississippi Valley Historical Association; The Catholic Library Association; The American Library Association; The American Association of Collegiate Registrars; The Association of Ohio College Registrars; The National Association of Student Personnel Administrators; The American Mathematical Society; The Association of College Unions; The National Association of College and University Food Services; The National Association of College Stores; The United States Field Artillery Association; The American Political Science Association; The American Association of Collegiate Schools of Business Assembly; The American Association of University Women; The Association of University Programs in Health Administration; The National Association of Women Deans and Counsellors; The Association of Independent Colleges and Universities of Ohio; The Institute of International Education; College and University Personnel Association.

Buildings and Facilities

Location

Xavier University is favorably located at Dana Avenue and Victory Parkway in a residential area ten minutes from the heart of Cincinnati, a metropolitan center with a population of over 1,500,000 people.

Alter Hall

Alter Hall, the main classroom building on the Xavier Campus, is the center for academic affairs. WVXU-FM, "the voice of Xavier," a non-commercial educational radio station and a training facility for students with interest in professional broadcasting is also located in Alter Hall. The station broadcasts on a frequency of 91.7 mhz. with an ERP of 65 watts.

Bellarmino Chapel

(See Campus Ministry).

The University

University Center

The University Center building houses the following: President's office, Student Development offices, Career Planning and Placement Office, Student Financial Aid Office, Post Office, Student Senate offices, Bookstore, Cafeteria, Musketeer Grill, Theatre, Games Room, and various meeting rooms.

Library

The McDonald Memorial Library is a modern building which, with open stacks, allows its readers free access to most of its collections. The building has 740 seats and a volume capacity of 350,000. Good lighting, air conditioning, comfortable furniture and elevator service combine to provide a pleasant place for study and research. Readers are well served by a competent staff of librarians and associates.

The collection numbers almost 200,000 volumes of books, periodicals and microform. Special collections include several incunabula and medieval manuscripts, the Williams and Friel Bible collections, the manuscripts of Francis J. Finn, S.J., letters of several U.S. Presidents, and the University Archives.

Xavier students have borrowing privileges at several Cincinnati and Northern Kentucky libraries because of the McDonald Library's membership in the Greater Cincinnati Library Consortium.

The Paul L. O'Connor, S.J. Sports Center

The Paul L. O'Connor, S.J., Sports Center, located between the Fieldhouse and Victory Parkway, includes a swimming pool, squash and handball courts, classrooms for the Physical Education Department and offices for the Athletic Department. At the time of publication the center is under construction with completion scheduled for the summer of 1976. Phase 2 of the center, including a multi-purpose gymnasium and gymnastic equipment, is scheduled for completion at a later date.

Fieldhouse

Contained in the *Schmidt Memorial Fieldhouse* are the Athletic, the Band, and the Physical Education Departments. The Basketball court, handball and paddle ball courts, athletic and gymnastic equipment, and intramural facilities are also located in this building.

Student Housing

Brockman Hall, Husman Hall, Kuhlman Hall, and Marion Residence are equipped to accommodate full-time students. Residence hall costs are listed under Fees.

Out-of-town students must live on campus. Exceptions to this regulation are granted by the Director of Housing.

Cincinnati area students are invited to live in a residence hall.

Brockman Hall

The Brockman Hall dormitory also houses the Xavier Television studios and Tucker's Tavern.

Laboratories

The Department of Biology, occupying Albers Hall, is well equipped for teaching undergraduate students the biological sciences. General laboratories are outfitted with compound and stereoscopic microscopes, ample slides and specimens, and fresh- and sea-water aquaria. Other laboratories are maintained for study in anatomy and development, behavior and physiology, plant biology, genetics, microbiology, and ecology. Advanced students use research space at the Albers Biological laboratories, which are particularly well suited for investigations dealing with the electrical activity of the senses, the nervous system, and the hearts of various animals.

The Department has assembled abundant visual aids—models, vertebrate and invertebrate museum specimens, a variety of projectors, and its own library of motion pictures and kodachrome slides. Modern laboratory instrumentation is used in appropriate courses and includes Tectronix oscilloscopes, Grass stimulators, electronencephalographs, and polygraphs; activity recorders, environmental growth chambers, Warburg apparatus, and sterilizing devices.

The Department of Physics has one large general physics laboratory, a newly designed laboratory for advanced physics at the junior level, a newly equipped atomic-nuclear physics laboratory for seniors, an optics laboratory, an analog computer laboratory, and a complete machine shop.

The seismology laboratory, for research in seismology, at present uses some of the facilities of the physics laboratories in addition to office, library and dark room in Fisher Lodge. For the purpose of advancing the science of seismology, Xavier University maintains a first class station and observatory. The station is located on a farm approximately sixteen miles east of the University. It is equipped with three Benioff short-period seismographs that are kept in continuous operation. In addition, an instrument vault situated in the basement of the Schmidt Building serves experimental purposes.

The chemistry laboratories are located in the Logan Chemistry Building. Five large laboratories are devoted to physical, organic, analytical, general inorganic chemistry, and graduate research. There are smaller laboratories for biochemistry, instrumental analysis, and radiochemistry.

Computer Center and Services

The University Computer Center, located in the Walter Seton Schmidt Building, provides a complete range of services connected with the analysis and processing of data by means of computers. These services, available to all branches of the University, may be categorized as services meeting University needs in the areas of education, research and administration.

Faculty and student researchers are provided analysis, programming and operating services in support of their projects by the Center. The high speed and accuracy of the computers are invaluable for research involving complex and extended computations.

Lodge Learning Laboratory

The Lodge Learning Laboratory, located on the second floor of Schmidt Hall, is a resource center available to assist students in producing instructional materials and to provide instruction in operation and classroom use of equipment. It serves primarily the students in the various educational certification programs of the University.

Counselling Center

The Center, located in Sycamore House, provides psychological services for students of Xavier University. It is equipped to handle behavioral problems in a variety of areas such as the choice of studies, of a school, or of an occupation; measurement of aptitudes, interests, abilities, etc.; failures in school or at work; difficulties in reading and unsatisfactory patterns of living. Psychological testing and vocational guidance, psychiatric evaluation, counselling, and psychotherapy are the fundamental services of the Center. Undergraduate full-time students are provided the testing, counselling, and vocational guidance services free, except for a \$5.00 test materials' replacement charge.

The University

Art Gallery

The Fine Arts Gallery, located in the Carriage House of Marion Hall, is intended to be a living facility—one that will present works of art available to the University through loans, gifts, and travelling exhibitions. It was opened in the summer of 1966.

Bookstore

The Xavier Bookstore is in the University Center Building. In addition to all required books and supplies, the Bookstore carries a large selection of paperbacks, as well as toilet articles, gift items, and specialty clothing with the XU insignia. Special orders for books not in stock may be placed through the Bookstore.

St. Barbara Hall

R.O.T.C. offices are located in St. Barbara Hall on Winding Way. R.O.T.C. is open to both men and women students.

Breen Lodge

Breen Lodge, Xavier's Educational Resource and Women's Center, offers an alternative community lifestyle to five selected upperclass women. The Lodge provides the university with Free University, many films, programs and a hospitable atmosphere for lectures and leisure.

Pied Piper

The *Pied Piper*, a university owned neighborhood house, is run by students for students. Working in conjunction with Campus Ministry and Student Activities, the students initiate programs to complement dorm and academic life. The *Piper Coffeehouse Shows* feature both professional performers and campus talent.

Campus Parking

All cars on campus must carry a currently valid Xavier University parking permit. Student parking is available in the North Campus Parking Lot accessible from Herald Avenue next to Husman Hall. All resident students are permitted cars provided they are registered. Visitors to campus may utilize the parking facilities along University Drive and in the Brockman Parking area. These areas are reached through the main gate of Xavier from Dana Avenue just east of Victory Parkway. Security personnel will issue visitors a temporary parking pass.

Student Services

Academic Counseling

Deans and Associate Deans of the Colleges of Arts and Sciences, Business Administration, and Continuing Education serve as counselors in their respective colleges. They are assisted by an Academic Counselor. The Academic Counseling Office for personal academic counseling is located in Alter Hall. The office of the Dean of College Counseling serves in interviewing prospective transfer students and foreign applicants and is located in Boylan Hall. A faculty counselor is available to each student in his/her major area of concentration.

Campus Ministry

Bellarmino Chapel is the focal point of Xavier's campus ministry. Unique is its twin role of campus chapel and diocesan parish, it forms a diversified Christian community from both campus and the surrounding neighborhood.

Most of the campus ministry staff reside in the dorms for greater accessibility to students. Among the services sponsored by campus ministry are liturgical events, retreats, marriage counseling, speakers and special events, and personal counseling.

Greater Cincinnati Consortium of Colleges and Universities

Eleven area colleges offer new opportunities for curriculum enrichment through cross-registration in order that all students may take courses generally not available at their home institutions. Participating schools besides Xavier are the Atheneum of Ohio, Cincinnati Technical College, College of Mount St. Joseph, Edgewood College, Hebrew Union College, Miami University, Northern Kentucky State College, St. Thomas Institute, Thomas More College and the University of Cincinnati. The program is available to all full time students.

Office of Career Planning and Placement

In addition to providing Xavier students and alumni with traditional placement services, such as on-campus interviews and notification of job openings, the Office of Career Planning and Placement offers valuable information, printed resources, guidance and group programs that can help the individual move successfully through the various phases of career planning.

Students are encouraged to take advantage of the resources and workshops provided by the office as early as the freshman year.

The office, which is located on the ground floor of the University Center Building, is open to students and alumni each week day, twelve months a year.

Food Service

The *Cafeteria* and *Musketeer Grill* located in the University Center building provide meal service for the Xavier community. For complete information regarding food service please refer to the Food Service Handbook.

Student Health Services

The University provides a health clinic to serve students and the University community. It is located in Kuhlman Hall.

Student Government and Activities

The Office of Student Development looks out for the welfare of both resident and commuter students. All student organizations are under the general supervision of the Dean for Student Development.

Student government is devoted to improvement in the quality of student life. The main governing organization of the student body is the Student Senate.

With more than 90 student activities and organizations from which to choose, Xavier students can satisfy the variety of interests, hobbies, and talents they would like to express and pursue. Full information on student government and student activities may be found in the Student Handbook available from the Office of Student Development.

Community Relations

In 1969 the University established the Center of University and Urban Affairs. It is concerned with pressing community issues—civic, economic, social, cultural, and educational. It recruits and aids minority and disadvantaged students, develops programs for better understanding of their problems by the University Community, and assists in efforts to recruit minority group faculty and graduate assistants.

Intramural Athletics

Intramural programs are carried on in a variety of sports. Activities are carried on in baseball, basketball, bowling, handball, touch football, and other sports.

Intercollegiate Athletics

Xavier University believes that there are sound values in intercollegiate athletic competition and that it has a valid place in American education. Intercollegiate athletics, therefore, are conducted to further the education of the students physically, emotionally, intellectually, and morally. Participants learn the value of cooperative effort and the necessity of subordinating their own good to that of the group. They also see the need for poise and for competence in the face of opposition, and they learn a sportsmanlike respect for rules.

Intercollegiate rivalry also benefits the student body by providing wholesome recreation and the opportunity for the undergraduates to show their loyalty to all phases of the University's program. Students gain the educational value of sharing in group activity, and also learn to respect the rules as sportsmen.

The program of intercollegiate athletics at Xavier includes basketball, baseball, golf, sailing, tennis, women's basketball, women's volleyball, and occasional sports. These activities are administered by the Athletic Director, who is advised by the Athletic Board and who is responsible to the Vice President and Dean for Student Development.

Participants in intercollegiate athletics, as in other co-curricular activities, must be *bona fide* students in good standing. They will have entered the University in accordance with the admission norms published in the Catalogue and will be subject to the regular scholastic demands. If, in the judgment of the dean, their participation in athletics interferes with their progress toward a degree, he may forbid them to continue even though they are not formally on scholastic probation.

Privacy Rights of Parents and Students

The Family Education & Privacy Act of 1974 (as amended) details the rights of parents and students to access of most records held and maintained by educational institutions. The law further requires that parents or eligible students be notified of the types of records held and officials responsible for such records.

Parents have the right of access, review and challenge for elementary and secondary students (under the age of 18). The student assumes the rights of the parents at age 18 or upon attendance at a postsecondary institution. However, if the student is considered dependent (according to the 1954 Internal Revenue Code), both the student and parents have access rights.

In compliance with Section 99.5 of the Family Education & Privacy Act of 1974, the following information is published for all students at Xavier University.

Types of Records Maintained

Pursuant to the task of operating an educational institution, Xavier University maintains student files in the following areas: Admissions, Academic, Housing, Student Financial Aid and Placement, as well as transcripts of formal Discipline Board hearings, health records, psychological counseling and test results, and athletic records.

Official Responsible for Maintenance of Records:

Records	Official's Name & Title
Admissions	Mr. Rene Durand, Director of Admissions
	Dr. Robert H. Helmes, Dean, College of Continuing Education.
	Dr. Raymond F. McCoy, Dean, Graduate School.
Academic	Rev. Orrin T. Wheeler, S.J., Registrar
	Dr. Robert H. Helmes, Dean, College of Continuing Education
	Dr. Raymond F. McCoy, Dean, Graduate School
Housing	Mr. David A. Tom, Director of Housing
Financial Aid	Mr. Charles Pollock, Director, Student Aid
	Dr. Robert H. Helmes, Dean, College of Continuing Education
	Dr. Raymond F. McCoy, Dean, Graduate School
Discipline Board	Mr. J. Kenneth Blackwell, Chairperson, University Discipline Board
Health	Mrs. Ann T. Brown, R.N., Director, McGrath Health Center

Psychological Counseling	Dr. David Hellkamp, Director, Counseling Center
Athletic	Mr. James McCafferty, Director of Athletics
Placement	Mrs. Madalyn Freund, Director of Career Planning and Placement

Review and Expunging of Records

Each of the departments listed has review procedures and methods of expunging inaccurate data which are particular to the type of records kept and to the specific purpose for which they are maintained. Specific procedures can be determined by contacting the head of the department concerned. While academic transcripts are kept permanently, all other records are destroyed either when the student leaves Xavier or within a few years following his/her departure.

Access to Records

Pursuant to Section 99.13, students have the right of access to all educational records except those specifically excluded under the amendments to the Privacy Act. The following materials are specifically *exempted from access* by students: 1. *Personal notes* to teachers and administrators, provided these notes are not available to a third party other than a teacher's substitute. 2. *Law Enforcement Records*, to include those of the campus police force. 3. *Medical and Psychiatric records*—these records are not available to anyone except those providing the treatment. However, the records may be reviewed by a physician or other appropriate professional of the student's choice.

In addition to the above excepted information, the following are not accessible to students: 1. *PARENTS CONFIDENTIAL FINANCIAL STATEMENTS*. 2. *Confidential letters of reference placed in the file prior to January 1, 1975*.

The student does have the right of access upon request to all other educational records and files which are directly related to the student. This includes all admissions records, registration files, financial aid materials (excluding the PCS mentioned above), housing files, discipline records and any athletic records.

The student may waive the right of access to letters of reference and also provide a prospective employer with a signed authorization for release of information about the student as part of an employment application. An employer, however, cannot make this waiver mandatory for employment.

Procedures for Challenging Content of Records

The procedures for challenging content of any specific record for reasons of inaccuracy or bias can be either informal or formal hearings. Formal hearings are required when informal discussion fails to bring a resolution to the problem. The formal proceedings will be conducted within a reasonable length of time, and the decision rendered by an impartial official who has no direct interest in the matter at hand. The parents and/or student have the right to present evidence that the challenged material is inaccurate, misleading, or in any way inappropriate for the particular file. Correction or deletion should be requested. All formal hearing decisions must be rendered in writing within a reasonable length of time.

Cost of Reproducing Files

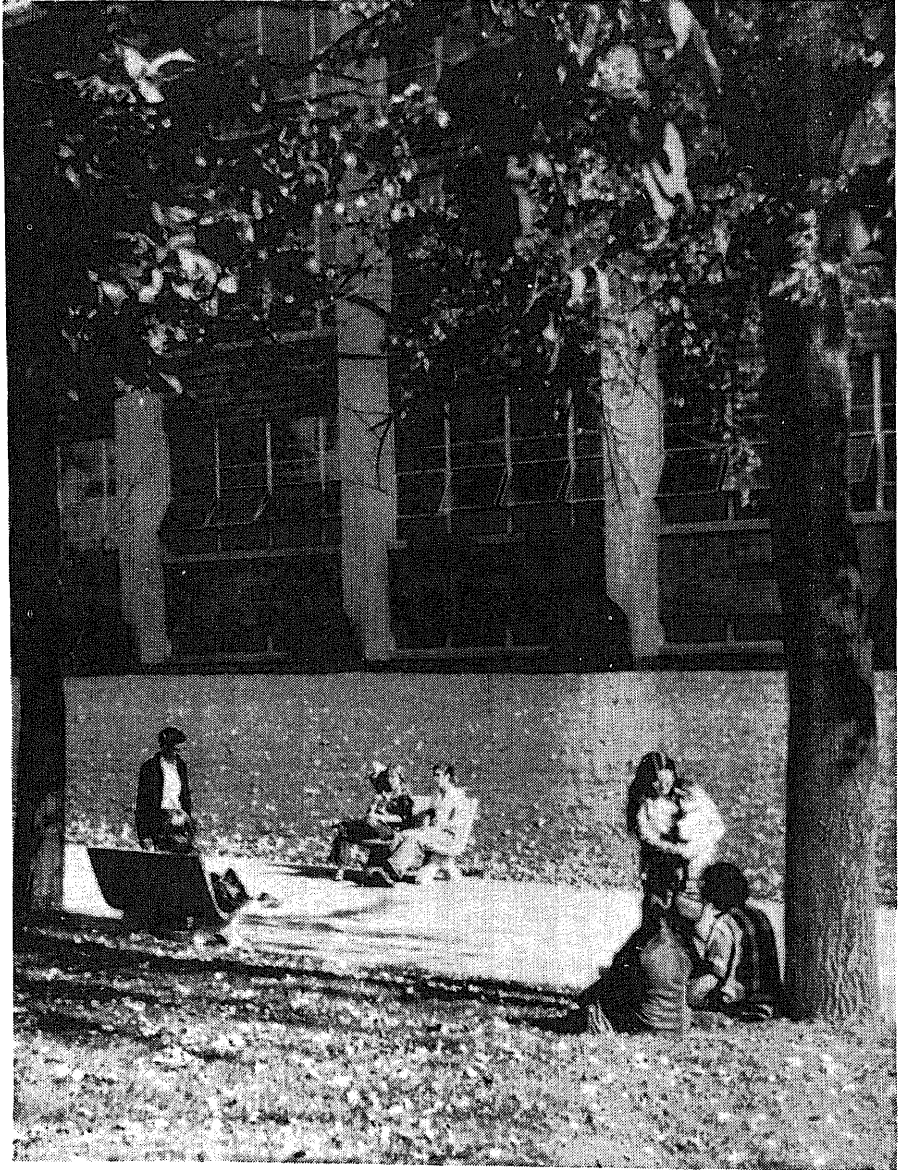
Students have the right to request and receive copies of all materials contained in those files deemed accessible in Section 4. The cost of reproduction shall be borne by the requesting party and shall not exceed the cost to the institution. The present charge for a Xerox duplicate is ten cents (10¢) per page, per copy. The charge for transcripts is \$1.00 per transcript. A representative of Xavier University will be present during the duplication to insure that complete and accurate copies are made and to prevent the possibility of unauthorized deletions or corrections.

Privacy Rights

Directory Information

The Family Education and Privacy Act permits the public release of what is termed "directory information." For Xavier University's purposes, this information includes the following: the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees awarded, special honors and awards, and the most recent previous educational agency or institution attended by the student.

Xavier University is required to publicly announce to the students that which Xavier will release as directory information. If a student does not wish "directory information" released by Xavier, that student must inform the appropriate offices about which information should not be released.



The College of Arts and Sciences The College of Business Administration The College of Continuing Education

Admission policies apply in general to all undergraduates. Those planning to enter the College of Continuing Education, however, should apply directly to the Dean of that college. No deposit is required of College of Continuing Education applicants.

Admissions

Application for Admission

Application for admission to the undergraduate day College of Arts and Sciences or College of Business Administration is made on a special "Admissions Application Form" which can be obtained from the Office of Admissions. This completed form should be forwarded, together with a \$15.00 application fee, to the Office of Admissions. The application fee is not refundable or applicable to any account.

The applicant must also request the high school (and any post-secondary institutions attended) to forward directly to the Director of Admissions an official transcript of the academic record. Credentials accepted for admission become the property of the University. All credentials should be on file at least one month before the day of registration. Scores of the Scholastic Aptitude Test (SAT) or the American College Testing (ACT) should be forwarded to the Office of Admissions. A recommendation from a counselor or teacher is helpful and encouraged.

Evidence of a student's potential for success in college studies is judged by the high school average, rank in class, aptitude test scores, and the comments offered on recommendations. Of these, the high school record (or for transfer students, the previous college record) remains the most important factor.

Requirements for Admission

Xavier University offers its educational opportunities to men and women who seek intellectual, personal, moral, and social growth. Students who have demonstrated past academic achievement and who show promise and aptitude for successful performance at Xavier, are invited and encouraged to apply for admission. Xavier is an academic community whose doors are open to all persons regardless of race, religion, sex, or national origin.

To be eligible for admission a student must be the graduate of an accredited high school, and normally have a minimum average grade of "C". A minimum academic average of "B" is ordinarily required for admission to the pre-medical program. Applicants whose averages are lower may be considered and admitted at the discretion of the Committee on Admissions.

The high school record should normally include a minimum of fifteen units of which eleven must be in academic subjects, including four units of English, two units of math, one unit of science, one unit of history, and two units of a foreign language. The foreign language requirement can be fulfilled by substituting two units of history and/or science. A unit is the equivalent of a subject extending through a scholastic year of thirty-six weeks with five meetings per week. Single half units are acceptable only in those courses considered half-year subjects.

All freshman applicants are also required to submit the results of the College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Testing Program Examinations (ACT).

High School Equivalence

A Certificate of High School Equivalence is recognized in individual cases as a replacement for the high school diploma. Applicants should have copies of their scores and of the Certificate forwarded directly to the Office of Admissions.

Admission

Advanced Placement

Xavier University participates in the Advanced Placement Program of the College Entrance Examination Board, and on a limited basis in the C.E.B. College Level Examination Program. Students can earn valid academic credit that can fulfill requirements in certain curricular areas by obtaining satisfactory grades on these examinations.

Early Admission

Xavier University offers the opportunity for superior high school students who have completed their junior year to enroll at the University. Such students must have maintained a grade point average of at least B, and their admission must be recommended by the high school counselor. Courses completed in high school should include three units of English, two of mathematics, two of science, two of social science, and two units of one foreign language. An interview is strongly recommended for students interested in this program. Arrangements can also be made for students completing their senior year in a Cincinnati area high school to enroll at the University on a part-time basis.

Admission on Probation

Applicants who do not meet the qualifications for unqualified admission may, under special circumstances, be admitted on probation at the discretion of the Committee on Admissions. They must fulfill whatever admission and enrollment qualifications the Committee on Admissions shall deem necessary.

Provisional Admission

Provisional admission may be granted by the Dean to a student who has been unable to complete arrangements for formal admission before registration dates. When the admission file is completed, if the student does not qualify for admission, his admission and registration are canceled.

Re-Admission

An applicant who was previously registered at Xavier is required only to submit the Admissions Application form, unless he has attended another school in the meantime, in which case he should apply as a transfer student.

Students suspended for poor scholarship from the University or from other institutions will ordinarily not be eligible for admission or re-admission until the lapse of at least one semester. In all cases admission or re-admission and the conditions for such will be determined finally by the Committee on Admissions.

Foreign Students

Applicants from foreign countries must submit official documents in English translation of all secondary education (and if applicable, of all university education). An applicant must have completed the level of education required for university admission in the student's native country. Students whose native language is other than English must submit evidence of English proficiency through a recognized examination such as the Test of English as a Foreign Language (TOEFL), the Michigan English Test, or a test from another accredited agency.

In addition, in order to act on an application for admission and prior to the issuance of the Form I-20, the student's sponsor must submit an affidavit that all expenses will be paid, as well as a separate statement from an official source which gives evidence of the sponsor's ability to meet the expenses. An official medical examination report is also required for admission.

Special Students

Students who possess sufficient educational background, maturity, and experience may, with the Dean's consent, choose special courses without following a complete degree program. Courses thus taken may be subsequently credited toward a degree upon admission to the University as a degree candidate.

Transfer Students

Xavier University welcomes qualified transfer students from other institutions of higher education. In addition to the credentials required of freshman applicants, transfer students should have forwarded to the Office of Admissions complete and official transcripts from all post-secondary institutions attended. No applicant may disregard his previous college record and apply for freshman standing.

The rank of advanced standing to which the student will be admitted will depend upon the quantity and quality of the work done in the other institution or institutions, the accreditation of the institution, and the conformity of the work to the degree program for which the student wishes to register. Evaluation of credits for advanced standing will be provisional for at least one semester. If a student transfers without a degree, credit is given for all academic courses in which he has received a grade of "C" or better. Ordinarily the grade of "D" will not be accepted unless the "D" will have been in a sequential course in a subject for which a higher grade was obtained in a subsequent course. If a student transfers into Xavier with an associate degree he will have all academic courses accepted which were accepted for his associate degree even if he received the grade of "D" for them, provided only that his overall quality point average is at least 2.0.

Transfers Within the University

Students transferring from the College of Continuing Education into the Undergraduate Day Division need submit only an application form and an official transcript of their work in the College of Continuing Education to the Office of Admissions. Students transferring from the Undergraduate Day Division to the College of Continuing Education apply to the Dean, College of Continuing Education. If the application is approved, arrangements for the transfer will be made. Ordinarily transfers from within the University will not be approved for full-time students until after the student has completed two full semesters in the division from which he wishes to transfer.

Transfers should be arranged at least one month before the opening of a session.

Veterans

Xavier University is approved by the Veterans' Administration for the education and training of veterans and their dependents under all existing public laws. Requests for information should be addressed to the Director of Veterans' Educational Benefits, Xavier University, Cincinnati, Ohio, 45207.

Notification of Admission

The applicant will receive from Xavier University a notice of admission or a notice of unfavorable action as soon as the University has received necessary completed credentials as outlined above in the section on "Requirements for Admission."

Deposits

All new applicants who have been approved for admission are required to confirm their acceptance by the payment of a non-refundable tuition deposit of \$50.00. The deposit may be submitted any time after the letter of approval has been received, but it must be paid by May 1. Students who are approved after May 1 will be given three weeks to make the deposit. The deposit is credited to the student's account and will be deducted from the total bill at registration.

Upon approval of an application from a student requiring housing accommodations, the Admissions Office will forward a Room Reservation Form for a campus residence hall. Students from the Cincinnati area are welcome to live on campus. In order to reserve a campus housing accommodation, the University requires a non-refundable deposit of \$75.00. The deposit is credited to the student's account and will be deducted from the total bill at registration. A room reservation will not be honored without payment of the deposit.

Fees

Admission to the College of Continuing Education

Those seeking admission to the undergraduate College of Continuing Education, whether in Arts and Sciences or in Business Administration, should apply to: The Dean, College of Continuing Education, Xavier University, Cincinnati, Ohio 45207.

Most of the regulations under "Application for Admission and Admission Requirements" apply also to the College of Continuing Education. But certain differences must necessarily exist between admission to a full-time and a part-time program; hence, those seeking admission to the College of Continuing Education would be well advised to write or telephone that office.

It should be noted that non-local full-time students registered for 12 semester hours or more through the College of Continuing Education and attending day classes must live in the dormitory until they attain status of Senior (90 semester hours completed). All fees applicable to full-time day students are applicable to full-time students registered for day classes through the College of Continuing Education.

Fees*

Communications concerning costs for the College of Continuing Education should be addressed to the Dean of the College of Continuing Education, Xavier University, Cincinnati, Ohio 45207. Certain charges, such as the deposit with the application, are not required by the College of Continuing Education.

The following rates are effective in the regular academic year and in the summer sessions. All communications concerning expenses for the College of Arts and Sciences or the College of Business Administration should be addressed to the Director of Admissions, Xavier University, Victory Parkway, Cincinnati, Ohio 45207.

A non-refundable fee of \$15.00 must accompany the Application for Admission. For those requesting housing accommodations, an additional \$75.00 is required. The housing deposit will be applied to the student's regular account. It will not be refunded if the applicant, having been accepted, cancels his application or fails to enter the University.

Accounts Payable and Service Fee*

All accounts are payable on the day of registration. This applies to all Xavier University students. All Xavier University students can pay one-third of the sum owed the University on the day of registration, a second third on November 1st or March 1st, and the final third on December 1st or April 1st for the Fall and Spring Semesters respectively. A one-third payment plan can be selected for summer sessions also. On unpaid balances the following policy will govern all University students:

A 1% per month service fee will be charged to all accounts with an unpaid balance over 30 days old. The service fee is computed on the balance outstanding on the first day of the preceding month, less any payments and credits received during that month. New charges incurred during the month are not subject to a service fee for that month. To avoid any additional service fee, the entire amount due may be paid at any time.

Bills will be mailed monthly. No service fee will be charged if the total outstanding balance is paid on or before the last day of the month in which the bill is rendered.

* Expenses listed are for the 1976-1977 academic year. Changes are made in these rates from time-to-time.

Ordinary Expenses*

Tuition, Full-time undergraduate, per semester, (covers 12 to 18 semester credit hours)	\$970.00
Tuition, per semester hour, (in excess of 18 or fewer than 12 semester hours, day or evening)	60.00
Matriculation fee (payable once)	10.00
R.O.T.C. fee (per semester)	10.00
Deposit—(Freshmen and Sophomores only)	25.00
Laboratory science fee (per course per semester, for Biology, Chemistry, Physics, Experimental Psychology, Physiological Psychology, and Statistical Techniques)	20.00
Laboratory materials deposit (per course per semester—partially refundable)	10.00
Laboratory materials deposit, Comparative Anatomy	15.00
Laboratory materials deposit for science thesis (partially refundable)	25.00
Medical Technology Fee (<i>see block schedule</i>)	75.00
General fee (per semester)	80.00
(The general fee includes the use of all non-classroom facilities, the Student Health Center, and a reduction in the fee charged for the services of the Psychological Services Center.)	
Identification Card (annually)	10.00
Language audiovisual fee (to be paid by all Modern Language students, per semester)	7.50

Contingent Expenses*

Fee for change in registration	\$ 3.00
Late registration	5.00
Additional per day	1.00
Maximum	10.00
Special examinations (each)	2.00
Duplicate transcript	1.00
Undergraduate Record Examination	4.00
Graduation fee	25.00
Parking permit	
Full-time student (per year)	14.00
Part-time student (per year)	8.00

Room*

Room, per semester, double occupancy	\$300.00-\$315.00
Room, per semester, single occupancy (as available)	\$365.00-\$445.00
Room Equipment Damage and Improvement Fee (non-refundable)	\$10.00

All rooms are equipped with a bed, desk, chair, and bed linen. Students are expected to bring blankets, towels, and soap.

Board*

Students who live on campus are required to take their meals in the University Dining Room on a seven-day basis. There are two basic plans from which students other than Seniors may choose. (1) A seventeen-meal plan includes breakfast, lunch and dinner, Monday through Friday, and dinner only on Saturday and Sunday; cost, \$395.00 per semester. (2) A nineteen-meal plan includes breakfast, lunch and dinner Monday through Friday with brunch and dinner Saturday and Sunday; cost, \$400.00 per semester. Seniors living on campus are required to take only one meal per day, Monday through Friday, and may elect to take breakfast, lunch or dinner or any combination exceeding the single meal per day plan. Breakfast and lunch are available on Saturdays in the Grill on a cash basis. Brunch is available on a cash basis on Sundays in the University Dining Room. (Board includes meals from the first day of scheduled classes of the day undergraduate divisions to the last day of scheduled examinations of the same divisions.)

* Expenses listed are for the 1976-1977 academic year. Changes are made in these rates from time-to-time.

Financial Aid

Refunds (Undergraduate)*

A refund of *tuition* may be claimed in the case of withdrawal or dismissal. The University semester refund schedule is as follows:

Before the first class meeting	100% refund
First day of class and 6 days thereafter	90% refund
7-13 days after first class meeting	70% refund
14-20 days after first class meeting	50% refund
21-27 days after first class meeting	30% refund
28-34 days after first class meeting	10% refund
After 34 days	no refund

The amount of the refund will be calculated from the date of formal notification of withdrawal.

Cf. Withdrawal from the University.

For tuition refund schedules for the summer sessions, consult the University Summer Bulletin.

Fees are not refunded in regular or summer sessions.

A refund of board expenses may be claimed by one separating from the University. The amount of refund will be proportioned to the date at which the student gives formal notice of separating from the University.

Students drafted or called to service as reservists will receive a 100% refund of tuition and a partial refund for the unused portion of their General Fee. At the time of application for this refund, the student's ID card must be returned to the Treasurer's office.

Financial Aid SCHOLARSHIPS

Information on University sponsored scholarships is provided by the sources indicated upon request.

1. For Undergraduate, Day Division, Academic Scholarships: The Director of Student Aid or Chairman, Scholarship Committee.
2. For The College of Continuing Education Scholarships: The Dean, the College of Continuing Education.
3. For Graduate Scholarships: The Dean, Graduate School.
4. For Reserve Officer Training Corps Scholarships: The Professor of Military Science.
5. For Athletic Grants-in-aid: The Director of Athletics.
6. For Band Scholarships: The Director, Xavier University Band.
7. For Hospital and Health Administration Programs: The Director, Health and Hospital Administration.

Xavier Achievement Scholarships

These scholarships are for full tuition and fees, and are awarded on a competitive basis to entering freshmen of superior ability and promise who possess the highest academic qualifications. All students who apply for admission and are approved before February 1 will be considered for these scholarships. In order to retain this scholarship for four years, the recipient must attain an average of 3.0 in freshmen year and 3.25 thereafter.

Presidential Scholarships

These scholarships are awarded on a competitive basis to entering freshmen and transfer students of outstanding ability and promise. Scholarships will vary from a minimum amount to full tuition depending upon the student's academic qualifications, financial need and the availability of funds. All students who submit the Parents' Confidential Statement and the Xavier Financial Aid Application will be considered for these scholarships. A limited number of Presidential Scholarships are awarded solely on the basis of academic merit. The scholarship is renewable for each year of undergraduate studies provided that the recipient resubmits the Parents' Confidential Statement each year, continues to demonstrate sufficient financial need, and attains an average of 2.75 in his first year and 3.0 thereafter.

* Expenses listed are for the 1976-1977 academic year. Changes are made in these rates from time-to-time.

University Scholarships

Competition is open to entering black students as well as those currently enrolled. The size of the award may vary depending upon the number of qualified applicants, their financial need and the availability of funds. Black students who want to be considered for this scholarship should contact the Director of Financial Aid.

Honors Course Scholarships

Special scholarships are available for students enrolling in the Honors A.B. Program. For further information, contact the Director of the Honors Program.

Upperclassmen Scholarships

Full time undergraduate students enrolled in the day division who have been on the Dean's List at least three times are eligible for an Upperclassmen scholarship. Application forms are available in the Financial Aid Office or from the Chairman of the Scholarship Committee. Applicants are required to provide a Parents' Confidential Statement processed by the College Scholarship Service. These scholarships must be renewed each year. April 1 is the deadline for submitting the application form to the Chairman of the Scholarship Committee. The processed PCS should also be available to the Scholarship Committee by this same date.

Fredin Memorial Scholarships

Each year the Fredin Scholarship Committee awards several scholarships to worthy students to help them finance one full year of study in Paris, France. Established from the bequest of Mlle. Aline Fredin in memory of her parents, these scholarships are awarded on a competitive basis to Xavier students who have attained at least junior standing.

Scholarship Regulations

Achievement Scholarships are for full tuition and fees. Other scholarships apply to tuition alone. No scholarship, except the Fredin Memorial, may be used to cover the cost of room and board.

2. Scholarships are applicable to courses taken during the regular Fall and Spring semesters. They may not be applied to the cost of courses taken during the summer.
3. Only full time students are eligible for scholarships.
4. Scholarships must be accepted for the year or years they are awarded. They may not be transferred by the holder and may not be resumed at will after having been relinquished.
5. All scholarships are awarded at the discretion of the Scholarship Committee of Xavier University. The Committee reserves the right to adjust the scholarship stipend in the event that the holder receives financial aid from some other source.

ROTC Scholarships

The Department of the Army annually awards one-year, two-year, three-year, and four-year ROTC Scholarships to outstanding students. Information and applications for the four-year scholarships are submitted by high school senior candidates through the "Army ROTC, Fort Monroe, Va. 23351." For additional information, high school seniors should contact their guidance counselors or the Xavier University Military Department. Annually one-year, two-year, and three-year scholarships may be awarded to members of the Xavier University junior, sophomore, and freshman ROTC classes respectively. All scholarships cover the cost of books, tuition, and fees, plus a monthly \$100 subsistence allowance for not more than ten months of the school year.

Students in the advanced course (junior and senior years) also receive a \$100 per month allowance for the two years, not to exceed 20 months.

Financial Aid

SCHOLARSHIP FUNDS

The permanent scholarships that have been generously given to Xavier University in the past are listed below. Income from these scholarships is increased each year by gifts of annual scholarships. In addition, the University uses funds from its current income to make up the balance of these awards.

Scholarship List

Anonymous, \$70,000

A scholarship fund—the gift of a friend of the University.

William F. Poland, S.J., Fund, about 1906, approximately \$115,000

Fr. Poland established this fund from his patrimony at the time of the death of his parents.

Elizabeth Sullivan Scholarship, 1924, \$3,000

Mary B. Shannon Scholarship Fund, 1925, \$13,334

Worpenberg Family Scholarship, \$5,000

This is a partial scholarship to be awarded preferably to a graduate of Saint Xavier High School.

Rev. James D. Foley, S.J., Scholarship (in his honor), \$2,000

Mary Mohlenhoff Scholarship (in memory), \$2,000

Passion Play Scholarship, 1928, \$100

The Ryan Sisters Scholarship, \$3,000

Siedenberg-King Scholarship, \$2,000

Margaret Shea Scholarship, 1937, \$3,500

Archbishop McNicholas Memorial Scholarship, 1940, \$5,000

Mrs. F. W. Hinkle Memorial Scholarship, 1940, \$5,000

The Ryan Sisters Memorial Scholarship, 1940, \$5,000

Saint Xavier Church, Memorial Scholarship, 1940, \$5,000

The four preceding scholarships were given on the occasion of the Quadricentennial Observance of the foundation of the Society of Jesus and the Centennial of the Jesuits in Cincinnati.

Rev. James McCarthy, S.J., Scholarship, 1942, \$3,468

This partial scholarship is to be given to a needy and deserving student in honor of Fr. James McCarthy, S.J. It was donated by the will of Mrs. Clara Pressler.

Xavier Student Council, 1942, \$2,087.47

The proceeds from a World War II metal scrap drive conducted by the Student Council were donated for this scholarship.

Bernard H. Ludwig Scholarship, 1948, \$2,000

A partial scholarship to be given preferably to some member of Saint Augustine's Parish, to be selected by the pastor of Saint Augustine's, Cincinnati.

Charles A. Clasgens Scholarship, 1949, \$3,576

A partial scholarship for any worthy poor student, preference to be given to a student of Saint Peter's Roman Catholic School, New Richmond, Ohio.

Blessed Virgin Mary Scholarship, \$5,000

A partial scholarship established by an anonymous donor in honor of the Blessed Virgin Mary.

Rev. Albert Dierkes, S.J., Scholarship, \$6,400

A partial scholarship established by an anonymous donor in memory of Fr. Dierkes.

Fred Tuke Scholarship, 1951, \$10,000

A donation by Mr. Fred Tuke provided a full tuition scholarship.

Walter A. and George McDonald Fund

This fund, established in 1960 to honor Mr. and Mrs. Andrew J. McDonald provides income for a graduate assistant in the Department of Chemistry.

Walter A. and George McDonald Scholarship, \$1,000

Dr. Edward McGrath Scholarship, 1956, \$7,500.

A partial scholarship donated in memory of Dr. McGrath.

Lillian W. Ochs, \$250

Class of 1931 Scholarship, 1956, \$7,500

A half-tuition scholarship donated by the Class of 1931 on the occasion of the twenty-fifth anniversary of their graduation.

The Stephens L. and Margaret J. Blakely Scholarship, 1958

A partial tuition scholarship maintained by the annual contribution of Mr. John R. Blakely and Mrs. Jane B. Woodrough in honor of their parents. The scholarship is awarded to a pre-law student from Kenton County, Kentucky.

The Richard A. Jones Journalism Scholarship, 1960, \$19,161.83

A bequest from the estate of Mrs. Alma J. Snodgrass to the College of Continuing Education in memory of her father, Cincinnati newspaperman.

The Jesse K. Dunn Memorial Scholarship Fund, 1959, \$7,000

The Frederick A. Hauck Physics Research Scholarship, 1962, \$1,500 annually

This is an award to a student (or students) selected by the Department of Physics to pursue, on the undergraduate level, research projects commensurate with his (or their) intellectual promise.

The Matthew Ryan Family Scholarship, 1964, \$10,000

Given at the request of the late Miss Margaret Ryan.

The Fredin Memorial Scholarships, 1964

These are annual awards for one or more students to pursue their studies in French in France. Established from the bequest of Mlle. Aline Fredin in memory of her parents. See Modern Languages, Foreign Language FR 298.

The Mr. and Mrs. Theodore H. Oppenheim Scholarship Fund, 1966

A scholarship to be awarded at the discretion of the Scholarship Committee.

The Wilson J. (Woody) Sander Memorial Scholarship Fund, 1967, \$15,700

This Scholarship Fund honors the memory of the late Mr. Sander, '34, whose service to his Alma Mater included chairmanships of the Athletic Board and the Alumni Living Endowment Fund.

The William V. Masterson, '41, Memorial Scholarship, \$3,565

This memorial provides tuition assistance to an outstanding student in marketing for his senior year.

The Raymond L. Buse Memorial Scholarship Fund, \$27,500

This memorial was established to perpetuate the memory of Raymond L. Buse, Sr., with the income to be awarded to a student selected by the Scholarship Committee.

The Reverend Paul L. O'Connor, S.J., Scholarship, 1971. \$40,000

This scholarship was provided by an anonymous donor who wished to honor the President of Xavier University. It is intended that the income will assist worthy students selected by the Scholarship Committee.

The James H. and Marye S. Curran Memorial Scholarship Fund, 1971, \$31,187.50

This scholarship was established in 1971 in accordance with the will of Mr. James H. Curran, member of the class of 1927. The income from this fund is to be used to finance a presidential scholarship designated as the James H. and Marye S. Curran Scholarship.

The Foster G. McGaw Scholarship from the Association of University Programs in Health Administration and the American College of Hospital Administrators is awarded by the program each year to an entering graduate student who exhibits potential for making a significant contribution to the hospital administration profession. The scholarship pays \$1,000 toward the student's expenses.

The Mary Manning Walsh Scholarship Fund, \$1,000,000

The Mary Manning Walsh Scholarship Fund was established in 1968 by her husband, the late Thomas J. Walsh, with a gift in excess of \$1,000,000.00. The income from this Fund is to be used for scholarships for worthy students unable to pay entirely for their education.

Edward F. Macke '98 Graduate Scholarship Endowment Fund, \$50,000

The Edward F. Macke '98, Graduate Scholarship Endowment Fund provides scholarship assistance to graduate students at Xavier University. This Fund was established in 1969 with a gift of approximately \$50,000.00 from the late Edward F. Macke.

The Fred F. Mackentepe Scholarship, 1971, \$25,000

A bequest from the estate of Fred F. Mackentepe for scholarship use in the donor's name. The scholarship grants are awarded at the discretion of the Scholarship Committee.

Financial Aid

The Reverend William P. Hetherington, S.J., Memorial Scholarship Fund, 1971

This Scholarship Fund honors the memory of the late Father Hetherington. The fund was initiated by the Booklovers Association, of which Father Hetherington was Moderator.

The Robert T. Rice, Jr., Memorial Scholarship Fund

This Fund honors the memory of the late Robert T. Rice, Jr., Class of 1969, who was killed in the line of duty in Viet Nam. The Fund was created by the family and friends.

The Ralph W. Chambers Memorial Scholarship Fund

This Fund honors the memory of the late Ralph W. Chambers, Class of 1948. The Fund was created by the family and friends.

The Rita Elsaesser Harpenau Memorial Scholarship Fund

The Fund honors the memory of the late Mrs. Robert A. Harpenau (Rita Elsaesser). The Fund was created by the family and friends.

The Edmund J. Bradley Memorial Fund

A fund of \$67,000 was established in 1972 in accordance with the will of Mr. Edmund J. Bradley. The income from this fund is to be used to provide financial assistance to deserving students at the University in the field of science, preferably in the field of physics.

The Jack Currus Scholarship Fund, 1972, \$10,000

A bequest from the estate of Mr. Jack Currus to provide scholarship assistance to worthy and needy students. The scholarship funds will be awarded by the Scholarship Committee.

The Rita Elsaesser Harpenau Memorial Scholarship Fund, 1973, \$50,000

This fund honors the memory of Mrs. Robert A. Harpenau (Rita Elsaesser). The fund was created by Mrs. Anthony C. Elsaesser in memory of her daughter. The fund will assist underprivileged but capable students to attend Xavier University.

The Helen Hennigan Diehl-Thomas J. Klinedinst Scholarship Fund, \$10,000

This scholarship was established in 1975 by St. Francis Hospital. It honors Mrs. Helen Hennigan Diehl and Mr. Thomas J. Klinedinst for the many years of dedicated and loyal service to the Hospital as members of the Board of Trustees and many auxiliary activities. Two Master of Health and Hospital Administration students will each receive \$250.00 toward their educational expenses.

The Equitable Life Assurance Company Scholarship

This scholarship, made available through the Association of University Programs in Health Administration, is awarded by the Graduate Program in Hospital and Health Administration each year to an entering graduate student who exhibits potential for making a significant contribution to the hospital administration profession. The scholarship pays \$1,000 toward the student's expenses.

Class of 1969 Scholarship, \$3,034

This scholarship is designed to provide financial assistance to any needy students, preferably from socio-economic minority groups, who have sought all other means of financial aid and cannot begin or continue their college education without financial assistance. It is not to be allocated in strict accordance with academic achievement. The sole criterion is that the student be qualified for admission or that he be in good academic standing.

Class of 1970 Scholarship, \$2,629

This scholarship is to be awarded annually to a worthy student. The student must need financial assistance, must show better than average academic promise, and should espouse the ideals, aims, and goals of a Jesuit education. It may be awarded to any student regardless of race, creed, color, sex, or national origin. However, preference is to be given to sons or daughters of members of all Undergraduate Divisions of the Class of 1970.

Class of 1971 Scholarship

The 1971 Class Gift has been invested by the University as part of its scholarship portfolio. The principal will accrue interest for a period of ten years, and such interest will be added to the principal annually. After ten years, the annual interest earned by the principal will be awarded as a four-year scholarship to a worthy student in financial need. Competition will only be open to citizens with racial or cultural backgrounds or regions of original residence as follows: Black American, Mexican-American, American Indian, or Southern Appalachia.

GRANTS, LOANS, WORK-STUDY

Law Enforcement Education Program

Under the provisions of Section 406 of the Omnibus Crime Control and Safe Streets Act of 1968 (Public Law 90-351), Xavier University participates in the Law Enforcement Education Program. LEEP awards provide student loans and/or grants to public law enforcement personnel. For further information contact the Director of Student Aid, Xavier University.

Ohio Instructional Grants Program

The Ohio Instructional Grants Program, established by the 108th Ohio General Assembly, offers financial aid to Ohio students who are enrolled as undergraduates in an eligible Ohio institution of higher education. The amount is based upon the adjusted effective income of the family, the number of dependent children in the family, and the total instructional charges of the educational institution. To be eligible, a student must be a resident of Ohio. For further information contact the Director of Student Aid, Xavier University.

National Direct Student Loan

The National Direct Student Loan Program is a continuation of the National Defense Student Loan Program authorized by Title II of the National Defense Education Act of 1958. Recipients are selected by the school itself.

The borrower must be enrolled as at least a half time student in need of financial aid for his education, and judged capable of maintaining good academic standing.

Repayments begin on a quarterly basis within nine months after the borrower ceases to be at least a half-time student. These loans carry a 3 percent interest on the unpaid balance during the repayment period. The loan must be repaid in accord with the terms specified in the promissory note. Under no conditions may the repayment period exceed ten years. For further details, communicate with the Director of Student Aid, Xavier University.

The College Work-Study Program

In the Economic Opportunity Act of 1964, Government funds are made available to colleges and universities for part-time work, usually on campus. Applicants should be nationals (citizens) in need of the earnings to meet their college expenses, should have good academic standing, and should carry a normal (full-time) number of academic course hours. Under this program students may work up to 20 hours per week when their classes are in session and not more than 40 hours per week in vacation periods or during the summer when not enrolled in classes. Whenever possible, Work-Study jobs will be co-aligned with the student's course of studies to give the most valuable educational experience.

Xavier University participates in this program. For details communicate with the Director of Student Aid, Xavier University.

Supplemental Educational Opportunity Grants

The United States Office of Education provides funds for grants from \$200 to \$1,500 a year to worthy undergraduate students in exceptional financial need. Grants are renewable for four years. The amount awarded to a student must be matched by some other type of financial aid provided either by the University, an outside scholarship, or other source.

Further information may be obtained from the Director of Student Aid, Xavier University.

Basic Education Opportunity Grants

The Basic Educational Opportunity Grant Program is a Federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions.

The maximum award a student may receive is \$1,400 minus the amount the student and his or her family are expected to contribute toward the cost of the student's education. Determination of the family contribution is not made by the educational institution.

Further information may be obtained from the Director of Student Aid, Xavier University.



Curricular Information

The Curriculum

The various curricular programs of the University are designed to attain the educational objectives as described in the "Objectives of the University." The various curricula are planned to provide learning experiences for the liberally educated person. The basic core curriculum—required of all students—has been designed to accomplish this goal. Additionally, opportunities for concentration in special areas of learning are provided through the broad offerings of University majors.

Degrees

The University will confer a bachelor's degree upon any candidate who has successfully completed an accepted program of studies, and who has fulfilled, prior to graduation, all degree requirements, both general and particular. Degrees conferred on candidates of the College of Arts and Sciences are the Bachelor of Arts, Honors Bachelor of Arts, Bachelor of Science, and Bachelor of Literature. Graduates of the College of Business Administration receive the Bachelor of Science in Business Administration.

The Core Curriculum

The University core curriculum has been established to attain the ends of a Jesuit liberal arts education. The general requirements of this curriculum apply to every degree program at the undergraduate level of the University. While these requirements apply to all degree programs, exceptions are found in several programs. The student should study the specific requirements of the degree for any exceptions to these general regulations. The core curriculum may be seen as general educational requirements and seeks to provide the student with the universalism and breadth associated with liberal arts education.

The University Core Curriculum Follows:

Humanities

Every student must successfully pass 12 semester hours of electives in humanities. In the College of Arts and Sciences, six of these hours must be in literature, either in English or a foreign language. The remaining six semester hours may be in any approved humanities courses offered by the University. (Any prerequisite to these courses must be completed.) In the College of Business Administration, the student elects twelve semester hours of approved courses. Some of these hours are expected to be in literature courses. Courses which fulfill this requirement have been selected from communication arts, fine arts, literature, philosophy, and theology and are designated as approved with an asterisk (*) in the course description section of this catalogue. In the College of Continuing Education, the student fulfills this requirement according to the degree program being pursued in arts, science, or business administration.

Social Science

The student must also pass 12 semester hours of electives in the social sciences. The College of Arts and Sciences requires that six of these hours must be in history at the 100-level courses. They must include a I and II course, not necessarily sequential in content or in the I-II sequence. (See page 144.) The remaining six hours are to be elected in most programs from approved social science courses. In the College of Business Administration, six of the hours are fulfilled by the two semester requirement in Principles of Economics (I and II) in all business administration degree programs. The remaining six hours are fulfilled from social science electives, *not* in the business core curriculum. In the College of Continuing Education, the same regulations apply to the corresponding degree programs. Social science electives are selected from the departments of economics, education, geography, history, political science, psychology, sociology, accounting, management, industrial relations and marketing. The courses which fulfill this requirement are marked with an asterisk (*) in the course description section of this catalogue.

Curriculum Information

Mathematics

The University requires each student to have successfully completed six semester hours in mathematics. In many degree programs the courses are electives. Specific mathematics courses are required in others. The College of Business Administration requires specific mathematics courses in all its degree programs. The College of Continuing Education's requirements follow the degree requirements in the major. Students should study the degree requirements of the degree major for any specific courses. Two courses of similar content cannot be elected to fulfill this requirement.

Science

Six semester hours of the same laboratory science must be passed successfully by all students. In some degree programs this requirement is fulfilled by a science course which requires more than six semester hours over two semesters (General Zoology, General Chemistry, College Physics, or University Physics). The two semester courses (six semester hours total) which fulfill this regulation are: Biology 102-105 Life and Laboratory; Chemistry 102-105 Man, Molecules, and the Environment and Laboratory; Physics 100-103 Elementary Astronomy and Laboratory; Psychology 121-124 General Experimental Psychology and Laboratory; and Physics 116-119 The Earth and Its Environment and Laboratory.

Philosophy

In all degree programs the University requires PI 220 Philosophy of Man, PI 230 Metaphysics, and PI 240 Principles of Ethics. Six additional hours of philosophy electives must be completed successfully. The student may elect any philosophy courses to fulfill the six hours of electives. (Requirements for transfer students depend upon transfer evaluation.)

Theology

Theology 111 Introduction to Theology is required of all students except those in the College of Continuing Education. It is a prerequisite to all theology courses. (Students in Continuing Education must elect one course from a list numbered 100-114). Additionally, nine semester hours of theology electives are required in every degree program. The student may elect any nine semester hours in theology to complete this curricular requirement from theology courses numbered 120-399. (Requirements for transfer students depend upon transfer evaluation.)

English Composition

The University requires evidence of skill attainment in writing. This requirement can be satisfied by passing successfully a test in written composition offered by the University's English Department. Otherwise the student must take En 101 English Composition. The course is generally taken in the Freshman year.

Foreign Language

The College of Arts and Sciences requires twelve semester hours (Elementary and Intermediate level courses) of a foreign language in most degree programs. (There is no language requirement in the business administration degrees of the University.) In some degree programs certain languages are strongly recommended. The student with an adequate background may "test out" of any amount of this requirement. Additionally, the student who matriculates with two years of a foreign language may begin at the second semester of the elementary level sequence in the same language.

Summary of Core Curriculum

Humanities	12 elective hours
Social Science	12 elective hours
Mathematics	6 elective hours
Science	6 elective hours
Philosophy	9 required hours, 6 elective hours
Theology	3 required hours, 9 elective hours
English Composition	3 semester hours or equivalent "test out"
Foreign Language (Arts and Sciences only)	12 required hours

Semester Hours

The number of semester hours which each course carries is provided in the course description section of this catalogue. The number of hours is represented by the arabic numeral following the title of the course under each department's course listings and descriptions.

Course Numbering System

- 100 to 199 Lower division courses.
- 200 to 399 Upper division courses.
- 400 to 499 Special University Programs, Undergraduate and Graduate.
- 500 to 699 Graduate courses only.

Academic Regulations

Classification of Students

Lower Division Groups:

1. Freshmen—students having less than 29 credit hours and 56 quality points.
2. Sophomores—students having from 29 credit hours and 58 quality points to 54 credit hours and 108 quality points.

Upper Division Groups:

1. Juniors—students having from 55 credit hours and 110 quality points to 89 credit hours and 178 quality points.
2. Seniors—students having a minimum of 90 credit hours and 180 quality points.

Other Groups:

1. Part-time—students taking less than 12 credit hours of work in any semester.
2. Unclassified—students who have not declared themselves as a candidate for any degree.
3. Auditors—students not taking courses for college credit.

Unit of Instruction

A unit of instruction is one hour a week for a minimum of fifteen weeks. The unit is called a *credit hour*. A weekly two- or three-hour period of laboratory work is considered equivalent to one credit hour.

Examinations

Examinations in all courses are regularly held at mid-semester and the end of the semester. A student who has been absent from a mid-semester or semester examination will receive a grade of X if the excuse for the absence is acceptable to the dean; otherwise, the absentee will receive a failing grade. Absence, however, does not excuse a student from the requirement of a special examination at a time determined by the Dean. *If an X grade is not removed within two weeks, a grade of F will be given for the course.*

Written assignments are due at the time specified by the instructor. If extension of time is granted, the student will be given a temporary grade of I. Unless the assignments are completed within two weeks after the last day of the regularly scheduled examinations, the student will be recorded as failing the course.

If a student claims knowledge of a subject for which he cannot furnish an official record, a special examination may be given with the approval of the Dean and the chairman of the department.

Grading System

- A —Exceptional. Indicates not only high achievement but also an unusual degree of intellectual initiative.
- B —Good. Indicates attainment above the average.
- C —Average. Indicates the normal attainment for the average student.
- D —Inferior. Indicates passing work but below the normal attainment.
- F —Failure.

Academic Regulations

- I —Incomplete; grade withheld pending fulfillment of assignment.
- W —Withdrawal (approved).
- X —Absent from examination.
- S —Pass for Pass-Fail electives.
- U —Unsatisfactory for Pass-Fail electives.

N.B.—No student may withdraw from a class within the last 28 days before the first day of the final examinations. At this time he must either take the examinations or receive a failure.

Quality Points

The quality point is the unit used in measuring the quality of student achievement in a course. The number of quality points received for any course is equal to the number of quality points attached to the grade received multiplied by the number of credit hours yielded by the course. Quality points are given as follows:

- A—4 points per credit hour
- B—3 points per credit hour
- C—2 points per credit hour
- D—1 point per credit hour

The scholastic standing of the student at the end of any session is the ratio of the total number of quality points received to the total number of credit hours carried in that session. A College of Continuing Education session or semester consists of twelve consecutive semester hours.

Satisfactory/Unsatisfactory

Juniors and seniors may take 6 hours on a Satisfactory/Unsatisfactory basis. In addition education certification students must take their hours of student teaching as Satisfactory/Unsatisfactory. Courses in Military Science may not be taken on a Satisfactory/Unsatisfactory basis.

A grade of "Satisfactory" is the equivalent of the grade "C" or higher in the course; "Unsatisfactory" is the equivalent of "F"; and a "D" grade in the course will be recorded as a "D" on the student's record.

The course(s) will carry credit hours toward graduation but will have no effect on the quality point average. (Pre-medical students should not take science courses as Pass/Fail, nor should those working for teaching certificates elect education courses.) Students must indicate election of a Pass/Fail course at registration. Changes to or from a grade basis are allowed until the close of late registration.

Good Standing

In order to remain in good academic standing, a student must maintain a cumulative average of 2.0. Failure to maintain this requirement will result in the student being placed on warning, or on probation, or being suspended by the University.

If a freshman's cumulative average falls below 2.0 but is not less than 1.75 in a semester, he will be warned. If a freshman's average falls below 1.75 in a semester, he will be placed on probation.

If a student's cumulative average as a sophomore, junior, or senior falls below 2.0, he will be placed on probation. If a student fails to obtain a cumulative average of 2.0 at the end of the semester that he is on probation, he may be suspended.

During that semester that a student is on probation his program may be reduced to twelve semester hours and he may not publicly represent the University nor may he be an officer of a student activity.

In determining probationary status, completion of two courses, totalling at least five semester hours during the summer session, is considered the equivalent of a semester's work.

Dean's List

Students carrying at least twelve credit hours for letter grades (i.e. not Pass-Fail) in any semester with an average of at least 3.25 are placed on the Dean's list for that semester. (For part-time students in the College of Continuing Education six semester hours of letter-grades must be carried.)

Dean's List Audit

Students placed on the Dean's List are permitted to audit free of charge a three hour course in the immediately subsequent semester. Students should apply for the audit slip at the office of the appropriate dean during the period of late registration. This audit is put on the transcript only when at the end of the semester the professor informs the registrar's office that the student has been regular in attendance.

Warned List

A freshman student whose quality point average is low but not low enough to justify his incurring probation is placed on the warned list.

Such a student does not come under censure, but his participation in co-curricular activities may be limited at the discretion of the dean.

Failure

A student who fails in two or more courses in a semester may be excluded from registration at the dean's discretion.

Permission to re-enter the University will be granted only after the student petitions for re-admission in writing and sets forth evidence of his ability to do satisfactory academic work.

Writing Standards

The University requires a quality in written papers for class assignments which meet acceptable standards of good English usage consistent with University objectives. Faculty members have the option of returning any paper which does not meet acceptable usage standards. If such an assignment is not rewritten to meet these standards, the instructor may reduce the student's grade in the course by one grade mark, e.g., a "B" grade can be reduced to a "C".

Disciplinary Action

Xavier University expects the conduct of its students on and off campus to be in accord with the standards of Christian living. Should a student violate any University regulation, he/she will be subject to disciplinary measures. In minor cases, the Dean for Student Development will take appropriate action after consultation with the student.

Serious cases will be presented before the University Discipline Board. This Board, after hearing the case in accordance with accepted due process, will determine the penalty, if any. The Board has the power to suspend or expel any student found to be in serious violation of any University regulation, though such penalties must be approved by the President.

Loss of Academic Credit

Academic credits for which the student is currently enrolled *may* be lost by a student who is dismissed from the University before the end of the semester. The permanent record card will not reflect any disciplinary information. Disciplinary records are confidential and are maintained by the Dean for Student Development for a period of five years.

Attendance

In order to secure credit in any course in which he is registered, the student is required to attend classroom and laboratory exercises *regularly* and *promptly*. Absences date from the day of opening announced in the calendar.

Absence from a Test

Unexcused absence from a previously announced test may incur the penalty of a failure in that particular test.

Academic Regulations

Transfer within the University

A student who wishes to transfer from one college of the University to another must make application to the Dean of the college to which he desires to transfer. If the application is approved, arrangements for the transfer will be made. Ordinarily transfers from the College of Continuing Education to Day School and from Day School to the College of Continuing Education will not be approved for full-time students until after the student has completed two full semesters in the division from which he wishes to transfer.

Transfers should be arranged at least one month before the opening of a session.

Withdrawal from Courses

A student must withdraw in person and in writing from a course(s) for which registration has been completed. The withdrawal must be certified by the student's Dean or Registrar. A grade of "W" will be assigned to the student's course(s) for which official withdrawal has been completed. Failure to complete this procedure will result in a "F" grade for the course(s). Withdrawal must be made in the student's office of registration.

Withdrawal from the University

A student who wishes to withdraw from the University must notify the office of the Dean or the Registrar either in person or in writing. *A student is considered to be in attendance until he has given this formal notice of withdrawal.*

A student will be obliged to withdraw for reasons of poor scholarship, failure to remove academic probation, or misconduct.

Xavier University reserves the right to require a student to withdraw if, in the judgment of University officials, such action would be beneficial to the physical, mental, emotional, or moral best interests of the student, or is considered necessary for the welfare of the University.

Honorable Dismissal

Honorable dismissal is voluntary withdrawal from the University *with the consent of the Dean or the Registrar*. A statement to such effect, indicative of the student's good standing so far as character and conduct are concerned, *will be issued only when all indebtedness to the University has been adjusted.*

Transcript Regulations

Application for a transcript of credits must be made in writing by the student and filed with the registrar *at least two weeks before the record is needed.*

Requests for transcripts for purpose of transfer to another university or for any other purpose cannot be granted during the busy periods of examination and registration.

Transcripts are issued only after the student has fulfilled all financial obligations to the University.

There is no charge for the first transcript. A fee of \$1.00 is charged for each additional transcript.

Since the Registrar's Office does not maintain Graduate School or the College of Continuing Education records, students who have been registered in one of the undergraduate day colleges and later in the Graduate School or the College of Continuing Education must apply to both the Registrar's Office and the Graduate School or the College of Continuing Education when requesting transcripts.

Auditor

Anyone wishing to audit a course without receiving credit may do so at one-half of the regular tuition rate for the credit course. It is understood that the one-half tuition rate is applicable only for courses in which there are registration vacancies. Auditor's rates *will not* be applicable to courses which become closed to credit students.

Anyone changing from auditor status to credit status must pay the additional fee to equal the normal tuition rate per credit hour. Anyone changing from credit status to auditor *after* the first class will *not* receive a tuition reduction but will be billed for a credit registration. No one may change from a credit status to an audit status after the final date for withdrawal from a course. No one may change from audit status to credit status after the allowed period for late registration.

This auditor policy applies only to undergraduate students.

Requirements for Degrees

1. Candidates for undergraduate degrees must complete the curricular requirements listed under the "Core Curriculum."
2. Students must complete from six to fifteen hours of *lower division* work preparatory to the specialization of their choice.
3. They must also have no fewer than eighteen hours of *upper division* work in the major, in all of which they must attain an average of C.
4. They must have at least 120 hours with an overall average of C.
5. They must have an average of C in upper division courses.
6. They must have completed the last 30 hours *in residence* and with an average of C.
7. They must have filed formal application for the degree in the office of their college.
8. They must have taken the Undergraduate Record Examination (Advanced Test) in their major field if it is a departmental requirement.
9. They must have passed the comprehensive examination if in the College of Arts and Sciences—unless the department has a substitute requirement. (When a thesis is required, the original and one copy must be deposited in the Registrar's office on or before the date designated in the University Calendar in the Catalogue.)
10. They must have discharged all financial obligations to the University.
11. They must have agreed to be present at the Commencement.

Graduation Honors

Honors are awarded on the basis of outstanding attainment. A student who has earned a quality-point average of 3.75 in his college work will be graduated *Summa cum Laude*; one who has earned 3.50, *Magna cum Laude*; one who has earned 3.25, *cum Laude*. These honors are announced at commencement and are inscribed on the diplomas of those meriting them.

For students graduating in June, the final semester's work cannot be computed in determining the quality-point average for honors for inscription on the diplomas and announcement at graduation. However, after the annual graduation ceremony, honors obtained as a result of including the student's final semester *will be entered on the student's official University record.*

Transfer student's are eligible for honors at graduation only under the following conditions:

1. They must have completed at Xavier University at least half of the work required for their program.
2. The quality-point average earned for their work at Xavier University must meet the standards given above.

Reservation of Rights

The University reserves the right to modify its graduation and other requirements as may seem necessary from time to time. It will be obligated only during the academic year of the student's registration by requirements published in the Catalogue for that year.

Students who interrupt their attendance and who later return must meet the curricular requirements in force at the time of their return.

Studies Outside the United States

Students who desire to spend a year abroad as part of their undergraduate education have a number of possibilities open to them. The student should consult the Chairman of the International Education Committee for available opportunities. The program sponsored by Loyola University, Chicago, at the Rome Center of Liberal Arts is especially recommended. Students who wish to spend their sophomore or junior year at the Rome Center are urged to request information in the

Registration

first semester of the previous year. A full complement of courses is taught by faculty from Loyola and other American and European universities. The transcript of credits is issued from Loyola, Chicago. Xavier University is an affiliate of Loyola University in sponsoring the year abroad at the Rome Center.

REGISTRATION

Time of Registration

Fixed dates in each session found in the academic calendar of this Catalogue are reserved for registration.

Late Registration

Registration on days later than the assigned dates may be permitted upon the payment of a late registration fee of \$5.00 and \$1.00 per day up to ten days.

Change in Schedule

After the student has filed registration forms, changes in courses or sections can be made only with the consent of the Dean at the recommendation of the departmental advisor. No change in schedule may be made later than one week after the inception of classes.

A fee of \$3.00 will be charged for each change.

Number and Choice of Courses Permitted

The number and choice of courses or total number of credit hours in a student's program of studies are subject to such restriction as shall be deemed necessary by the Dean or the departmental advisor.

Selection of Courses

Students must observe prerequisites set by the University or by the departments which conduct the instruction. *Students may not disregard the directions of the dean and of the chairmen of departments in this matter.*

Since the University must consider the needs of all students, it may sometimes be unable to accommodate itself to the preferences of some students for particular hours and professors. The scheduling of courses and sections at certain hours does not mean that a student can always be admitted to any given section which he may select.

HONOR SOCIETIES

Alpha Sigma Nu. A chapter of this national honor fraternity for students of Jesuit colleges and universities was established at Xavier in 1939. Candidates for membership, chosen during their junior or senior year or from the Graduate School, must be outstanding in scholarship, in loyalty, and in service to the University.

Pi Mu Epsilon. The Ohio Theta Chapter of Pi Mu Epsilon, the national honorary mathematics fraternity, was established at Xavier University in 1962. The purpose of this organization is the promotion of scholarly activity in mathematics among students in academic institutions. Membership is limited to students, both graduate and undergraduate, majoring in mathematics or related subjects who have achieved distinction in scholarship and have done outstanding work in mathematics.

Psi Chi. Honorary psychology fraternity.

Sigma Pi Sigma. There is a chapter of Sigma Pi Sigma, national physics honor society, at Xavier University. Its purposes are to serve as a means of awarding distinction to students having high scholarship and promise of achievement in physics; to promote their interest in research; to encourage professional spirit and friendship among physics students; and to popularize interest in physics.

Tau Kappa Alpha. Honorary forensic fraternity.

The Xavier Order of Military Merit. XOMM is an honorary organization of Advanced Course students selected annually by a board consisting of elected representatives from the existing membership of XOMM and a member of the military faculty. The selection of new members is subject to approval by the PMS. Some of the criteria for selection to membership are leadership qualities, military and academic grades, and relative standing in the Cadet Battalion. Members of the order are awarded a red fourragere to be worn as part of the uniform.

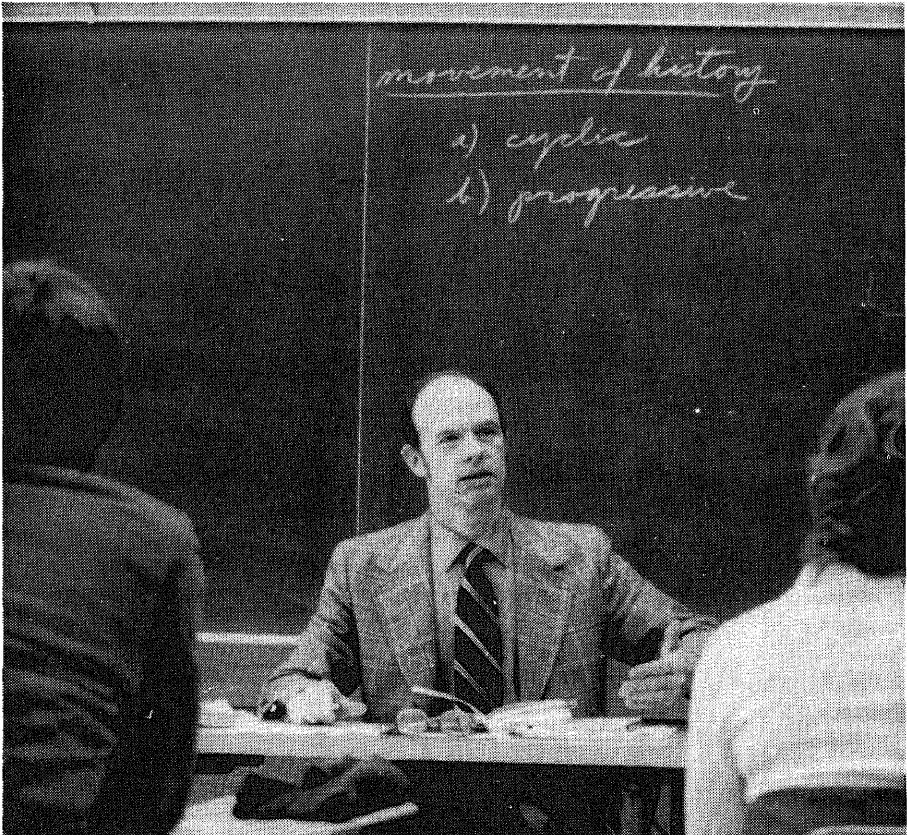
Phi Alpha Theta. Kappa Nu Chapter of the international honor society in history, is open to majors with a 3.25 or better cumulative average.

Pi Sigma Chi. Membership in PSC is for students who have completed twelve credit hours in political science (or will complete them in the semester in which they apply). Applicants must have an A or B in all political science courses and must rank in the upper half of their class.

Delta Sigma Pi. The Theta Lambda chapter of the International Fraternity of Delta Sigma Pi, a professional fraternity in business administration, promotes academic achievement, leadership and brotherhood.

Kappa Kappa Psi, organized on campus in 1968, is a national band honorary fraternity that recognizes academic achievement and service.

Xavier University does not practice or condone discrimination, in any form, on the basis of race, color, national origin, religion, sex, age or handicap.



Degree Programs— The College of Arts and Sciences THE HONORS BACHELOR OF ARTS

The Honors Bachelor of Arts is awarded to students who complete the Honors Program of the University. The Honors Program has been designed to prepare students for life in the modern world by trying not only to develop breadth, balance, and an openness to new ideas, but also to examine the roots from which our culture has sprung, and thereby to develop a sense of history and a feeling for tradition.

A limited number of selected students are admitted to the Honors Program. Candidates for the Program are expected to rank high in their high school classes, and ordinarily they should have four years of high school Latin, although special arrangements can be made for those with only three or two years.

Honors students are required to fulfill the regular University core curricular requirements. The following modifications also apply to the Honors Program: whenever possible, special honors sections, or the more demanding sections, of required courses should be taken; the six hours of mathematics should include calculus; the science course should be General Chemistry, or General Zoology, or University Physics; a total of 21 hours of philosophy is required; and the special classical orientation of this Program is provided by 18-22 hours of Greek, 21 hours of Latin, and six hours of the History of Classical Literature.

The student should note that the possibility of some 33 elective hours enables the superior student to cover pre-medical or pre-law requirements, or to do concentrated work in almost any of the major fields offered by the University in addition to completing an intensive program in liberal arts.

The Program is designed to produce educated and cultured men and women rather than trained professionals. Such a goal is no apology for the program. Additionally, graduates of the Program over the past quarter of a century have in fact attained significant success in a variety of professions—in law and medicine, in business and various academic disciplines, in teaching, engineering, religious life, etc.

Honors Bachelor of Arts

Recommended Sequence of Program

First Semester	Sem. Hrs.	Second Semester	Sem. Hrs.
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Freshman Year

En 115 Lit. and Comp. I 3 Gk 172—Plato* or 3 Gk 101—Elem. Greek 5 Hs@ 3 Lt 211 Livy 3 Mt 120—Calculus I 3 <hr style="width: 100%;"/> ***Total 15-17	En 116 Lit. and Comp. II 3 Gk 162—Euripides or 3 Gk 102—Intro. to Greek Lit. 5 Hs@ 3 Lt 153—Virgil: <i>Aeneid</i> VII-XII 3 Mt 130—Calculus II 3 <hr style="width: 100%;"/> ***Total 15-17
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Sophomore Year

Science Elective** 4 Gk 260—Sophocles 3 Lt 214—Latin Prose Style 3 Pl 200—Origins of Phil 3 Th III Intro. to Theology 3 Elective 3 <hr style="width: 100%;"/> Total 19	Science Elective** 4 Gk 331—Thucydides 3 Lt 231—Horace: <i>Odes</i> 3 Pl 220—Phil. of Man 3 Theology Elective 3 Elective 3 <hr style="width: 100%;"/> Total 19-20
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Junior Year

Humanities Elect (Lit.) 3 Gk 371—Plato: <i>Republic</i> 3 Ec or Hs—Elective 3 Lt 391—Lucretius 3 Pl 230—Metaphysics 3 Theology Elective 3 Electives†† 3 <hr style="width: 100%;"/> Total 15-21	Humanities Elect (Lit.) 3 Gk 251—Homer: <i>Iliad</i> 3 Ec or Hs—Elective 3 Lt 312—Tacitus: <i>Annals</i> 3 Pl 240—Prins. of Ethics 3 Electives†† 6 <hr style="width: 100%;"/> Total 15-21
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Senior Year

Gk 388—Hist. of Greek Lit. 3 Lt 356—Roman Satire 3 Pl 260† 3 Theology Elective 3 Electives†† 9 <hr style="width: 100%;"/> Total 12-21	Lt 388—Hist. of Latin Lit. 3 Pl 270† 3 Pl 280† 3 Electives†† 12 <hr style="width: 100%;"/> Total 12-21
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*Students having two units of high school Greek, or its equivalent, will register for GK 172. Others will take GK 101.

@See Social Science requirement p. 33 .

***Those not taking GK 101, 102 ordinarily elect a modern language.

**The science requirement may be fulfilled by taking General Zoology, BI 110-113, General Chemistry, Ch 110-113, or University Physics Ph 109-111.

†The Student will where possible, complete their philosophy requirement by taking Pl 260, 270 and 280 (or 381 or 383).

††Students need not take all thirty-six hours of electives; or, with permission, they may take more than thirty-six hours.

University Scholars' Program

The University Scholars' Program is an honors program for serious and talented students. University Scholars may major in any of Xavier's undergraduate degree programs or they may elect to design their own individualized interdisciplinary major.

University Scholars receive, according to their major area of study, an A.B. (Scholars Curriculum), a B.S. (Scholars Curriculum), or a B.S.B.A. (Scholars Curriculum).

An interview with the Director of the Scholars' Program is required for admission to it. Students are admitted to the program prior to or during their freshman year of studies.

A summary of the Scholars' Program curriculum follows:

1. A minimum of 5 High Intensity Courses (HIP), or their equivalents, in the following core-curricular subjects:

PI 220 Philosophy of Man

PI 230 Metaphysics

PI 240 Ethics

Th 111 Introduction to Theology

Hs 141 Ideas and Institutions I

Hs 142 Ideas and Institutions II

or any European History courses approved by the Director

Ec 101 Principles of Economics I

Ec 102 Principles of Economics II

Pre-Med students may substitute General Psychology for one course in Economics

2. At least one University Scholars' Seminar:

These seminars are offered every spring semester. A Scholar is required to take at least one before graduation, although he or she may take as many as three. Only sophomore, junior, or senior Scholars are to enroll in these seminars, which may satisfy appropriate Scholars core-curricular requirements in philosophy, theology, literature, or mathematics.

3. Two courses in literature at the recommendation of the Director:

For students who need to develop their writing skills, En 115 Composition and Literature, is strongly recommended.

4. Calculus I and II (Mt 120, 130) or their equivalent.

5. Two sequential courses in one natural science.

6. A basic knowledge of a foreign language—the equivalent of the introductory and intermediate courses in a language.

7. Advanced upper-division work (4 courses) in either language or mathematics:

Students may substitute computer language courses for advanced mathematics courses. It should be noted that many advanced language courses also fulfill the literature requirement.

8. Additional core-requirements in philosophy (2 courses) and theology (3 courses) may be taken as University Scholars' Seminars, directed readings courses, or upper-division courses recommended by the Director.

Guidelines for Scholars' Program Interdisciplinary Major Option

1. The student shall write a brief statement in which he describes his individualized interdisciplinary major, explains his reasons for electing it and identifies some courses that would fulfill its purposes. This statement is submitted to the Director.
2. The Director shall constitute an advisory committee for the student. This committee shall consist of the Director and one or two faculty members in specific subject areas covered by the proposed interdisciplinary major.
3. The committee shall evaluate the proposed major in terms of its coherence and intellectual seriousness and in terms of faculty, curricular, and library resources. If it were necessary, it could suggest modifications of the student's proposal. A member of the committee would serve as the student's major advisor.
4. The major shall consist of at least eight 200 level or above courses.
5. The committee and the student shall determine an appropriate senior activity for the student to demonstrate his grasp of or proficiency in his major. This might be a senior thesis (for which credit might be given) or a written or oral comprehensive examination.

Prelegal Study

The basic criteria for acceptance into law school are the grade point average required during undergraduate studies and performance on the Law School Admission Test (LSAT). Application forms and information regarding the dates of this test can be obtained from the Dean's office of the student's college. The importance attached to letters of recommendation, job experience, and extracurricular or community activities varies greatly among law schools. The competition for admission to law schools today is intense; not all law school graduates are finding law-related jobs. The law school applicant should strive to accumulate a very adequate background.

American law schools prescribe neither specific courses nor a specific major for prelaw study. They do insist on a broad program of high quality in liberal arts. The degree program should educate the students to assimilate difficult documents and to interpret factual data, to think logically and creatively, to express themselves well orally and in writing, and to acquire a critical understanding of the human institutions and values with which the law deals. While there is no such thing as a prelaw program, it does not follow that all courses or majors are of equal value for the study of law. Some subjects (not necessarily majors) to which law schools attach special importance are English, government, economics, history, mathematics, Latin or foreign language, logic, scientific method, and philosophy. Courses in accounting and public speaking are also recommended.

Students considering law as a career are urged to read the introductory section of the official Prelaw Handbook and to consult with both their departmental chairman and one of the Prelaw Advisors. They are also encouraged to join the St. Thomas More Prelaw Society.

THE BACHELOR OF SCIENCE (Biology)

The biology curriculum includes a core presenting current concepts of the molecular, cellular, organismal, and population levels of biological organization. It also offers electives to encourage students to acquire some depth in these areas. Lectures and laboratory procedures present basic biological principles, experience in careful observation, controlled experimentation, and thoughtful analysis of scientific data. The major requires 36 semester hours in biology.

A Student's program contributes to his liberal arts education and prepares him for career opportunities in the following areas:

1. Graduate study
2. Entrance to schools of medicine, dentistry, veterinary medicine, and optometry
3. Teaching biology at the high school level
4. Specialized employment

Students planning graduate study, teaching, or similar employment complete General Zoology, General Botany, Genetics, General Physiology, and Methods of Biological Research (21 hours) and remaining hours (15) of BI electives.

Those going to medical or dental schools complete General Zoology, Microbiology or Bacteriology or General Botany, Genetics, General Physiology, and Methods of Biological Research (21 hours), twelve recommended hours including Embryology, Comparative Anatomy, Vertebrate Histology, and remaining hours (4) of BI electives.

Students planning application to schools of veterinary medicine should consult with the Department Chairman for current listing of courses required for admission after three years and four years of undergraduate studies.

Majors must complete two semesters of physics, four of chemistry (through organic), and two of mathematics (statistics and calculus). The Chairman advises students as to course sequence and prerequisites for courses. With his approval, majors may substitute courses to fulfill requirements.

B.S. (Biology)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year@

BI 110—Gen. Zoology I	2	BI 112—Gen. Zoology II	2
BI 111—Gen. Zoology I Lab	2	BI 113—Gen. Zoology II Lab	2
Ch 110—Gen. Chemistry I	3	Ch 112—Gen. Chemistry II	3
Ch 111—Gen. Chemistry I Lab	1	Ch 113—Gen. Chemistry II Lab	2
Mt 121—Calculus (Scientific)	3	Mt 103—Statistics Biol. Sci	3
ML 111@	3	ML 112	3
		En 101—English Composition*	3
<hr/>		<hr/>	
Total	14	Total	18

Sophomore Year

BI 120—Gen. Botany	3	BI—Biology Elective	3-4
BI 121—Gen. Botany Lab	1	Ph 110—University Physics II	3
Ph 108—University Physics I	3	Ph 111—University Physics II Lab	1
Ph 109—University Physics I Lab	1	ML 122	3
ML 121	3	PI 220—Phil. of Man	3
Th 111 Intro. to Theology	3	Humanities Elective (Lit.)	3
Humanities Elective (Lit.)	3		
<hr/>		<hr/>	
Total	17	Total	16-17

Junior Year

BI—Biology Elective	2-4	BI 230—Genetics	3
Ch 140—Organic Chemistry I	3	Ch 142—Organic Chemistry II	3
Ch 141—Organic Chemistry I Lab	1	Ch 143—Organic Chemistry II Lab	1
History I (100-level Elective)**	3	History II (100-level Elective)**	3
PI 230—Metaphysics	3	PI 240—Prins. of Ethics	3
Humanities Elective	3	Theology Elective	3
<hr/>		<hr/>	
Total	15-17	Total	16

Senior Year

BI 360—Vertebrate Physiology	2	BI—Biology Elective	3-4
BI 361—Vertebrate Physiology Lab	2	BI 399—Methods Biol. Res	1
BI—Biology Elective	2-4	Philosophy Elective	3
BI 398—Methods Biol. Res.	1	Theology Elective	3
Philosophy Elective	3	Humanities Elective	3
Theology Elective	3	Social Science Elective	3
Social Science Elective	3		
<hr/>		<hr/>	
Total	16-18	Total	16-17

*Required, unless exempted through a test-out program. See page 34 .

@Courses in Social Science, Humanities, Philosophy or Theology may be taken in the freshman year and the start of language studies postponed to the sophomore or junior years. See Language requirements, page 34.

**See Curricular requirements, page 33.

THE BACHELOR OF SCIENCE (Chemistry)

The Department of Chemistry offers a comprehensive curriculum leading to the Bachelor of Science. The program covers the four major fields (inorganic, analytical, organic, and physical chemistry), the preparation and identification of compounds, and the literature on the subject. Ch 190 (Chemical Literature) fits the student to prepare his thesis and amounts to a beginning course in research.

Departmental requirements for a major include:

1. The completion of Ch 110, 111, 112, 113, 130, 131, 132, 133, 140, 141, 142, 143, 190, 230, 250, 260, 261, 280, 281, and one of the following: Ch 320, 340, or 370.
2. A senior research project culminating in a written thesis, Ch 398, 399.
3. The requirements in the major totals 44 semester hours.
4. The requirements in mathematics total 12 semester hours: Mt 120, Mt 130, Mt 110, and Mt 220.
5. University Physics, Ph 108, 109, 110 and 111 is required.

Xavier University is approved by the American Chemical Society for its training in chemistry, and students completing the approved program of studies are graduated as "certified" chemistry majors.

B.S. (Chemistry)

Recommended Sequence of program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ch 110—Gen. Chemistry I 3	Ch 112—Gen. Chemistry II 3
Ch 111—Gen. Chemistry I Lab 1	Ch 113—Gen. Chemistry II Lab 2
History I (100-level Elective)*** 3	Mt 120—Calculus I* 3
Foreign Language@ 3	History II (100-level Elective)*** 3
Th 111 Intro. to Theology 3	Foreign Language 3
En 101—English Composition** 3	PI 220—Phil. of Man 3
Total 16	Total 17

Sophomore Year

Ch 130—Physical Chemistry I 3	Ch 132—Physical Chemistry II 3
Ch 131—Physical Chemistry I Lab 1	Ch 133—Physical Chemistry II Lab 1
Mt 130—Calculus II 3	Mt 110—Vectors and Geometry 3
Ph 108—Univ. Physics I 3	Ph 110—Univ. Physics II 3
Ph 109—Univ. Physics I Lab 1	Ph 111—Univ. Physics II Lab 1
Foreign Language 3	Foreign Language 3
PI 230—Metaphysics 3	Theology Elective 3
Total 17	Total 17

Junior Year

Ch 140—Organic Chemistry I 3	Ch 142—Organic Chemistry II 3
Ch 141—Organic Chemistry I Lab 1	Ch 143—Organic Chemistry II Lab 1
Ch 280—Instrumental Analysis 3	Ch 281—Instrumental Analysis Lab 2
Mt 220—Advanced Calculus I 3	Ch 230—Physical Chemistry III 2
Humanities Elective (Lit.) 3	Humanities Elective (Lit.) 3
PI 240—Prins. of Ethics 3	Philosophy Elective 3
Ch 190—Chemical Literature 1	Ch 398—Chem. Research I 1
Total 17	Total 15

Senior Year

Ch 250—Qual. Organic Anal 3	Ch 320, 340 or 370 2-3
Ch 260—Inorganic Chemistry 3	Ch 399—Chemical Research II 1
Theology Elective 3	Philosophy Elective 3
Social Sciences Elective 3	Social Sciences Elective 3
Humanities Elective 3	Humanities Elective 3
Ch 300—Chem. Seminar 0	Ch 261—Inorganic Chemistry Lab 1
Total 15	Total 16-17

*If a student has advanced standing in the calculus, he will begin his mathematics courses with Mt 130 or Mt 110. If the entering student has a serious mathematics deficiency, he may be required to make up such deficiencies in the first semester of the freshman year.

**Required, unless exempted through a test-out program. See page 34 .

@See Language requirements, page 34. A student may continue in the language (classical or modern) which he has commenced in high school. If he chooses to begin the study of a new foreign language, the department recommends German or Russian.

***See Curricular requirements, page 33.

THE BACHELOR OF SCIENCE (Chemical Science)

In addition to the B.S. (Chemistry) program the Department of Chemistry offers a program which leads to the degree of Bachelor of Science (Chemical Science). This program is intended primarily for those students who wish to make use of chemical knowledge in connection with a career in the business world, e.g., in sales or marketing, or in secondary education.

The course requirements in chemistry and mathematics are less than those of the B.S. (Chemistry) program. The hours thus released are made available as free elective hours which then can be applied to courses in accounting, business administration, economics, education, etc.

Where specific program requirements exist, they are indicated in the block schedule on the facing page. Substitutions can be made with permission of the chairman of the department.

The degree program requires 31-32 semester hours in the major. University Physics, Ph 108, 109, 110, and 111 is also required. Mt 101 and Mt 121 fulfill the University mathematics requirement.

While a thesis is not required in the Chemical Science program, a student may elect Chemical Research (398, 399) in place of two hours of Chemistry electives. In such a case the comprehensive examination requirement is waived.

B.S. (Chemical Science)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
Freshman Year			
Ch 110—Gen. Chemistry I	3	Ch 112—Gen. Chemistry II	3
Ch 111—Gen. Chemistry I Lab	1	Ch 113—Gen. Chemistry II Lab	2
History I (100-level Elective)**	3	History II (100-level Elective)**	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
En 101—English Composition*	3	Foreign Language	3
Foreign Language@	3	Mt 101—Statistical Inference	3
<hr/>		<hr/>	
Total	16	Total	17

Sophomore Year

Ch 120—Prin. of Phys. Chem.	3	Ph 110—Univ. Physics II	3
Ch 151—Analytical, Physical Chem. ...	1	Ph 111—Univ. Physics II Lab	1
Ph 108—Univ. Physics I	3	PI 230—Metaphysics	3
Ph 109—Univ. Physics I Lab	1	Social Science Elective	3
Mt 121—Calculus (Science)	3	Foreign Language	3
Foreign Language	3	<hr/>	
<hr/>		Total	13
Total	14	Total	13

Junior Year

Ch 140—Organic Chemistry I	3	Ch 142—Organic Chemistry II	3
Ch 141—Organic Chemistry I Lab	1	Ch 143—Organic Chemistry II Lab	1
Theology Elective	3	Humanities Elective (Lit.)	3
Elective	3	Theology Elective	3
Humanities Elective (Lit.)	3	Elective	3
Ch 190—Chemical Literature	1	PI 240—Prin. of Ethics	3
<hr/>		<hr/>	
Total	14	Total	16

Senior Year

Ch 280—Instrumental Analysis	3	Ch 281—Instrumental Analysis Lab	2
Theology Elective	3	Ch—Elective	2-3
Philosophy Elective	3	Philosophy Elective	3
Humanities Elective	3	Elective	3
Ch—Elective	3	Humanities Elective	3
<hr/>		Social Science Elective	3
<hr/>		<hr/>	
Total	15	Total	16-17

*Required, unless exempted through a test-out program. See page 34.

@See Language requirements, page 34.

**See Curricular requirements, page 33.

A.B. (Classics)

The A.B. Degree in Classics is designed to bring students into intimate contact with the world of the ancient Romans or Greeks through the study of their language and literature. It introduces them to that era when western man in recorded history was for the first time dealing with and recording many of the same problems and questions with which we are still grappling today.

Students are expected to complete 6-12 lower division hours in Latin or Greek (the amount of lower division work depending on whether they have had two or more years of that language in high school) plus 21 hours of upper division work. They are expected also to complete 10-12 hours of a second foreign language in addition to the core requirements of the college. This should leave at least 15 hours available for free electives. Finally, the classics major is expected to pass a comprehensive examination.

The degree program provides a substantial number of hours in electives, in addition to the elective requirements in the various University core curriculum requirements. These elective hours can be used to meet a specific student interest or need.

A.B. (Classics)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

En 101—English Composition* 3	History II (100-level Elective)** 3
History I (100-level Elective)** 3	Lt 151—Virgil I-VI 3
Lt 115—Interm. Latin* 3	Mt—Elective 3
Mt—Elective 3	ML or Gk 3-5
ML* or Gk 3-5	Pl 220—Phil. of Man 3
 Total 15-17	 Total 15-17

Sophomore Year

Humanities Elective 3	Humanities Elective 3
Lt 131—Horace 3	Lt—Elective 3
ML or Elective 3	ML or Elective 3
Science Elective 3	PL 230—Metaphysics 3
Th 111 Intro. to Theology 3	Science Elective 3
 Total 15	 Total 15

Junior Year

Electives 6	Elective 3
Lt—Elective 3	Lt—Elective 3
Social Science Elective 3	Pl 240—Prins. of Ethics 3
Theology Elective 3	Social Science Elective 3
	Theology Elective 3
 Total 15	 Total 15

Senior Year

Elective 3	Electives 6
Lt—Electives 6	Lt—Electives 6
Philosophy Elective 3	Philosophy Elective 3
Theology Elective 3	
 Total 15	 Total 15

*Required, unless exempted through a test-out program. See page 34.

**See Curricular requirements page 33.

THE BACHELOR OF ARTS (Classical Humanities)

This program is designed to offer a major with a minimum number of course requirements and a maximum choice of electives. The twenty-four hours of study of the ancient Greek and Roman world will give the student an overview of the culture which in time and place is far removed from his own, but which has exercised a very strong influence on his own culture. The degree is not intended to be a preparation for any graduate program. A student in this program who develops graduate school aspirations will be counselled to switch to a major in classics (Latin and/or Greek) or to take a major in another field.

The foreign language requirement is fulfilled by taking 12 hours of Latin or ten hours of Greek. For students with at least two years of high school Latin the language requirement is nine hours, or even less if the student passes a qualifying examination. The student is also expected to take six hours, after the language requirement courses, of Latin or Greek literature in the original language, plus 18 hours of classics-type courses.

Since there is a good deal of room in this program for elective courses, students are expected not to use any of their major courses to fulfill University core curriculum requirements.

A.B. (Classical Humanities)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

Lt 101, 115 or 131	3	Lt 102, 151 or 161	3
or Gk 101	5	or Gk 102	5
History I (100-level Elective)**	3	History II (100-level Elective)**	3
Mt-Elective	3	Mt-Elective	3
Th 111—Intro. to Theology	3	Pl 220—Philosophy of Man	3
En 101 English Composition*	3	Humanities Elective (Lit)	3
<hr/>		<hr/>	
Total	15-17	Total	15-17

Sophomore Year

Lt 131 or Lt 200-300 level course or Gk 200-300 level course	3	Lt 161 or Lt 200-300 level course or Gk 200-300 level course	3
Science Elective	3	Science Elective	3
Theology Elective	3	Pl 230-Metaphysics	3
Cl-Elective	3	Cl-Elective	3
Social Science Elective	3	Social Science Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Junior Year

Lt (200-300 level course) or Elective	3	Lt (200-300 level course) or Elective	3
Theology Elective	3	Pl 240-Principles of Ethics	3
Cl-Elective	3	Cl-Elective	3
Humanities Elective (Lit)	3	Humanities Elective	3
Elective	3	Elective	3
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Total	15	Total	15

Senior Year

Humanities Elective	3	Philosophy Elective	3
Theology Elective	3	Cl-Elective	3
Philosophy Elective	3	Electives	9
Cl-Elective	3		
Elective	3		
<hr/>		<hr/>	
Total	15	Total	15

*Required, unless exempted through a test out program. See page 34.

**See Curricular requirements, page 33.

COMMUNICATION ARTS (Bachelor of Science)

Communication is the heartbeat of today's complex society. It can spell major success or failure for ourselves, the community, the nation, and the world. No longer can today's college students—tomorrow's leaders—neglect the study of communication as the basis of human action involving individuals, groups, societies, businesses, professions, and skilled technicians.

Whatever the career, a young man or woman must be trained to interpret the countless messages that comprise their daily lives of work and play. How they read, listen and react to information will reflect the force of their contribution to society's advancement.

The CA major will help them understand theories of communication and form positive attitudes towards the roles they will play. Courses in basic skills of written and spoken communication, in areas of specialization—Speech, Film, Journalism-Public Relations, Radio-Television, and Theatre—are joined with hands-on experience at all levels of lab work. Individual attention and student projects furnish experience which enables some students to find part-time work, and some graduates to obtain positions in local fields or to enter graduate schools.

Typically, a student selects one of five areas of concentration (below), preferably in first year and takes one CA course. Basics are followed by courses in one area, and finally electives. Since Basics vary from one area to another, careful planning is necessary at all stages, as specified below. To the thirty-hour major, an additional six hours of CA courses may be added in fulfilling the University humanities electives requirement. A senior comprehensive examination and written senior project complete the requirements.

Areas of concentration with sequential requirements of ten courses (30 hours) follow:

Communication-Speech—Basics: 101, 102, 206, 203, 204; Area: three communication-speech courses; Electives: two courses in this or related area.

Film area—Basics: choose one (101, 102, 200, 260, 263, 266) and 206, 203, 204; Area: 211, 212, 213; Electives: three courses in this or related area.

Journalism-Public Relations—Basics: choose one (101, 102, 200, 260, 263, 266) and 206, 203, 204; Area: 241, 242, 251, 252, 253; Electives: one course in this or related area.

Radio-Television—Basics: 102, 206, 203, 204; Area: 220, 221, 223, 224, 225; Electives: one course of value to the student.

Theatre—Basics: 102, 206, 203, 204; Area: 231, 232, 235 or 238; Electives: three in this or related area.

Departmental labs and other facilities include: the AV Center; Dana Film Studios; WVXU-FM and the TV Studios, both labs for radio-television concentrators.

B.S. (Communication Arts)

Recommended Sequence of Program

First Semester	Sem. Hrs.	Second Semester	Sem. Hrs.
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Freshman Year

En 101—English Composition*	3	CA—Basic	3
Foreign Language@	3	Foreign Language	3
Science Elective	3	Science Elective	3
History I (100-level Elective)**	3	History II (100-level Elective)**	3
CA—Basic	3	PI 220—Phil. of Man	3
Total	15	Total	15

Sophomore Year

CA—Basic	3	CA—Basic	3
CA—Area	3	CA—Area	3
Foreign Language	3	Foreign Language	3
Mt—Elective	3	Mt—Elective	3
Th 111—Intro. to Theology	3	PI 230—Metaphysics	3
Total	15	Total	15

Junior Year

CA—Area	3	CA—Area/Elective	3
Social Science Elective	3	Social Science Elective	3
Humanities Elective (Lit)	3	Humanities Elective (Lit.)	3
Theology Elective	3	PI 240—Prins. of Ethics	3
Elective	3	Elective	3
Total	15	Total	15

Senior Year

CA—Area/Elective	3	CA—Elective	3
Philosophy Elective	3	Philosophy Elective	3
Humanities Elective	3	Humanities Elective	3
Theology Elective	3	Theology Elective	3
Elective	3	Elective	3
Total	15	Total	15

*Required, unless exempted through a test-out program. See page 34.

**See Curricular requirements, page 33.

@See Language requirements, page 34.

THE BACHELOR OF SCIENCE (Computer Science)

From business to law enforcement, computer technology has revolutionized society's methods for processing information. All indications are that computer use will continue to accelerate in the foreseeable future. Typical computer careers include its application in such areas as accounting, economics, engineering, law, mathematics, medicine, and the sciences. Other positions include the design of computers, computer product marketing and sales, technical writing and teaching.

As technology increases, so must the intelligent use of that technology. Xavier University's program in computer science is designed to develop, within the framework of a liberal arts education, the knowledge, skills, and creative analytical ability required for a productive career in computer-related fields and for graduate work in computer and information sciences. The computer science major requires a minimum of 30 semester hours in computer science and an additional 29 semester hours in technical areas. Included in the latter are the first four mathematics courses required of mathematics majors. Students entering the computer science program should have a background in algebra sufficient to begin a serious study of calculus.

Computer science majors are urged to become active members of the Xavier University Student Chapter of the Association for Computing Machinery.

B.S. (Computer Science)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

PI 220—Phil. of Man	3	Th 111—Intro. to Theology	3
Foreign Language @	3	Foreign Language	3
Mt 120—Calculus I	3	Mt 130—Calculus II	3
CS 125—Intro. to Comput I	2	CS 135—Numerical Calculus I	1
CS 126—Intro. to Comput II	1	CS 136—Numerical Calculus II	2
CS 127—Intro. Comput Lab	1	Mt 110—Vectors and Geometry	3
En 101—English Composition*	3		
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Total	16	Total	15

Sophomore Year

PI 230—Metaphysics	3	Theology Elective	3
Foreign Language	3	Foreign Language	3
Science Elective†	3	Science Elective†	3
Science Lab I	1	Science Lab II	1
Mt 220—Advanced Calculus I	3	CS 265—Discrete Structures	3
CS 255—Assembly Language	3	CS 256—Assembly Lang. Lab	1
		CS 275—Higher Level Languages	3
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Total	16	Total	17

Junior Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Humanities Elective (Lit.)	3	Humanities Elective (Lit.)	3
PI 240—Prin. of Ethics	3	Theology Elective	3
CS—Elective††	3	CS—Elective††	3
CSR—Elective#	3	CSR—Elective#	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Social Science Elective	3	Social Science Elective	3
Philosophy Elective	3	Philosophy Elective	3
Humanities Elective	3	Humanities Elective	3
CS-CSR Elective††	3	CS Elective††	3
CS 390—Senior Project	3	CS 395—Senior Seminar	1
		Theology Elective	3
<hr/>		<hr/>	
Total	15	Total	16

*Required, unless exempted through a test-out program. See page 34.

**See Curricular Requirements, page 33.

@See Language requirements, page 34.

††CS 325 DATA Structures and CS 335 Operating Systems are required in the CS elective in the Junior or Senior Year.

#CSR (Computer Science Related Electives) are courses to be approved by the Director of the Computer Science program.

†Students are required to elect General Zoology or General Chemistry, or University Physics to fulfill this science elective.

THE BACHELOR OF ARTS (Economics)

The Bachelor of Arts degree in economics is offered those who wish to take the traditional liberal arts program. The curriculum of an economics major is designed to satisfy the student's desire for a broad liberal arts background, and to provide a general, but thorough, understanding and appreciation of economic activity. As an economics major, the student is provided with a knowledge of the economic system of the United States as well as the concepts, tools of analysis, concerns, and points of view of professional economists. The curriculum also emphasizes the contributions of the great economists of the past who have influenced current thought. After having grasped the basic analytical tools of the profession, students analyze such problem areas as inflation, unemployment, government regulation, competition, monopoly, and international trade.

The economics major serves as an excellent background for a career in business or government. It is also a very appropriate major for law school, since many of the contemporary legal issues and controversies arise from problems in the economic system. Finally, the major prepares the student for advanced study at graduate schools of economics or business administration throughout the country.

Requirements in the major include: Ec 101 and 102, Principles of Economics; Ec 200 Microeconomic Analysis; Ec 201 Macroeconomic Analysis; Ec 202 History of Economic Thought; Ec 210 Human Resources; Ec 250 Money and Banking; Ec 345 International Economics; and nine (9) semester hours of economic electives. The major requires a total of thirty three (33) semester hours.

A.B. (Economics)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
Ec 101—Prins. of Economics	3	Ec 102—Prins. of Economics	3
Humanities Elective (Lit.)	3	En 101—English Composition*	3
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Total	15	Total	15

Sophomore Year

Mt 112—College Math	3	Ec 250—Money and Banking	3
Science Elective	3	Mt 122—Calculus (Business)	3
Humanities Elective (Lit.)	3	Science Elective	3
Theology Elective	3	PI 230—Metaphysics	3
Foreign Language	3	Foreign Language	3
Social Science Elective	3		
<hr/>		<hr/>	
Total	18	Total	15

Junior Year

Ec 200—Microeconomics	3	Ec 201—Macroeconomics	3
Social Science Elective	3	Ec 202—Hist. of Econ. Thought	3
Theology Elective	3	PI 240—Prins. of Ethics	3
Ec Elective	3	Ec—Elective	3
Elective	3	Humanities Elective	3
		Elective	3
<hr/>		<hr/>	
Total	15	Total	18

Senior Year

Ec 222—Econometrics	3	Ec—Electives	6
Ec 345—International Economics	3	Elective	3
Elective	3	Philosophy Elective	3
Philosophy Elective	3	Humanities Elective	3
Theology Elective	3		
<hr/>		<hr/>	
Total	15	Total	15

*Required, unless exempted through a test-out program. See page 34.

@See Language requirements, page 34.

**See Curricular requirements, page 33.

TEACHER CERTIFICATION

Elementary School

The B.S. (Elementary Education) program is a major in Elementary Education and leads to University recommendation for State certification to teach grades one through eight in Ohio. This program is outlined in the block schedule. Information and counseling are available in the Teacher Education and Placement Office. Students wishing to teach K-8, see footnote in the block schedule. Certification for teaching the Educable Mentally Handicapped is also available. Five additional required courses in the elementary program must be taken through the Greater Cincinnati Consortium of Colleges and Universities. Interested students should contact the Chairman, Department of Education.

Secondary School

The sequential courses in education are planned to provide the required preparation for teaching in secondary schools of Ohio. Recommendation for State certification is made by Xavier University after completion of all requirements.

Each student must be formally accepted in writing into the teacher education program before he takes his first course in education. This acceptance is given in the Teacher Education and Placement Office, 14 Alter Hall. Prior to the semester in which the student plans to do student teaching, the student must receive formal acceptance from the Director of the Elementary, Secondary or Physical Education Program as applicable.

The minimum professional requirements for high school certification in Ohio are attained at Xavier University by the following:

1. Professional education courses; Ed 131, 141, 201, 202 (or 210), and 203.
2. For teaching particular subjects (history, English, etc.), the student must consult the specific state requirements of each subject. Copies of these requirements may be secured in the Teacher Education and Placement Office.
3. For teaching health and physical education, the student must follow the B.S. (Physical Education and Health) program. Information and counseling are available at the Physical Education Office in the Xavier University Fieldhouse.

New Standards for Teacher Preparation

The curricula for teacher certification outlined in this catalogue are subject to change under the new Ohio standards for the redesign of teacher preparation which are currently being implemented at Xavier. Changes when made will be publicized widely for the guidance of all students concerned.

Montessori Education

There are two Montessori programs available to undergraduate students: 1) The Bachelor of Science (Montessori Elementary Education) for certification as kindergarten-elementary teachers (K-8) and for American Montessori Society certification as Montessori Elementary teachers; 2) The Bachelor of Science (Montessori Education) for work with children of pre-school age in the Montessori setting. Both programs require a full semester internship arranged by Xavier University.

Specific counseling of each student is given by an advisor within the Montessori program. Details regarding these programs are available through the Chairman of the Department of Education.

Outside of Ohio

Students desirous of meeting professional requirements of other states should obtain an official statement of specific requirements from the Department of Education of their respective state. They should consult the Teacher Education and Placement Office before registering for courses in education.

B.S. (Elementary Education)

(Grades 1-8)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

En 101—English Composition 3	Bl 114—Intro. Life Science 3
Mt 104—College Mathematics 3	Bl 115—Intro. Life Science Lab 1
Ph 114—Intro. Phys. Science 3	Mt 101—Elements of Stat. Inf. 3
Ph 115—Intro. Phys. Science Lab 1	Pl 220—Phil. of Man 3
Ed 300—Intro. to Elem. Ed.† 3	Po 102—American Government 3
Th 111—Intro. to Theology 3	Ps 101—Gen. Psychology 3
Total 16	Total 16

Sophomore Year

Ps 232—Child Psychology 3	Ed 318—Ling. for Teachers 3
En 226—Children's Lit 3	Ed 315—New Math: Elem 3
FA 201—History of Art I** 3	Ed 385—Phys. Ed. Elem. Schl. 2
Hs 341—U.S. to 1865 3	FA 252—Hist. & Lit. of Music II 3
Theology Elective 3	Pl 230—Metaphysics 3
	Hs 342—U.S. Since 1865 3
Total 15	Total 17

Junior Year

Ed 214—Meth. of Teaching Read 3	Ed 302—Elem. Meth. & Mat.:
Ed 301—Elem. Meth. & Mat.: Sc 2	Lang. Arts, Social Sc.† 4
Ed 313—Elem. Meth. & Mat.: Art 1	Humanities Elective (Lit.) 3
Ed 314—Elem. Meth. & Mat.: Music . . . 1	Hs 261—World Civilization II 3
Ed 382—Elem. Health & Hygiene 2	Gg 207—World Geography 3
Hs 260—World Civilization I 3	Pl 240—Prins. of Ethics 3
Theology Elective 3	
Total 15	Total 16

Senior Year

Ed 204—Student Teaching*‡ 6	En 200—Adv. Comp. for Teachers 3
Ed 304—Sem. Prof. Problems 3	Philosophy Electives 6
Ed 216—Diag. Reading Instruction . . . 3	Theology Elective 3
	Elective‡ 2
Total 12	Total 14

†Ed 300 includes the September observation experience. Ed 300 and Ed 302 require ½ day per week for one semester of field experiences.

**The art requirement may be satisfied by FA 213 or Fa 220.

*Student Teaching may be assigned in either semester and balanced by electives.

‡Students wishing certification in Kindergarten through 8th grade must take Ed 305, 306 Kindergarten Methods and Materials, I (2 cr. hrs.), II (2 cr. hrs.) as electives and do student teaching at the K-3 level.

B.S. (Physical Education and Health)@@

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

BI 106—Hu. Anat. & Phys. I*	2	BI 108—Hu. Anat. & Phys. II*	2
BI 107—Hu. Anat. & Phys. I Lab*	1	BI 109—Hu. Anat. & Phys. II Lab*	1
Ed 377—Org. & Adm. Phys. Ed.†	3	Ed 378—Adm. Health Educ.†	3
Mt 101—Elements of Stat. Infer.	3	Mt 104—College Mathematics	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
En 101—English Composition@	3	Ps 101—General Psychology	3
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Total	15	Total	15

Sophomore Year

History I (100-level Elective)††	3	History II (100-level Elective)††	3
Ed 371—Gym and Tumbling†	2	Ed 386—Kinesiology†	2
Ed 387—Safety & First Aid†	2	PI 230—Metaphysics	3
Ed 271—Intro: Emot. Dist. Child	3	Ed 375—Coaching Trk. & Fld.** and	
Ed 373—Coaching Basketball** or		Ed 374—Coaching Baseball** or	
Ed 372—Coaching Football** or		Ed 383—Coach. Women's Team Sports**	2
Ed 376—Theory of Officiating	3	Ed 274—Mental Hygiene	2
Theology Elective	3	Ed 131—School and Society	3
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Total	14	Total	15

Junior Year

Ed —Phys. Ed. Elective	3	Ed 388—Personal & Com. Health†	2
Ed 215—Dev. Read. in Sec. Sch.	3	Ed 141—Educational Psychology	3
Ed 202—Sec. Curr. & Eval.	3	So/Th 310—Marriage and Family	3
PI 240—Prins. of Ethics	3	Philosophy Elective	3
Humanities Elective	3	Humanities Elective (Lit.)	3
<hr/>		Elective	3
Total	15	Total	17

Senior Year

Philosophy Elective	3	Ed 203—Student Teaching and	
Theology Elective	3	Seminar	9
Humanities Elective (Lit.)	3	Ed 379—Phys. Ed. Meth. & Mat.	4
Humanities Elective	3	<hr/>	
Elective	4	Total	13
<hr/>		<hr/>	
Total	16	Total	13

@@This program meets State of Ohio Certification requirements. (Grades 7-12).

*BI 106, 107, 108, 109 offered every other year, alternating with Hs Elective.

†Ed 377, 378 offered every other year alternating with Ed 371, 386, 387, 388.

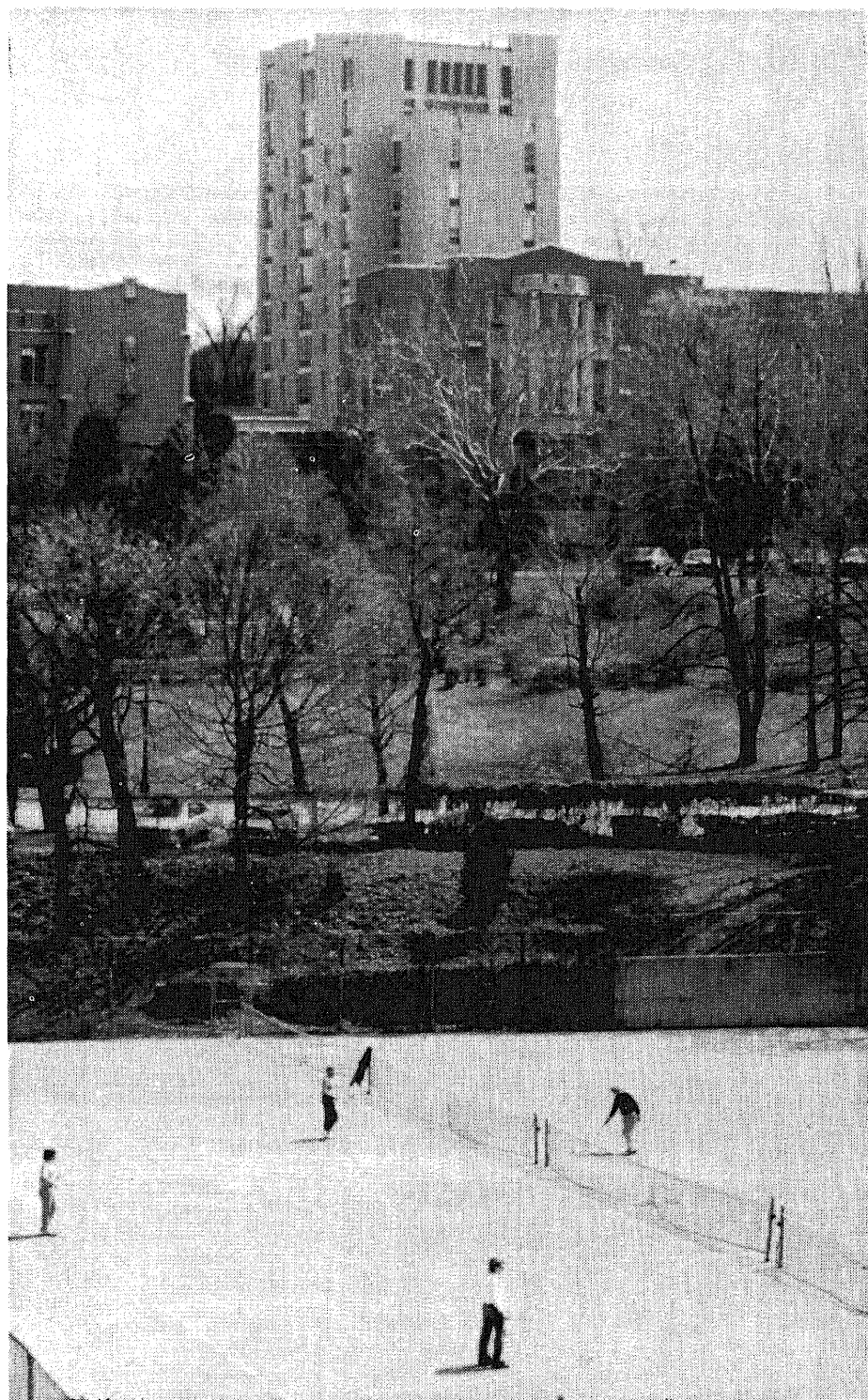
@Required, unless exempted through a test-out program. See page 34.

††See Curricular requirements, page 33.

**One or more of these courses are offered every year during the first and second semesters. By electing these cycled courses as they appear in the schedule, sophomores and juniors will meet state and University requirements, and their own needs.

For Ohio Certification covering Physical Education Grades 1-8, students must include the following 9 hours (as part of their 10 hours of physical education and free electives:)

Ed 381 Tests & Evaluation in Physical Education	2
Ed 385 Physical Education in the Elementary School	2
Ed 389 Adaptive Physical Education	3
Ed 392 Perceptual Motor Problems in Education	2



THE BACHELOR OF ARTS (English)

The Department of English offers a program in writing, in the literature of England and of America and in literary criticism. The program is designed to develop critical insight, cultural enrichment, linguistic ability and several vocational possibilities.

The English major offers the opportunity for substantial electives. Fifteen elective semester hours in the major are generally available to the student. However, English majors must take En 115, En 116, En 300 and En 303 as preparation for further work in English. One additional course in American literature, at least one course in Shakespeare and one other course in British literature before 1800 are also required.

The English major must take a senior comprehensive examination. It is based on a reading list and the coursework in English. To assist in preparing for the comprehensive examination, undergraduates majoring in English should confer at least once each semester with one of the senior members of the Department of English.

Among other options available to the English major are: a program which includes courses in English and courses in the culture of the United States; an interdisciplinary program for interested students pursuing an integration of literature and theology; and a major in English with optional courses in Business Administration. Details of these programs may be obtained from the departmental chairman.

Undergraduates who wish to be certified as teachers of English on the secondary level are advised to consult with the Chairman, Department of English and with the Office of Teacher Education and Placement (Room 14, Alter Hall) regarding the requirements for teacher certification.

A.B. (English)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

En 115—Composition and Lit. I†	3	En 116—Composition and Lit. II†	3
History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Science Elective	3	Science Elective	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
<hr/>		<hr/>	
Total	15	Total	15

Sophomore Year

En 300—Trends in British Lit.	3	En 303—Trends in American Lit.	3
Elective	3	Elective	3
Mt—Elective	3	Mt—Elective	3
Theology Elective	3	PI 230—Metaphysics	3
Foreign Language	3	Foreign Language	3
<hr/>		<hr/>	
Total	15	Total	15

Junior Year

Shakespeare Elective	3	En—Electives	6
En—Amer. Lit. Elective	3	Humanities Elective	3
Humanities Elective	3	PI 240—Prins. of Ethics	3
Theology Elective	3	Social Science Elective	3
Social Science Elective	3	<hr/>	
<hr/>		Total	15
Total	15		

Senior Year

En—Electives	6	En—Electives	6
Philosophy Elective	3	Philosophy Elective	3
Theology Elective	3	Electives	6
Elective	3	<hr/>	
<hr/>		Total	15
Total	15		

†These courses satisfy University English composition requirement for English majors.

@See Language requirements, page 34.

**See Curricular requirements, page 33.

THE BACHELOR OF ARTS (History)

The Bachelor of Arts, conferred on history majors, requires two semesters of history at the 100 level course number to include a first semester (I) and a second semester (II) course, not necessarily sequential, Hs 341, 342, 294, and five or seven additional courses. Those who plan careers in law or business or government employment should complete the 30 hour major. Those who will attend graduate school or become teachers should complete a 36 hour major. Thus they will use six hours of their electives. Seminars for seniors planning graduate study in history are offered in aspects of the history of the United States, Europe, Latin America, and Asia.

History is studied as a liberal art for its primary value of educating one toward proper appreciation of human living. Its memory of man and its insistence on accurate detail, on proof, and on the relation of cause and effect cultivate habits of mature judgment. It helps toward developing due respect and sympathy for others, and supreme regard for the final purpose of life.

Moreover, the study of history ordinarily prepares the student for careers in teaching, government service and even general business fields. It is an excellent preparation for law school and the foreign service.

A Senior Comprehensive Equivalent requirement exists. It may be satisfied by successfully completing Hs 294 which includes the requirement of a directed research paper.

A.B. (History)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Science Elective	3	Science Elective	3
PI 220—Phil. of Man	3	Th 111 Intro. to Theology	3
Humanities Elective (Lit.)	3	En 101—English Composition*	3
<hr/>		<hr/>	
Total	15	Total	15

Sophomore Year

Hs 341—Amer. Civ. to 1865	3	Hs 342—Am. Civ. Since 1865	3
Humanities Elective (Lit.)	3	Mt—Elective	3
Mt—Elective	3	Social Science Elective	3
Social Science Elective	3	PI 230—Metaphysics	3
Theology Elective	3	Foreign Language	3
Foreign Language	3	<hr/>	
Total	18	Total	15

Junior Year

Hs—Electives	6	Hs—Electives	6
Humanities Elective	3	Humanities Elective	3
Theology Elective	3	PI 240—Prins. of Ethics	3
Social Science Elective	3	Social Science Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Hs—Elective	3	Hs 294—Historical Criticism†	3
Philosophy Elective	3	Philosophy Elective	3
Theology Elective	3	Electives	9
Electives	6	<hr/>	
Total	18	Total	15

**See Curricular requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program. See page 34.

†Hs 294 may be taken any time after the sophomore year.

THE BACHELOR OF SCIENCE (Mathematics)

The Department of Mathematics offers a program intended to develop exact methods of thought and analysis, provide the mathematical background for work in science and business, and prepare students for teaching and for graduate work.

Mathematics has always been the tool of the physical scientist, who is now finding uses for even more sophisticated concepts. The expansion of the use of computers will require the services of many individuals trained in the mathematical sciences. The social and health sciences and the world of business and law are becoming aware of the need for people who are able to use mathematical models to solve problems. The field of statistics is growing rapidly. Also the study of mathematics for its own sake, theoretical mathematics, will continue to require new mathematicians.

A major in mathematics at Xavier will take courses in science, the humanities, social science, modern language, philosophy and theology in addition to mathematics. The program also includes free electives to be taken in areas of study of particular interest to the individual student. The required courses in mathematics form a sound base for any type of mathematical application. There are numerous elective courses offered in the major field. The student chooses from these as a first step in the direction of specialization or as a preparation for graduate study.

A mathematics major will take 12 hours of Lower Division mathematics and 27 hours of Upper Division mathematics of which 15 hours are elective courses. The guidelines for the core curriculum are found on page 33 of this catalogue. Any student wishing to major in mathematics should consult a member of the mathematics staff before registration. Mathematics majors are encouraged to fulfill the Modern Language requirement in French, German, or Russian. The Senior Comprehensive examination requirement is fulfilled by passing the Graduate Record examination in Mathematics.

B.S. (Mathematics)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
ML 111@	3	ML 112	3
PI 220—Phil. of Man	3	Th 111—Intro. to Theology	3
En 101—English Composition*	3	Mt 110—Vectors and Geometry	3
Mt 120—Calculus I	3	Mt 130—Calculus II	3
Mt 125—Intro. to Computing	2	Mt 135—Numerical Calculus	1
Total		Total	
17		16	

Sophomore Year

Science elective	3	Science Elective	3
PI 230—Metaphysics	3	Humanities Elective (Lit.)	3
ML 121	3	ML 122	3
Mt 210—Infinite Series	2	Mt 215—Differential Equations	2
Mt 220—Advanced Calculus I	3	Mt 230—Advanced Calculus II	2
		Theology Elective	3
Total		Total	
14		16	

Junior Year

Elective	3	Elective	3
Humanities Elective (Lit.)	3	Humanities Elective	3
Social Science Elective	3	Social Science Elective	3
PI 240—Prins. of Ethics	3	Theology Elective	3
Mt 240—Linear Algebra	3	Mt 250 or Mt 260	3
Total		Total	
15		15	

Senior Year

Elective	3	Elective	3
Philosophy Elective	3	Philosophy Elective	3
Theology Elective	3	Humanities Elective	3
Mt—Electives	6	Mt—Electives	6
Total		Total	
15		15	

**See Curricular requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program . See page 34.

THE BACHELOR OF SCIENCE (Medical Technology)

The curriculum which leads to the B.S. in Medical Technology consists of three years of undergraduate study at Xavier University and a fourth year (twelve months) at a school of medical technology in a hospital accredited by the American Society of Clinical Pathologists and approved by Xavier University. Xavier University is affiliated with several hospital programs in Southwestern Ohio. During the fourth year, the student registers at Xavier University.

All requirements of the College of Arts and Sciences' core curriculum are fulfilled in the first six semesters; the year spent at the hospital teaching laboratories consists of specialized studies. These courses will be part of a program approved by ASCP for medical technologists. They include clinical microscopy, serology, immuno-hematology, clinical microbiology, and similar studies. The B.S. is awarded by Xavier University upon satisfactory completion of the fourth year.

After passing an examination administered by the Board of Registry of Medical Technologists of the ASCP, the graduate becomes a Registered Medical Technologist.

Through an affiliation with 2 hospitals the program may be completed in nuclear medical technology, but a tuition fee is charged by the hospitals.

Specific course requirements for the first three years are indicated in the accompanying block schedule on the next page. The degree program requires 16 semesters hours in biology and 18 semester hours in chemistry.

B.S. (Medical Technology)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year*

BI 110—Gen. Zoology I	2	BI 112—Gen. Zoology II	2
BI 111—Gen. Zoology I Lab	2	BI 113—Gen. Zoology II Lab	2
Ch 110—Gen. Chemistry I	3	Ch 112—Gen. Chemistry II	3
Ch 111—Gen. Chemistry I Lab	1	Ch 113—Gen. Chemistry II Lab	2
Mt 121—Calculus (Scientific)	3	Mt 103—Statistics Biol. Sci.	*3
En 101—English Composition**	3	PI 220—Phil. of Man	3
Foreign Language@	3	Foreign Language	3
<hr/>		<hr/>	
Total	17	Total	18

Sophomore Year

Ch 140—Organic Chem. I	3	Ch 142—Organic Chem. II	3
Ch 141—Organic Chem. I Lab	1	Ch 143—Organic Chem. II Lab	1
PI 230—Metaphysics	3	PI 240—Prins. of Ethics	3
History I (100-level Elective)#	3	History II (100-level Elective)#	3
Th 111—Intro. to Theology	3	Theology Elective	3
Humanities Elective (Lit.)	3	Humanities Elective (Lit.)	3
Foreign Language	3	Foreign Language	3
<hr/>		<hr/>	
Total	19	Total	19

Junior Year

BI 360—Gen. Vert. Physiology	2	BI 212—Bacteriology	2
BI 361—Gen. Vert. Physiology Lab	2	BI 213—Bacteriology Lab	2
Philosophy Elective	3	Ch 151—Analytical Chem.	1
Theology Elective	3	Philosophy Elective	3
Humanities Elective	3	Theology Elective	3
Social Science Elective	3	Humanities Elective	3
<hr/>		<hr/>	
Total	16	Total	17

Senior Year

During the junior year the student must apply to and be accepted for admission to an accredited hospital program of medical technology. The B.S. (Medical Technology) degree will be awarded upon satisfactory completion of the fourth year (12 months) of study at an accredited (ASCP) School of Medical Technology administered by a hospital and approved by Xavier University. During this year the student registers at Xavier University for the first summer session, the fall semester, and spring semester. (\$25 fee payable each registration.)

*Courses in Social Science, Humanities, Philosophy or Theology may be taken in the Freshman year and the start of language postponed to the sophomore year.

**Required, unless exempted through a test-out program. See page 34.

@See Language requirements, page 34.

#See Curricular requirements, page 33.

THE BACHELOR OF ARTS (Modern Languages)

The Department of Modern Languages offers courses of interest to students seeking to meet a variety of goals:

1. *Fulfillment of the modern language requirement.* The Department offers courses in basic language skills and culture of four foreign languages: French, German, Russian and Spanish.
Students who begin a Modern Language at Xavier, or who have had only one year of that language in high school must take 12 semester hours beginning with the 111 (Elementary I) course. Those who have two high school units in a modern language and continue the same modern language at the University are required to take 9 semester hours and must enroll in the 112 (Elementary II) course. By taking the MODERN LANGUAGE PROFICIENCY TEST, students may test out of any of the following courses: 112, 121, 122.
2. *Practical and vocational preparation.* Advanced courses in foreign language, literature, and civilization are available to those interested in areas of secondary education, government, business, and international agencies in which a strong foreign language background is a requirement or a valuable asset. A language major is not necessary to meet this goal.
3. *A MAJOR in French, in German, or in Spanish.*
4. *A MASTER'S DEGREE IN EDUCATION.* Concentrations are available to M.Ed. candidates in French, German and Spanish.
5. *ELECTIVES.* Upper division language courses are applicable to fulfill elective obligations in the humanities. All such courses may be used as free electives.

The major programs aim at providing the student the opportunities for an indepth knowledge of the literature and civilization of linguistic groups and a high degree of proficiency in the spoken and written language.

Requirements for modern language majors:

Majors in French: Fr 220

Majors in German: Gr 220, Gr 232, Gr 260

Majors in Spanish: Sp 200

During the final semester before graduation, all majors are required to take a departmental Senior Comprehensive Examination in their major language.

A.B. (Modern Languages)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

History I (100-level Elective)†	3	History II (100-level Elective)†	3
ML 111@	3	ML 112	3
Science Elective	3	Science Elective	3
PI 220—Phil. of Man	3	Th 111—Intro. to Theology	3
Mt—Elective	3	En 101—English Composition*	3
Total	15	Total	15

Sophomore Year

Social Science Elective	3	Social Science Elective	3
Elective	3	Humanities Elective (Lit.)	3
Mt—Elective	3	ML 122	3
ML 121	3	Theology Elective	3
PI 230—Metaphysics	3	Elective	3
Total	15	Total	15

Junior Year

Humanities Electives	6	Humanities Elective (Lit.)	3
ML 200	3	ML-Gr 232 and Gr Elective, or	
ML—Elective	3	Fr or Sp Electives	6
PI 240—Prins. of Ethics	3	Theology Elective	3
		Elective	3
Total	15	Total	15

Senior Year

ML—Gr 260 and Gr Electives, or		ML—Fr or Gr or Sp Electives	6
Fr or Sp Electives	9	Theology Elective	3
Philosophy Electives	6	Electives	6
Total	15	Total	15

†See Curricular Requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF ARTS (Philosophy)

Majors in philosophy are persons preparing for graduate studies in philosophy or some other discipline in the humanities or social sciences, or for professional studies, especially in law or theology. Others are anticipating careers in businesses or institutions that provide their own professional training. Still others have a second major for career goals (see below). Philosophy majors through their educational experience in the major are provided an opportunity to acquire a reasoned knowledge of the ultimate sources, categories, and properties of being (metaphysics); of the material world (philosophy of nature); of the intricacies of human knowledge (theory of knowledge and logic); of human nature, its dignity and powers (philosophy of man); of human action, its sources and goals (ethics); and of the philosophical principles of religion (philosophy of God). The major also provides a broad knowledge of the history of philosophy, and criteria are proposed which can be used to evaluate the many and varied contributions of philosophers from antiquity to the present.

Philosophy majors complete a minimum of 36 hours in philosophy, taken in special high intensity (HIP) sections when offered. PI 398-399 is an optional seminar offered to help seniors prepare for the written and oral comprehensive examinations in philosophy. The courses are also a valuable opportunity for the student to think through and synthesize the extensive and disparate knowledge acquired in 4 years of college. The philosophy major program contains 21 hours of free electives, which most students wisely take in a single discipline or specialty, thus acquiring a second area of concentration, rather than dispersing their electives over a wide range.

Philosophy majors who intend to pursue graduate study in medieval and modern philosophy find that knowledge of Latin and French are usually necessary; for ancient philosophy, Greek is usually necessary; and for contemporary European philosophy, French and German.

A.B. (Philosophy)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Science Elective	3	Science Elective	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
Humanities Elective	3	En 101—English Composition*	3
Total	15	Total	15

Sophomore Year

Mt—Elective	3	Mt—Elective	3
Foreign Language	3	Foreign Language	3
PI 230—Metaphysics	3	PI 232—Phil. of God	3
Theology Elective	3	Elective	3
Humanities Elective (Lit.)	3	Humanities Elective (Lit.)	3
Total	15	Total	15

Junior Year

PI 210—Logic <i>or</i>	3	PI 235—Theory of Knowledge	3
PI 310—Symbolic Logic	3	PI 270—Hist. of Modern Phil.	3
PI 237—Material World	3	Social Science Elective	3
PI 250—Hist. of Ancient Phil. <i>or</i>	3	Electives	6
PI 260—Hist. of Medieval Phil.	3		
Theology Elective	3		
Social Science Elective	3		
Total	15	Total	15

Senior Year

PI 240—Prins. of Ethics	3	PI 241—Current Moral Probs.	3
PI 250—Hist. of Ancient Phil. <i>or</i>	3	PI 280—Contemp. Phil. <i>or</i>	3
PI 260—Hist. of Medieval Phil.	3	PI 381—Contemp. Continental	
Theology Elective	3	Phil. <i>or</i>	
Humanities Elective	3	PI 383—Contemp. Brit. and	
Elective	3	Amer. Phil	3
Total	15	Electives	9
		Total	15

**See Curricular requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE (Physics)

Behind the complex and varied appearance of Nature we find a beautifully ordered design. From the tiniest bits of matter to the enormity of the Universe there exists a structure that is based on a surprisingly small number of far-reaching fundamental principles. It is the goal of Physics to discover these fundamental principles, often called the "Laws of Nature", and to describe all natural phenomena in terms of these principles. Because of this very fundamental nature of Physics, its subject matter is exceptionally broad and underlies and pervades all of the other natural sciences and fields of engineering. For example, the molecules of life within every living thing are held together by the same physical forces as the molecules of non-living material and must therefore be understood in terms of the same physical laws.

The study of Physics should be of particular interest to those who are awed by the mysteries of nature and who wish to share in the unraveling of these mysteries.

The curriculum in physics is designed to impart a broad and sound scientific education which includes training in the scientific method, acquaintance with the historical development of physical science, and a knowledge of the applications of physical laws which play so large a part in modern life. In all physics courses, emphasis is laid on the intelligent comprehension of basic principles and on the search for fundamental truths that give order and meaning to our universe.

Small classes, seminars, individual discussion, and student-faculty research are an integral part of the study program. The physics faculty believes that the best teaching can be done only when there is a direct individual relationship between a student and a good teacher—a situation in which there is close faculty-student interaction for discussing, thinking and exploring.

The program in physics is designed to familiarize students with the techniques of mathematical and experimental physics that would be useful to them in an industrial research or engineering position; in physics teaching; as a general preparation for more advanced graduate work in any of the varied fields of physics; or in such disciplines as astronomy, space science, biophysics, computer science, engineering, geophysics, medicine, law, and oceanography.

The requirements for a Bachelor of Science (Physics) include 46 credit hours of physics, 16 of mathematics, and 8 of chemistry. Specific courses are shown on the four year schedule which appears on the next page. These requirements, however, are modifiable for the needs and interests of each individual student.

B.S. (Physics)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

Ph 108—Univ. Physics I	3	Ph 110—Univ. Physics II	3
Ph 109—Univ. Physics I Lab	1	Ph 111—Univ. Physics II Lab	1
Ph 160—T.S. Computers in Phy.	1	Ph 161—Dig. Computers in Phy.	1
Mt 110—Vectors and Geometry	3	Mt 120—Calculus I	3
Pl 220—Phil. of Man	3	En 101—English Composition**	3
History I (100-level Elective)#	3	History II (100-level Elective)#	3
ML 111@	3	ML 112	3
<hr/>		<hr/>	
Total	17	Total	17

Sophomore Year

Ph 350—Theoret. Mechanics I	3	Ph 352—Electromagnetism	3
Ph 162—Analog Comp. in Phy. I	1	Ph 163—Analog Comp. in Phy. II	1
Mt 130—Calculus II	3	Mt 215—Differential Equations	2
Ch 110—Gen. Chemistry I	3	Ch 112—Gen. Chemistry II	3
Ch 111—Gen. Chemistry I Lab	1	Ch 113—Gen. Chemistry II Lab	1
Th 111—Intro. to Theology	3	Pl 230—Metaphysics	3
ML 121	3	ML 122	3
<hr/>		<hr/>	
Total	17	Total	16

Junior Year

Ph 366—Atomic Physics	3	Ph—Elective	3
Ph 375—Atomic Physics Lab	1	Ph 372—Electromag. Theory (2)* &	
Ph 364—Phys. Optics (3)* <i>or</i>		Ph 365—Phys. Optics Lab (1)* <i>or</i>	
Ph 242—Electronics I (2)* <i>and</i>		Ph 244—Electronics II (2)* <i>and</i>	
Ph 243—Electronics I Lab (1)*	3	Ph 245—Electronics II Lab (1)*	3
Mt 220—Advanced Calculus I	3	Mt 230—Advanced Calculus II	2
Theology Elective	3	Pl 240—Prins. of Ethics	3
Social Sciences Elective	3	Humanities Elective (Lit.)	3
<hr/>		<hr/>	
Total	16	Total	17

Senior Year

Ph 376—Intro. to Quantum Mech	3	Ph 374—Nuclear Physics	3
Ph 398—Senior Research I	1	Ph 381—Nuclear Physics Lab	1
Ph 364—Phys. Optics (3)* <i>or</i>		Ph 399—Senior Research II	1
Ph 242—Electronics I (2)* <i>and</i>		Ph 372—Electromag. Theory (2)* &	
Ph 243—Electronics I Lab (1)*	3	Ph 365—Phys. Optics Lab (1)* <i>or</i>	
Philosophy Elective	3	Ph 244—Electronics II (2)* <i>and</i>	
Theology Elective	3	Ph 245—Electronics II Lab (1)*	3
Humanities Electives	6	Philosophy Elective	3
<hr/>		<hr/>	
Total	19	Total	17

#See Curricular requirements, page 33.

@See Language requirements, page 34.

**Required, unless exempted through a test-out program. See page 34.

*These courses are offered on alternate years.

THE BACHELOR OF ARTS (Political Science)

The Department of History and Political Science offers the Bachelor of Arts in political science. This program requires Po 101, 110, 133, 221, 377, and either 390 or 391, and a minimum of four other courses for a total of 30 hours.

Political science functions both as a liberal art, that is, to assist the student in understanding and properly using the social forces at work in his life situation, and also as a practical preparation for a number of careers. Students interested in the dedicated service of their fellow men may use political science preparatory to studies in law, public administration, party politics, and international business.

Those who plan careers in law or business should complete the 30 hour major. Those who will attend graduate school or become teachers should complete a 36 hour major. Thus they will use six hours of their electives.

A.B. (Political Science)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

History I (100-level Elective)#	3	History II (100-level Elective)#	3
Foreign Language@	3	Foreign Language	3
PI 220—Phil. of Man	3	Th 111—Intro. to Theology	3
Science Elective	3	Science Elective	3
Humanities Elective (Lit.)	3	En 101—English Composition**	3
<hr/>		<hr/>	
Total	15	Total	15

Sophomore Year

Elective*	3	Elective	3
Humanities Elective (Lit.)	3	Social Science Elective	3
Social Science Elective	3	PI 230—Metaphysics	3
Theology Elective	3	Po 110—American Govt.	3
Po 101—Govt. in Society	3	Foreign Language	3
Foreign Language	3	<hr/>	
Total	18	Total	15

Junior Year

Mt 101—Statistical Inference	3	Mt—Elective	3
Humanities Elective	3	Humanities Elective	3
Po 221—Comparative Gov't	3	Po 133—Political Theory	3
Po—Elective	3	PI 240—Prins. of Ethics	3
Theology Elective	3	Po 377—International Relations	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Po 391—Problems in Am. Gov't. (or 390)	3	Po—Elective	3
Po—Electives	6	Electives	9
Philosophy Elective	3	Philosophy Elective	3
Theology Elective	3	<hr/>	
Total	15	Total	15

#See Curricular requirements, page 33.

@See Language requirements, page 34.

**Required, unless exempted through a test-out program. See page 34.

*Suggested: Principles of Economics.

THE BACHELOR OF SCIENCE (Psychology)

The Department of Psychology endeavors to acquaint students thoroughly with the content and methods of scientific psychology. While emphasizing the scientific approach in the understanding of human behavior and human personality, the psychology courses aim to show to the student that this branch of science is complementary to and compatible with a sound philosophy of human nature. In addition to the program leading to the Bachelor of Science in Psychology, the Department provides service courses to majors of other departments. The Bachelor of Science program in psychology aims to provide a general background for advanced studies in fields which presuppose understanding of human psychology such as clinical psychology, vocational and educational guidance, medicine, education, social work, and personnel work in business and industry.

Departmental requirements for a major are:

1. Completion of Ps 101 and 102 as an introduction to *upper division* work.
2. Twenty-eight credit hours in *upper division* courses including Ps 201, 210, 221, 222, and 299.
3. Satisfactory completion of BI 110, 111, 112, 113 to fulfill the science requirement, unless substitution of other science courses is approved by the Chairman of the Department of Psychology.

B.S. (Psychology)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

BI 110—Gen. Zoology I	2	BI 112—Gen. Zoology II	2
BI 111—Gen. Zoology I Lab	2	BI 113—Gen. Zoology II Lab	2
En 101—English Composition*	3	Mt—Elective†	3
Mt—Elective†	3	Modern Language	3
Modern Language@	3	PI 220—Phil. of Man	3
Ps 101—General Psychology	3	Ps 102—Adv. Gen. Psychology	3
<hr/>		<hr/>	
Total	16	Total	16

Sophomore Year

History I (100-level Elective)#	3	History II (100-level Elective)#	3
Ps 210—Stat. Tech.	3	Humanities Elective (Lit.)	3
Modern Language	3	Modern Language	3
Th 111—Intro. to Theology	3	PI 230—Metaphysics	3
Humanities Elective (Lit.)	3	Ps 221—Exp. Psychology	3
<hr/>		<hr/>	
Total	15	Total	15

Junior Year

Humanities Elective	3	Humanities Elective	3
Social Science Elective	3	Social Science Elective	3
Ps 222—Exp. Psychology II	3	PI 240—Prins. of Ethics	3
Ps—Elective	3	Ps 201—Hist. and Systems	3
Theology Elective	3	Ps—Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Elective	3	Philosophy Elective	3
Philosophy Elective	3	Ps—Electives	4
Ps—Electives	4	Elective	3
Ps 299—Senior Comp. Review	2	Theology Elective	3
Theology Elective	3	<hr/>	
<hr/>		Total	13
Total	15		

*Required, unless exempted through a test-out program. See page 34.

†Majors must choose the mathematics sequence 104, 121 or 120, 130.

@See Language requirements, page 34. Majors may choose either French, German, Russian or Spanish.

#See Curricular requirements, page 33.

THE BACHELOR OF ARTS (Sociology)

Sociology, the study of man's behavior in the group context, is a science of excitement, growth, and change. It seeks to discover regularities and order in social behavior and to express these patterns as theoretical generalizations applying to the wide range of such behavior. General and specialized areas of study are covered, as indicated in the listing of courses offered by the department, and requirements are kept to a minimum in order to allow students flexibility in the design of their programs. Students and faculty are seriously concerned with the continued development of the program in an atmosphere of formal and informal norms.

The program of the department is designed to prepare the sociology major for the following fields of endeavor: (1) graduate study for teaching sociology and anthropology at all levels; (2) service and graduate study in the social work profession; (3) careers in the fields of pure and applied research; (4) administrative and consultant positions in business, industry, government, and community work.

Students majoring in sociology must complete So 101 Introduction to Sociology and So 121 Contemporary Social Problems as preparation for upper division work. The advanced courses consist of twenty-four semester hours and must include So 300 Sociological Theories and So 360 Methods of Social Research. A course in Statistical Techniques is recommended as a related elective for all majors. Majors desiring a career in social work should include So 220 Introduction to Social Work and So 222 Principles of Social Case Work in their program. Several courses in Anthropology are offered for students wanting study in that discipline.

A.B. (Sociology)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
Science Elective	3	Science Elective	3
Humanities Elective (Lit.)	3	En 101—English Composition*	3
	—		—
Total	15	Total	15

Sophomore Year

Theology Elective	3	PI 230—Metaphysics	3
So 101—Intro. to Sociology	3	So 121—Con. Social Problems	3
Foreign Language	3	Foreign Language	3
Elective	3	Humanities Elective (Lit.)	3
Social Science Elective	3	Social Science Elective	3
	—		—
Total	15	Total	15

Junior Year

Mt—Elective	3	Mt—Elective	3
So—Electives	6	PI 240—Prins. of Ethics	3
Theology Elective	3	So—Elective	3
Humanities Elective	3	Humanities Elective	3
	—	So 360—Meth. of Social Research	3
Total	15	Total	15

Senior Year

Philosophy Elective	3	Philosophy Elective	3
So—Electives	6	So—Elective	3
So 300—Sociological Theories	3	Electives	9
Theology Elective	3		—
Total	15	Total	15

**See Curricular requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF ARTS (Theology)

The study of theology integrates knowledge of religious traditions with the questions men and women today have about themselves and the world in which they live.

The theological faculty attempts to assist the student in this integration with courses studying religious traditions, especially the Judaeo-Christian, and with interdisciplinary courses to understand the issues of our times as a source of theology.

The major in theology is a preparation for graduate studies in theology, a preparation for religious education, and as a major in the liberal arts. Since the major provides many hours of electives, the degree program enables the student to develop or approximate the equivalent of another University major.

Students majoring in theology take 10 courses (30 credit hours) in theology followed by a comprehensive examination in the senior year. Courses are to be distributed as follows:

	<i>Courses</i>	<i>Hours</i>
1 Introductory Course	1	3
9 Upper Division Courses:		
1 each in the areas of Biblical, Systematic, Practical and		
Historical theology	4	12
5 Theology electives	5	15
	<hr/>	<hr/>
Total	10	30

A.B. (Theology)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
-----------------------	------------------	------------------------	------------------

Freshman Year

Foreign Language@	3	Foreign Language	3
History I (100-level Elective)**	3	History II (100-level Elective)**	3
Science Elective	3	Science Elective	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
En 101—English Composition*	3	Humanities Elective (Lit.)	3
Total	15	Total	15

Sophomore Year

Foreign Language	3	Foreign Language	3
Humanities Elective (Lit.)	3	Mt—Elective	3
Mt—Elective	3	PI 230—Metaphysics	3
Social Science Elective	3	Social Science Elective	3
Theology Elective	3	Th—Elective	3
Total	15	Total	15

Junior Year

Humanities Elective	3	Humanities Elective	3
PI 240—Prins. of Ethics	3	Philosophy Elective	3
Th—Electives	6	Th—Electives	6
Elective%	3	Elective%	3
Total	15	Total	15

Senior Year

Philosophy Elective	3	Th—Elective	3
Th—Electives	6	Electives%	12
Electives%	6		
Total	15	Total	15

@See Language requirements, page 34.

**See Curricular requirements, page 33.

*Required, unless exempted through a test-out program. See page 34.

%Theology majors have 27 hours of free electives; it is recommended that these be chosen in one area as a second concentration, rather than a wide dispersal of courses.

THE BACHELOR OF ARTS (Urban Studies)

In recent years students have shown a growing interest in programs that combine the more traditional academic themes with innovative and imaginative approaches and ones that have a greater concern for more specific career goals. It was to satisfy these desires and goals that the Urban Studies Program was instituted.

In the field of the concentration, the student takes the necessary fundamental courses as: Hs 341 and 342, the background in American Civilization; Hs 358 Urban America; Po 349 which traces State and Local Government; and Ec 241* Urban Economics as well as Po/Ec 335* Public Finance and Taxation. As electives in the major the student chooses *one* of the following for specialization: Po 200 Political Inquiry; Po 332 Public Administration; Po 360 American Political Parties; or Po 362 Public Opinion and Voting Behavior. Additionally, the student may choose between Hs 365 The Black Man in America or Hs 366 Racial and Ethnic Minorities.

An important feature of the program is the availability of an Internship Program with the City of Cincinnati.

Upon graduation the student is prepared for either further graduate study or a career in government on the national, state or local level.

*Note: Ec 101 and 102 are pre-requisites for Po/Ec 335 and Ec 245 and hence become required parts of the program.

A.B. (Urban Studies)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

History I (100-level Elective)**	3	History II (100-level Elective)**	3
Foreign Language@	3	Foreign Language	3
Science Elective	3	Science Elective	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
En 101—English Composition*	3	Humanities Elective (Lit.)	3
<hr/>		<hr/>	
Total	15	Total	15

Sophomore Year

Hs 358—Urban America	3	Po 359—State and Local Gov't	3
Hs 341—Am. Civ. to 1865	3	Hs 342—Am. Civ. Since 1865	3
Theology Elective	3	PI 230—Metaphysics	3
Humanities Elective (Lit.)	3	Social Science Elective	3
Foreign Language	3	Foreign Language	3
<hr/>		<hr/>	
Total	15	Total	15

Junior Year

Ec 101—Prins. of Economics	3	Ec 102—Prins. of Economics	3
Po/Ec 335—Public Finance	3	Po/Ec 245—Urban Economics	3
Mt—Elective	3	Mt—Elective	3
Theology Elective	3	PI 240—Prins. of Ethics	3
Humanities Elective	3	Humanities Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Hs 365 or Hs 366	3	Po 200, or Po 332, or Po 360, or	
Elective—Major or Free	3	Po 362	3
Philosophy Elective	3	Elective—Major or Free	3
Theology Elective	3	Philosophy Elective	3
Elective	3	Elective	3
<hr/>		Social Science Elective	3
Total	15	Total	15

** See Curricular requirements, page 33.

@See Language requirements, page 34.

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE (Natural Sciences)

(For Pre-Medical and Pre-Dental Students)

The Natural Sciences curriculum for pre-medical and pre-dental students presents a liberal arts program with emphasis on those sciences required for an adequate background for subsequent studies in medicine, in dentistry, and in similar professions. Recurrent pronouncements by Committees on Admissions at professional schools leave no doubt that they regard an education in the liberal arts as one of the most important factors in forming a genuinely capable and effective professional person. Students are advised to plan a four-year course.

If a student wishes to major in another area, he/she is free to do so. He/she should, however, seek advice from a member of the Committee for Health Sciences, the chairman of the appropriate department, and consult a current listing of professional school admission requirements* so that the selected course of studies will assure him/her of a degree and include all the minimum requirements for admission to those schools of medicine or dentistry to which he/she intends to apply.

The program includes, in addition to standard University graduation requirements, the following specific requirements: 19 semester hours in Biology, 21 semester hours in Chemistry, 8 semester hours in Physics, an additional 4-8 semester hours in a science concentration, and a 3 semester hour course in General Psychology. (The final requirement reduces the University requirement in social sciences to 3 semester hours.)

* *Medical School Admission Requirements* published by the Association of American Medical Colleges.

Admission Requirements of U.S. and Canadian Dental Schools published by the American Association of Dental Schools.

B.S. (Natural Sciences)

(For Pre-Medical and Pre-Dental Students)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year*

BI 110—Gen. Zoology I	2	BI 112—Gen. Zoology II	2
BI 111—Gen. Zoology I Lab	2	BI 113—Gen. Zoology II Lab	2
Ch 110—Gen. Chem. I	3	Ch 112—Gen. Chem. II	3
Ch 111—Gen. Chem. I Lab	1	Ch 113—Gen. Chem. II Lab	2
Mt 121—Calculus (Scientific)	3	Mt 103—Statistics Biol. Sci.	3
Foreign Language†	3	Foreign Language	3
		En 101—English Composition@	3
<hr/>		<hr/>	
Total	14	Total	18

Sophomore Year

Ch 120—Prins. Physical Chem.	3	BI 300—Vert. Embryology	2
Ch 151—Analytical Phys. Chem.	1	BI 301—Vert. Embryology Lab	2
Ph 108—Univ. Physics I	3	Ph 110—Univ. Physics II	3
Ph 109—Univ. Physics I Lab	1	Ph 111—Univ. Physics II Lab	1
Foreign Language	3	Foreign Language	3
Th 111—Intro. to Theology	3	PI 220—Phil. of Man	3
Humanities Elective (Lit.)	3	Humanities Elective (Lit.)	3
<hr/>		<hr/>	
Total	17	Total	17

Junior Year

BI 310—Comp. Anat. Verte.	2	BI 230—Genetics	3
BI 311—Comp. Anat. Verte. Lab	2	Ch 142—Organic Chem. II	3
Ch 140—Organic Chem. I	3	Ch 143—Organic Chem. II Lab	1
Ch 141—Organic Chem. I Lab	1	History II (100-level Elective)#	3
History I (100-level Elective)#	3	PI 240—Prins. of Ethics	3
PI 230—Metaphysics	3	Theology Elective	3
Humanities Elective	3		
<hr/>		<hr/>	
Total	17	Total	16

Senior Year

Ch 190—Chemical Lit.**	1	Theology Elective	3
Ps 101—General Psychology	3	Philosophy Elective	3
Theology Elective	3	Social Science Elective	3
Philosophy Elective	3	BI 320, Ch, or Ph	2-4
Humanities Elective	3	BI 399, Ch 399, or Ph	1
BI 360, Ch, or Ph***	2-4		
BI 398, Ch 398 or Ph	1		
<hr/>		<hr/>	
Total	16-18	Total	12-14

*Courses in Social Science, Humanities, Philosophy or Theology may be taken in the Freshman year and the start of language postponed to sophomore or junior years.

**Recommended of those planning to take Ch 398 and 399, otherwise the course need not be taken.

***Student selects a senior year concentration of courses plus research in Biology or Chemistry or Physics. Consult Chairmen for departmental offerings.

†See Language requirements, page 34.

@Required, unless exempted through a test-out program. See page 34.

#See Curricular requirements, page 35.

PRE-DENTAL CURRICULUM

The Council on Dental Education of the American Dental Association prescribes as a minimum for admission to a recognized dental school the completion of at least two years of education in an accredited college of liberal arts. It should be emphasized that these are the minimum requirements. Many dental schools require three years of college education, and most prefer students with the bachelor's degree.

The Committee for Health Sciences at Xavier University recommends as a minimum, a program of three years of pre-professional studies. If at the end of the third year of college, a student wishes to extend his education to obtain a B.S. (Natural Sciences), the Committee has indicated the remaining required courses beyond the three year program. (See the next page.) If a combined B.S.—D.D.S. program is anticipated, all college of liberal arts requirements except 10 hours of science must be completed within three years. The B.S. Natural Sciences then will be awarded upon satisfactory completion of the freshman year of dental school.

Students are advised to obtain information about the actual admission policies of the dental school* they plan to attend, and to make sure that they meet the standards of admission in regard to both quality and quantity of courses.

* *Admission Requirements of U.S. and Canadian Dental Schools* published by the American Association of Dental Schools.

Pre-Dental (Three and Four Year Programs)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year*

BI 110—Gen. Zoology I	2
BI 111—Gen. Zoology I Lab	2
Ch 110—Gen. Chem. I	3
Ch 111—Gen. Chem. I Lab	1
Mt 121—Calculus (Scientific)	3
Foreign Language†	3

Total 14

BI 112—Gen. Zoology II	2
BI 113—Gen. Zoology II Lab	2
Ch 112—Gen. Chem. II	3
Ch 113—Gen. Chem. II Lab	2
Mt 103—Statistics Biol. Sci.	3
Foreign Language	3
En 101—English Composition@	3

Total 18

Sophomore Year

Ph 108—Univ. Physics I	3
Ph 109—Univ. Physics I Lab	1
Ps 101—General Psychology	3
History I (100-level Elective)#	3
PI 220—Phil. of Man	3
Foreign Language	3

Total 16

Ph 110—Univ. Physics II	3
Ph 111—Univ. Physics II Lab	1
BI 300—Vert. Embryology	2
BI 301—Vert. Embryology Lab	2
History II (100-level Elective)#	3
PI 230—Metaphysics	3
Foreign Language	3

Total 17

Junior Year

BI 310—Comp. Anat. Verte.	2
BI 311—Comp. Anat. Verte. Lab	2
Ch 140—Organic Chem. I	3
Ch 141—Organic Chem. I Lab	1
PI 240—Prins. of Ethics	3
Humanities Elective (Lit.)	3
Th 111—Intro. to Theology	3

Total 17

BI 230—Genetics	3
Philosophy Elective	3
Ch 142—Organic Chem. II	3
Ch 143—Organic Chem. II Lab	1
Theology Elective	3
Humanities Elective (Lit.)	3

Total 15-16

If the student plans to continue his education and obtain a B.S. (Natural Sciences), the following program is necessary:

Senior Year

Ch 190—Chemical Lit.**	1
Theology Elective	3
Humanities Elective	3
Ch 120—Prin. Physical Chem.	3
Ch 151—Analytical Chem.	1
BI 360 or Ch or Ph***	2-4
BI 398 or Ch 398 or Ph	1

Total 14-16

Philosophy Elective	3
Theology Elective	3
Humanities Elective	3
Social Science Elective	3
BI 320 or Ch or Ph	2-4
BI 399 or Ch 399 or Ph	1

Total 15-17

*Courses in Social Science, Humanities, Philosophy or Theology may be taken in the Freshman year and the start of languages postponed to sophomore or junior years.

**Recommended of those planning to take Ch 398 and 399, otherwise the course need not be taken.

***Student selects a senior year concentration of courses plus research in Biology or Chemistry or Physics. Consult Chairmen for departmental offerings.

†See Language requirements, page 34.

@Required, unless exempted through a test-out program. See page 34.

#See Curricular Requirements, page 33.

LIBERAL ARTS DEGREE WITH BUSINESS OPTION

The values inherent in a liberal arts education are attractive to many prospective students. The more pragmatic aspects of life tend to offset such values in the minds of some people. The University offers students the opportunity to resolve this ambivalence in a number of University majors which provide sufficient free elective hours in certain arts and science degree programs. By taking the following courses, in addition to the degree program, the student can obtain an adequate introductory business background.

Required Courses in the Business Option

Ac 100	Principles of Accounting I	3 Sem. Hrs.
Ec 101	Principles of Economics I*	3 Sem. Hrs.
Mg 100	Principles of Management*	3 Sem. Hrs.
Fi 255	Business Finance	3 Sem. Hrs.

Optional Courses in the Business Option

BA 280	Legal Environment*	3 Sem. Hrs.
IS 100	Principles of Data Processing	3 Sem. Hrs.
Mk 100	Principles of Marketing*	3 Sem. Hrs.

* These courses can be taken to fulfill the social science electives in the general University curricular requirements. A maximum of six (6) semester hours of these courses can be applied to the social science requirement. The second semester Principles of Accounting (Ac 101) is highly recommended also if the student elects these courses to fulfill the social science elective requirements. Students are additionally encouraged to take Ec 102 Principles of Economics II.

The following majors in the College of Arts and Science provide a sufficient number of free elective hours to complete this program:

Communications Arts, Economics, English, History, Mathematics, Modern Languages, Philosophy, Political Science, Sociology, Theology, and Urban Studies.

A.B. AND B.S. DEGREES (Three Year Programs)

Designed to prepare students for Graduate Business Programs*

First Semester Sem. Hrs. Second Semester Sem. Hrs.

First Year

En 101—English Composition	3	Humanities Elective (Lit.)	3
Major I	3	Major II	3
History I (100-level Elective)	3	Pl 230—Metaphysics	3
FL I—Language	3	History II (100-level Elective)	3
Pl 220—Phil. of Man	3	FL II Language	3
Th 111—Intro. to Theology	3	Theology Elective	3
Science Elective	3	Science Elective	3
<hr/>		<hr/>	
Total	21	Total	21

Second Year

Major III	3	Major V	3
Major IV	3	Major VI	3
Ec 101—Prin. of Economics I	3	Ec 102—Prin. of Economics II	3
Mt 112—Coll. Math. (Business)	3	Mt 122—Calculus (Business)	3
Pl 240—Prins. of Ethics	3	Philosophy Elective	3
Humanities Elective (Lit.)	3	Fi 255—Business Finance	3
FL III Language	3	FL IV Language	3
<hr/>		<hr/>	
Total	21	Total	21

Third Year

Major VII	3	Major IX	3
Major VIII	3	Major X	3
Humanities Elective	3	Humanities Elective	3
Philosophy Elective	3	Theology Elective	3
Theology Elective	3	BA 270—Business Statics	3
Mk 100—Prin. of Marketing	3	Ac 101—Prin. of Accounting II	3
Ac 100—Prin. of Accounting I	3		
<hr/>		<hr/>	
Total	21	Total	18

* This program fulfills all University graduation requirements in the College of Arts and Science with majors of 30 hours or less, and for admittance into the Graduate Business Programs at Xavier University. It enables a student to complete the A.B. or B.S. and M.B.A. in four years.

For those majors requiring more than 30 semester hours and additional specific course requirements, such requirements must be fulfilled. The interested student should study carefully the requirements of the major and make necessary adjustments. Academic counseling is strongly recommended in such instances. While the above schedule provides for a total of 123 semester hours, this number of hours can be reduced through satisfactory "test-outs" in English Composition or in the language requirements. In all instances, however, the University requirement of 120 semesters hours for a degree must be completed.

Degree Programs— The College of Business Administration

The College of Business Administration offers the Bachelor of Science in Business Administration in the following concentrations: Accounting, Economics, Finance, Industrial Relations, Information Systems, Management, and Marketing. The degree programs provide the student with a broad preparation in the field of business administration together with intensive background in his major. Additionally, the degree integrates the concept of a liberal education, since the student in the College of Business Administration also fulfills the general University curriculum required of all students.

General University curriculum requirements are described on pages 33–34 of this catalogue. Requirements in the major are listed in the degree programs which immediately follow this page. College of Business Administration core Curriculum requirements for all majors are as follows:

<i>Course No.</i>	<i>Subject</i>	<i>Sem. Hrs.</i>
Ac 100, 101	Principles of Accounting	6
Ec 101, 102	Principles of Economics	6
Is 100	Principles of Data Processing	3
Ir 210	Human Resources	3
Fi 250	Money and Banking	3
Fi 255	Business Finance	3
Mg 100	Principles of Management	3
Mk 100	Principles of Marketing	3
BA 270	Business Statistics	3
BA 280	Legal Environment	3
	Total	36

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Accounting)

The program in accounting is designed to provide intensive training of a comprehensive nature for the adequate preparation of public, private or industrial accountants; independent and internal auditors; credit analysts and general business executives. The advanced courses which elaborate on the theory and practice of accounts, business analysis, costs, auditing and specialized accounting culminate in preparation for C.P.A. examinations and for actual entrance into the field of public accountancy.

Students majoring in accounting must complete the following courses in the major: Ac 100 and 101, Principles of Accounting; Ac 200 and 201, Intermediate Accounting; Ac 220 and 221, Managerial Cost Accounting; Ac 230 Taxation; Ac 310 Advanced Accounting Problems; and Ac 320 Auditing.

Other requirements for the degree are included in the University core curriculum requirements and the core curriculum requirements in the College of Business Administration. Electives to fulfill University minimum degree requirements provide a latitude for additional student interests.

B.S.B.A. (Accounting)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ac 100—Prins. of Accounting 3	Ac 101—Prins. of Accounting 3
Ec 101—Prins. of Economics 3	Ec 102—Prins. of Economics 3
Mt 112—College Math. (Business) 3	Mt 122—Calculus (Business) 3
Pl 220—Phil. of Man 3	Th 111—Intro. to Theology 3
En 101—English Composition* 3	IS 100—Prin. of Data Processing 3
Total 15	Total 15

Sophomore Year

Ac 200—Interm. Accounting 3	Ac 201—Interm. Accounting 3
BA 280—Legal Environment 3	BA 270—Business Statistics 3
Mk 100—Prins. of Marketing 3	Mg 100—Prins. of Management 3
Pl 230—Metaphysics 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

Junior Year

Ac 220—Managerial Cost Accounting . . 3	Ac 221—Managerial Cost Accounting . . 3
Ac 230—Taxation 3	Ac 320—Auditing 3
Pl 240—Prins. of Ethics 3	Fi 255—Business Finance 3
Science Elective 3	Theology Elective 3
Humanities Elective 3	Science Elective 3
Total 15	Total 15

Senior Year

Ac 310—Adv. Accounting Probs. 3	Humanities Elective 3
Ir 210—Human Resources 3	Philosophy Elective 3
Fi 250—Money and Banking 3	Theology Elective 3
Philosophy Elective 3	Social Science Elective 3
Social Science Elective 3	Elective 3
Total 15	Total 15

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Economics)

The economics program in the College of Business Administration provides the student with principles and procedures of the individual firm, industry, and the economy as a whole. Such training prepares the student to recognize the problem, to analyze it objectively, and to offer a proper solution. For this purpose courses in economics relate managerial decision-making within the firm to external economic factors which may affect the very existence of the firm or the entire industry. Economics majors, supported by the knowledge of functional tools acquired from other business disciplines, analyze such areas as inflation, unemployment, competition, monopoly power, industrial pricing, government regulation, and foreign trade.

The program is beneficial to those who wish to assume positions as professional economists, either public or private; business analysts; investment analysts; business executives; and labor leaders. It is also a very appropriate major for a degree in law, since many current legal issues and controversies arise from problems in the economic system.

Requirements in the concentration include: Ec101 and 102, Principles of Economics; Ec 200 Microeconomic Analysis; Ec 201 Macroeconomic Analysis; Ec 202 History of Economic Thought; Ec 250 Money and Banking; Ec 345 International Economics, and nine semester hours of economic electives. The business core curriculum and the general University curriculum must also be fulfilled for degree requirements.

B.S.B.A. (Economics)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ac 100—Prins. of Accounting 3	Ac 101—Prins. of Accounting 3
Ec 101—Prins. of Economics 3	Ec 102—Prins. of Economics 3
Mt 112—College Math. (Business) 3	Mt 122—Calculus (Business) 3
Th 111—Intro. to Theology 3	PI 220—Phil. of Man 3
En 101—English Composition* 3	IS 100—Prin. of Data Processing 3
Total 15	Total 15

Sophomore Year

BA 280—Legal Environment 3	BA 270—Business Statistics 3
IR 210—Human Resources 3	Fi 255—Business Finance 3
Mg 100—Prins. of Management 3	Mk 100—Prins. of Marketing 3
PI 230—Metaphysics 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

Junior Year

Ec 200—Microeconomic Anal. 3	Ec 201—Macroeconomic Anal. 3
Ec 250—Money and Banking 3	Theology Elective 3
PI 240—Prins. of Ethics 3	Science Elective 3
Science Elective 3	Social Science Elective 3
Social Science Elective 3	Humanities Elective 3
Total 15	Total 15

Senior Year

Ec 345—International Economics 3	Ec 377—Managerial Economics 3
Ec—Electives 6	Ec—Elective 3
Philosophy Elective 3	Philosophy Elective 3
Humanities Elective 3	Theology Elective 3
	Elective 3
Total 15	Total 15

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Finance)

The Bachelor of Science in Business Administration program in finance develops an appreciation in the student of financial management and financial operation. Every one majoring in finance must take three basic courses designed to acquaint him with the various financial records of the firm, the character and appraisal of corporate securities, and the financial techniques applicable to the various phases of this discipline. In addition, the student may choose elective subjects. This permits him to aim at a particular segment of finance such as corporate finance, security sales, etc. Certain courses are offered each semester. Others are cycled every other semester of every other year to provide the greatest diversification possible. Majors in finance will be offered opportunities to inspect various financial institutions and to meet with professionals in the field.

Specific requirements in the finance concentration include the following courses: Fi 255 Business Finance; Fi 257 Quantitative Methods in Finance; Fi 265 Investments; Fi 301 Financial Management; Fi 380 Cases and Problems in Finance; and six (6) semester hours of finance elective courses.

All finance majors are strongly urged to take Ac 200 and 201, Intermediate Accounting.

B.S.B.A. (Finance)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ac 100—Prins. of Accounting 3	Ac 101—Prins. of Accounting 3
Ec 101—Prins. of Economics 3	Ec 102—Prins. of Economics 3
Mt 112—College Math. (Business) 3	Mt 122—Calculus (Business) 3
Th 111—Intro. to Theology 3	PI 220—Phil. of Man 3
En 101—English Composition* 3	IS 100—Prin. of Data Processing 3
Total 15	Total 15

Sophomore Year

BA 270—Business Statistics 3	BA 280—Legal Environment 3
Fi 255—Business Finance 3	IR 210—Human Resources 3
Mk 100—Prins. of Marketing 3	Mg 100—Prins. of Management 3
PI 230—Metaphysics 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

Junior Year

Ec 250—Money and Banking 3	Fi 301—Financial Management 3
PI 240—Prins. of Ethics 3	Fi 265—Investment 3
Fi 257—Quant. Meth. in Finance 3	Theology Elective 3
Science Elective 3	Science Elective 3
Social Science Elective 3	Social Science Elective 3
Total 15	Total 15

Senior Year

Fi 380—Cases and Problems 3	Humanities Elective 3
Fi—Elective 3	Fi—Elective 3
Philosophy Elective 3	Philosophy Elective 3
Elective 3	Electives 6
Humanities Elective 3	
Total 15	Total 15

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Industrial Relations)

In an industrial society which is becoming more complex and interdependent, the need for leaders in the area of industrial relations with a well-rounded professional training is a necessity. This program is designed to provide specific knowledge of labor and is supported by a strong cultural background in the liberal arts. In accordance with these objectives, industrial relations courses examine collective bargaining procedures, legislation relative to labor-management relations, and the contributions of labor in the production process. The study of industrial relations is approached from the economic, social, political, and psychological aspects of labor-management relations. In addition to courses in industrial relations and the liberal arts, courses in marketing, accounting, economics, finance and management provide a strong background for a broad understanding of the business world. The industrial relations major prepares the student for a leadership role in employee relations, personnel, government, or service organizations.

The concentration requires the following courses in Industrial Relations: IR 210 Human Resources; IR 300 Labor Relations; IR 330 Industrial Psychology, and twelve (12) semester hours of electives in the specialized field of Industrial Relations.

B.S.B.A. (Industrial Relations)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ac 100—Prins. of Accounting 3	Ac 101—Prins. of Accounting 3
Ec 101—Prins. of Economics 3	Ec 102—Prins. of Economics 3
Mt 112—College Math. (Business) 3	Mt 122—Calculus (Business) 3
Th 111—Intro. to Theology 3	PI 220—Phil. of Man 3
IS 100—Prins. of Data Processing 3	En 101—English Composition* 3
Total 15	Total 15

Sophomore Year

BA 280—Legal Environment 3	BA 270—Business Statistics 3
IR 210—Human Resources 3	Fi 255—Business Finance 3
Mg 100—Prins. of Management 3	Mk 100—Prins. of Marketing 3
PI 230—Metaphysics 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

Junior Year

IR—Elective 3	IR 300—Labor Relations 3
PI 240—Prins. of Ethics 3	IR—Elective 3
Science Elective 3	Theology Elective 3
Social Science Elective 3	Science Elective 3
Elective 3	Social Science Elective 3
Total 15	Total 15

Senior Year

IR 330—Indust. Psychology 3	Ec 250—Money and Banking 3
IR—Elective 3	IR—Elective 3
Philosophy Elective 3	Philosophy Elective 3
Elective 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Information Systems)

Contributions of the business world to society are largely dependent on good management via information systems.

The objectives of the University Information Systems Program are to facilitate such contributions by:

1. Providing specialized professional training in information systems principles and techniques.
2. Stimulating the application of sound information systems to the wide range of business activities.
3. Aiding in the development of the student's intellect and personality to prepare for the dynamic field of computers.

The number of required hours for an Information Systems major is 21 hours including the required beginning course (IS 100 Principles of Data Processing). Required courses are as follows:

IS 100	Principles of Data Processing	3 sem. hrs.
IS 341	Systems Analysis and Design	3 sem. hrs.
IS 343	FORTRAN Programming	3 sem. hrs.
IS 344	COBOL Programming	3 sem. hrs.
IS 345	Data Processing Information Systems	3 sem. hrs.
IS or CS	electives	6 sem. hrs.

The Bachelor Degree in Information Systems is designed for individuals who aspire to a career in one of the following positions:

- Programmer/Analyst
- Systems Analyst
- Information Systems Manager

B.S.B.A. (Information Systems)

Recommended Sequence of Program

<i>First Semester</i>	<i>Sem. Hrs.</i>	<i>Second Semester</i>	<i>Sem. Hrs.</i>
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Freshman Year

Ac 100—Prins. of Accounting 3	Ac 101—Prins. of Accounting 3
Ec 101—Prins. of Economics 3	Ec 102—Prins. of Economics 3
Mt 112—College Math. (Business) 3	Mt 122—Calculus (Business)..... 3
Th 111—Intro. to Theology 3	PI 220—Phil. of Man 3
IS 100—Prins. of Data Processing 3	En 101—English Composition* 3
Total 15	Total 15

Sophomore Year

BA 280—Legal Environment 3	BA 270—Business Statistics 3
IR 210—Human Resources 3	Fi 255—Business Finance 3
Mg 100—Prins. of Management 3	Mk 100—Prins. of Marketing 3
PI 230—Metaphysics 3	Theology Elective 3
Humanities Elective 3	Humanities Elective 3
Total 15	Total 15

Junior Year

IS 341—Systems Analysis & Design ... 3	IS 345—Data Process. Info. Systems .. 3
IS 344—COBOL Programming 3	IS 343—FORTRAN Programming 3
PI 240—Prins. of Ethics 3	Theology Elective 3
Science Elective 3	Science Elective 3
Social Science Elective 3	Social Science Elective 3
Total 15	Total 15

Senior Year

IS—Electipe 3	IS—Elective 3
Humanities Elective 3	Ec 250—Money and Banking 3
Philosophy Elective 3	Humanities Elective 3
Electives 6	Philosophy Elective 3
Total 15	Total 15

* Required, unless exempted through a test-out program. See pages 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Management)

Contributions of the business world to society are largely dependent on good management.

The objectives of this program are to facilitate such contributions by:

1. Providing specialized professional training in the principles and the practices for the effective operation of the business organization.
2. Stimulating the application of sound philosophical principles to the wide range of problems encountered by management.
3. Aiding in the development of the student's intellect and personality to prepare him for leadership in society.

The number of required hours for a management major is 21 hours, including the required beginning course (Mg 100 Principles of Management). All Management courses are open to the candidate as possible electives for his major.

The B.S.B.A. Degree in Management is designed for individuals who have career aspirations among the following job opportunities:

- Management trainee
- Personnel trainee
- Business education*
- Pre-law

*Students interested in teaching certification in Business should consult with the Chairman of the Education Department for certification requirements.

B.S.B.A. (Management)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

Ac 100—Prins. of Accounting	3	Ac 101—Prins. of Accounting	3
Ec 101—Prins. of Economics	3	Ec 102—Prins. of Economics	3
Mt 112—College Math. (Business)	3	Mt 122—Calculus (Business)	3
Pl 220—Phil. of Man	3	Th 111—Intro. to Theology	3
IS 100—Prin. of Data Processing	3	En 101—English Composition*	3
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Total	15	Total	15

Sophomore Year

BA 280—Legal Environment	3	BA 270—Business Statistics	3
IR 210—Human Resources	3	Fi 255—Business Finance	3
Mg 100—Prins. of Management	3	Mk 100—Prins. of Marketing	3
Pl 230—Metaphysics	3	Theology Elective	3
Humanities Elective	3	Humanities Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Junior Year

Mg—Elective	3	Mg—Electives	6
Pl 240—Prins. of Ethics	3	Theology Elective	3
Science Elective	3	Science Elective	3
Social Science Elective	3	Social Science Elective	3
Humanities Elective	3	<hr/>	
Total	15	Total	15

Senior Year

Mg—Electives	6	Ec 250—Money and Banking	3
Philosophy Elective	3	Mg—Elective	3
Electives	6	Philosophy Elective	3
<hr/>		Theology Elective	3
Total	15	Humanities Elective	3
<hr/>		<hr/>	
Total	15	Total	15

*Required, unless exempted through a test-out program. See page 34.

THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (Marketing)

Marketing is the dynamic process by which individuals and organizations strive to anticipate and satisfy consumers' product needs and wants. In a free enterprise, freedom of choice society, this is accomplished through marketing research, product planning and pricing, promotion (advertising and selling), and distribution.

The marketing major develops an understanding of the concepts, functions and institutions of marketing, an appreciation of consumer orientation, and the ability to analyze marketing problems and formulate marketing policies.

This program is particularly relevant to the student planning a career in sales, advertising, consumer relations, merchandising, brand management, marketing management, marketing research, retailing, services, purchasing, business logistics, small business operations, executive management, consulting, business education, or work in certain government agencies.

Students seeking the B.S.B.A. (Marketing) degree must fulfill the following requirements in the major: Mk 100 Principles of Marketing (this is fulfilled in the general core curriculum requirements in the College of Business Administration); Mk 202 Marketing Research; Mk 204 Marketing Management; Mk 299 Marketing Planning and Analysis; and nine semester hours of electives in upper division courses in Marketing.

Electives are available in various aspects of the general University core curriculum and as free electives to satisfy special student interests and needs and to complete the minimal degree requirements.

B.S.B.A. (Marketing)

Recommended Sequence of Program

First Semester

Sem. Hrs.

Second Semester

Sem. Hrs.

Freshman Year

Ac 100—Prins. of Accounting	3	Ac 101—Prins. of Accounting	3
Ec 101—Prins. of Economics	3	Ec 102—Prins. of Economics	3
Mt 112—College Math. (Business)	3	Mt 122—Calculus (Business)	3
PI 220—Phil. of Man	3	Th 111—Intro. to Theology	3
IS 100—Prin. of Data Processing	3	En 101—English Composition*	3
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Total	15	Total	15

Sophomore Year

BA 280—Legal Environment	3	BA 270—Business Statistics	3
IR 210—Human Resources	3	FI 255—Business Finance	3
Mg 100—Prins. of Management	3	Mk 100—Prins. of Marketing	3
PI 230—Metaphysics	3	Theology Elective	3
Humanities Elective	3	Humanities Elective	3
<hr/>		<hr/>	
Total	15	Total	15

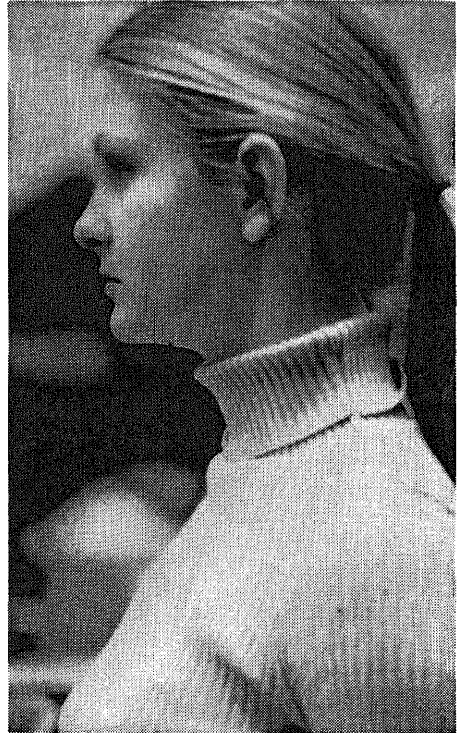
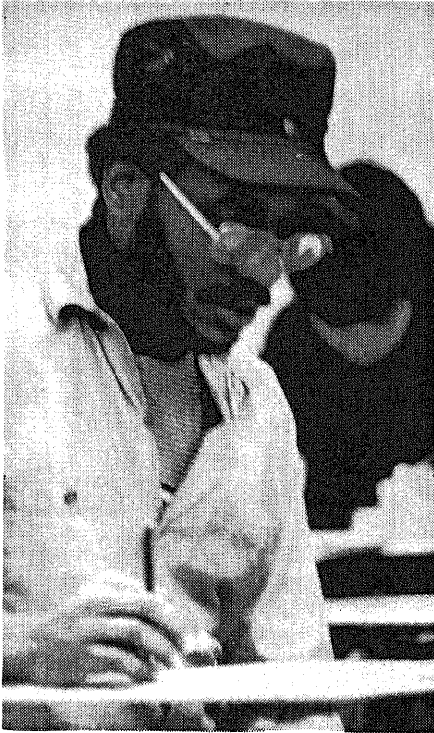
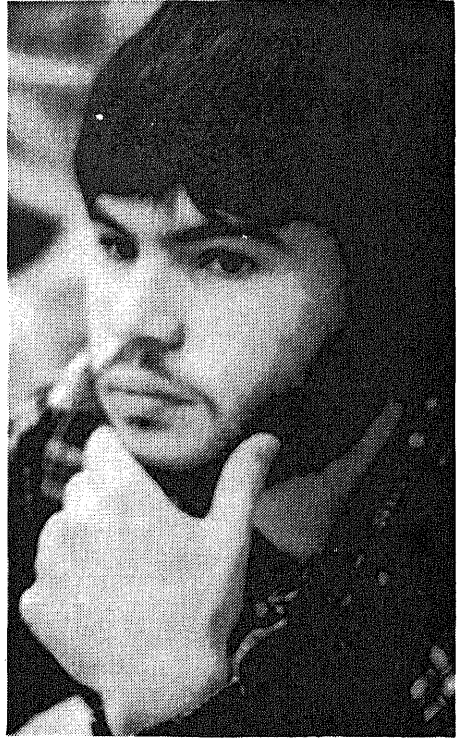
Junior Year

Mk—Elective	3	Mk 202—Marketing Research	3
PI 240—Prins. of Ethics	3	Mk—Elective	3
Science Elective	3	Science Elective	3
Social Science Elective	3	Social Science Elective	3
Humanities Elective	3	Theology Elective	3
<hr/>		<hr/>	
Total	15	Total	15

Senior Year

Ec 250—Money and Banking	3	Mk 299—Marketing Planning & Analysis	3
Mk 204—Marketing Management	3	Philosophy Elective	3
Mk—Elective	3	Theology Elective	3
Philosophy Elective	3	Humanities Elective	3
Elective	3	Elective	3
<hr/>		<hr/>	
Total	15	Total	15

*Required, unless exempted through a test-out program. See page 34.



Departments—

The College of Arts and Sciences

The Arabic numeral in parentheses following course titles indicates the number of semester credit hours which the course carries.

Biology (BI)

Staff: DR. CUSICK, *chairman*; DR. HEDEEN, FR. PETERS, MR. PETRI, DR. TAFURI
Laboratory Instructors: MRS. CUSICK, MR. PECQUET

BI 102-109 may not be taken for biology major, pre-medical, or pre-dental requirements.

BI 110-111 and 112-113 are required as introduction to all 200 level courses. In exceptional cases, BI 102-105 may be considered as full or partial fulfillment. Additional prerequisites are listed with specific courses.

(*) Courses so designated are approved as electives for curricular requirements in science, subject to limitations as indicated.

Lecture and laboratory sections of each course must be taken concurrently.

Lower Division Courses

- *102 **LIFE.** (2) Man, environment, living things. Cells to populations: heredity, evolution, ecology,
- *104 development, reproduction, behavior, plants, microbes and human life.
- *103 **LIFE LABORATORY.** (1) Each semester to accompany BI 102, 104 respectively. Exercises, experiments, and field trips.
- *105
- 106 **HUMAN ANATOMY AND PHYSIOLOGY I.** (2) The major human systems emphasizing, during this semester, the skeletal, muscular, digestive, and respiratory systems.
- 107 **HUMAN ANATOMY AND PHYSIOLOGY I LABORATORY.** (1) Human skeletal material and dissection of a representative mammal. Histology of tissues and organs with physiological exercises and demonstrations.
- 108 **HUMAN ANATOMY AND PHYSIOLOGY II.** (2) Continuation of BI 106 stressing the circulatory, excretory, nervous, endocrine, and reproductive systems.
- 109 **HUMAN ANATOMY AND PHYSIOLOGY II LABORATORY.** (1) Continuation of anatomical approach of BI 107 with related physiological studies and demonstrations.
- 110 **GENERAL ZOOLOGY I.** (2) Principles of biology, classical and molecular, emphasizing the anatomy, physiology, development, and behavior of vertebrates. Introduction to most 200 level courses.
- 111 **GENERAL ZOOLOGY I LABORATORY.** (2) The frog and microscopic study of vertebrate tissues. Development and physiological characteristics of cells, tissues, organs, plus vertebrate behavior.
- 112 **GENERAL ZOOLOGY II.** (2) A continuation of BI 110, Invertebrate phyla: morphology, physiology, classification, life histories, and behavior. Topics in heredity, evolution and ecology.
- 113 **GENERAL ZOOLOGY II LABORATORY.** (2) Each major phylum is studied with extensive use of living organisms. Genetic materials, fossils and invertebrate behavior patterns are examined.
- 114 **INTRODUCTION TO THE LIFE SCIENCES.** (3) Cells, heredity, ecology, and evolution. Plants and animal morphology and physiology, especially man. For B.S. (Elementary Education) curriculum only.

Biology

- 115 **INTRODUCTION TO THE LIFE SCIENCES LABORATORY.** (1) Exercises and field trips to illustrate principles of ecology, evolution, behavior, taxonomy, vertebrate organization, genetics, and cell biology.
- 120 **GENERAL BOTANY.** (3) The morphology, physiology, reproduction of representatives of each plant division are studied. Seed plants are stressed. Prerequisite: BI 102-105 or BI 110-113.
- 121 **GENERAL BOTANY LABORATORY.** (1) Living and preserved specimens of representatives of the various plant groups are studied. Demonstration of pertinent principles of plant physiology.
- 195 **DIRECTED STUDY.** Credit to be arranged.

Upper Division Courses

- 200 **ADVANCED BOTANY.** (2) Representatives of the various plant divisions stressing the physiology and reproduction of these organisms. The effects of plants on the activities of man. Prerequisite: BI 120-121.
- 201 **ADVANCED BOTANY LABORATORY.** (2) Plants in the field and laboratory. Aspects of plant physiology, together with methods of collecting, preserving, and identifying plants.
- 210 **GENERAL MICROBIOLOGY.** (2) The physiology and morphology of the algae, bacteria, and fungi. The beneficial and detrimental effects of these organisms to man and his environment.
- 211 **GENERAL MICROBIOLOGY LABORATORY.** (2) Methods of isolation and culture of the algae, bacteria, and fungi. Techniques of classification of these organisms.
- 212 **GENERAL BACTERIOLOGY.** (2) The morphology, classification, physiology and genetics of bacteria including the impact of these organisms on man. Prerequisite: BI 110-113
- 213 **GENERAL BACTERIOLOGY LABORATORY.** (2) The techniques for isolation, identification, culturing, and physiological study of bacteria.
- 230 **GENETICS.** (3) Principles of heredity. Genetic control of development. Population genetics. Prerequisites: BI 102-105 or BI 110-113.
- 231 **GENETICS LABORATORY.** (1) Techniques of investigating fundamental genetic principles. The fruit fly as an experimental animal with studies of bacterial genetics.
- 240 **EVOLUTION.** (2) Evidence for and the mechanisms of evolutionary processes. Prerequisite: BI 102-105 or BI 110-113.
- 244 **ANIMAL BEHAVIOR.** (2) Relates innate, learned, aggressive, social, and sexual behavior of animals as evolutionary products. Prerequisite: BI 102-105 or BI 110-113.
- 250 **GENERAL ECOLOGY.** (2-3) The relationships between organisms and their living and non-living environments. Prerequisite: BI 102-105 or BI 110-113.
- 251 **GENERAL ECOLOGY LABORATORY.** (1-2) Laboratory and field exercises to illustrate ecological principles. Local aquatic and terrestrial habitats are investigated and their biotic elements identified.
- 270 **PARASITOLOGY.** (2) Animal parasites: their life cycles, morphology, physiology, host-parasite relationships, and implications in disease. Prerequisite: BI 110-113.
- 271 **PARASITOLOGY LABORATORY.** (2) Living and preserved specimens illustrating the life cycles of major parasitic forms.
- 280 **TOPICS IN BIOLOGY.** (1-3) Short term courses designed to explore biological phenomena of current interest. Prerequisite: BI 102-105 or BI 110-113.
- 290 **SPECIAL PROBLEMS IN BIOLOGY.** (1-4) Independent study in some specialized area of biology. Prerequisite: permission of the Chairman. Laboratory fee.
- 300 **GENERAL AND VERTEBRATE EMBRYOLOGY.** (2) The morphological and physiological aspects of vertebrate development.

- 301 **GENERAL VERTEBRATE EMBRYOLOGY LABORATORY.** (2) A study of gametogenesis, fertilization, cleavage, gastrulation, and organogenesis. Living materials illustrate principles of development.
- 310 **COMPARATIVE ANATOMY OF THE VERTEBRATES.** (2) The morphology and morphogenesis of the vertebrates and their evolution. Prerequisite: BI 300.
- 311 **COMPARATIVE ANATOMY OF THE VERTEBRATES LABORATORY.** (2) Observation and analysis of structure and function in relation to adaptations, and to the development of dissecting skills.
- 320 **VERTEBRATE GENERAL HISTOLOGY.** (2) Animal tissues; structure and function as revealed by light microscopy, electron microscopy, and histochemistry. Prerequisite: Senior standing or permission of instructor.
- 321 **VERTEBRATE GENERAL HISTOLOGY LABORATORY.** (2) A microscopic study of fixed materials employing routine and histochemical techniques to demonstrate cell, tissue, and organ morphology.
- 340 **BIOLOGICAL BASIS OF ANIMAL BEHAVIOR.** (2) Functions of receptors, central nervous system, and effectors involved in the responses of animals to environmental changes.
- 341 **BIOLOGICAL BASIS OF BEHAVIOR LABORATORY.** (1) Gross and microscopic structure of adult and developing vertebrate nervous systems. Use of instrumentation to modify the environment and record responses.
- 360 **GENERAL VERTEBRATE PHYSIOLOGY.** (2) Contraction, perception, digestion, metabolism, circulation, respiration, coordination and excretion in vertebrates. Prerequisite: BI 110, 112, senior standing, or permission of instructor.
- 361 **GENERAL VERTEBRATE PHYSIOLOGY LABORATORY.** (2) Exercises requiring careful preparation of living materials and observation of their functional responses using modern instrumentation.
- 370 **BIOCHEMISTRY.** (3) (Ch 370).
- 393 **ZOOS ARE CLASSROOMS.** (1) Demonstrates how zoos may be used to teach biological principles.
- 394 **LOCAL RESOURCES FOR TEACHING LIFE SCIENCES.** (2) Demonstrates how museums, nature centers, parks and farms may be utilized to teach biology.
- 395 **DIRECTED STUDY.** Credit to be arranged.
- 398 **METHODS OF BIOLOGICAL RESEARCH.** (1-2) The gathering of experimental data from living organisms and its interpretation. Prerequisite: senior standing and approval of the Chairman.
- 399 **METHODS OF BIOLOGICAL RESEARCH.** (1-2) A continuation of BI 398 emphasizing experimental design and controls together with the written and oral presentation of scientific reports.

Chemistry (Ch)

Staff: DR. DUBE, *chairman*; DR. GARASCIA, DR. JOHNSON, DR. KLINGENBERG,
DR. O'NEILL, FR. THEPE

(*) Courses so designated are approved as electives for curricular requirements in science, subject to limitations as indicated.

Lower Division Courses

- *102 **MEN, MOLECULES AND THE ENVIRONMENT I.** (2) A terminal course for the non-science major. Chemical principles as a basis for understanding life. Applications of interest to the modern student.

Chemistry

- *103 **MEN, MOLECULES AND THE ENVIRONMENT I LABORATORY.** (1) Chemical experimentation which illustrates the applications described in Ch 102. Field trips will be included.
- *104 **MEN, MOLECULES AND THE ENVIRONMENT II.** (2) A continuation of Ch 102 including a treatment of drugs, air and water pollution, disease and chemotherapy.
- *105 **MEN, MOLECULES AND THE ENVIRONMENT II LABORATORY.** (1) A continuation of Ch 103.
- 107 **CHEMISTRY OF RADIOGRAPHIC FILM PROCESSING.** (1) Historical development of X-ray film and darkroom accessories. The nature of processing solutions. Darkroom apparatus and techniques.
- 110 **GENERAL CHEMISTRY I.** (3) Basic principles and descriptive facts. Atomic and molecular structure, states of matter, solutions, kinetics, and equilibrium. A pre-professional course.
- 111 **GENERAL CHEMISTRY I LABORATORY.** (1) Practice in the basic operations of chemical laboratory work. Experiments illustrate topics and principles covered in Ch 110. One three-hour period per week.
- 112 **GENERAL CHEMISTRY II.** (3) A continuation of Ch 110. Subjects include aqueous equilibrium, thermodynamics, electrochemistry, and the chemistry of representative elements. Prerequisite: Ch 110.
- 113 **GENERAL CHEMISTRY II LABORATORY.** (1-2) A continuation of Ch 111. The laboratory work includes qualitative and quantitative inorganic analysis. One or two three-hour periods per week. Prerequisite: Ch 111.
- 120 **PRINCIPLES OF PHYSICAL CHEMISTRY.** (3) For students in the life sciences, education and B.S. Chemical Science programs. Aspects of physical chemistry most relevant to living systems. Prerequisite: Ch 112.
- 130 **PHYSICAL CHEMISTRY I.** (3) An introduction to theoretical chemistry with emphasis on thermodynamics and chemical equilibrium. Prerequisites: Ch 112, Mt 120, and Ph 108.
- 131 **PHYSICAL CHEMISTRY I LABORATORY.** (1) A course to accompany Ch 130 and to illustrate by means of selected experiments principles discussed in Ch 130. Prerequisite: Ch 113.
- 132 **PHYSICAL CHEMISTRY II.** (3) A continuation of Ch 130. Chief emphasis is on chemical kinetics and the states of matter. Prerequisite: Ch 130.
- 133 **PHYSICAL CHEMISTRY II LABORATORY.** (1) A course to accompany Ch 132 and to illustrate, by selected experiments, principles discussed in Ch 132. Prerequisite: Ch 131.
- 140 **ORGANIC CHEMISTRY I.** (3) An introductory course treating the structure, preparation, reactions, and properties of organic compounds. Prerequisite: Ch 112.
- 141 **ORGANIC CHEMISTRY I LABORATORY.** (1) The practice of fundamental operations involved in the synthesis, separation, purification, and identification of organic compounds. Prerequisite: Ch 113.
- 142 **ORGANIC CHEMISTRY II.** (3) A continuation of Ch 140 which extends the treatment of fundamental organic chemistry. Some special topics are included. Prerequisite: Ch 140.
- 143 **ORGANIC CHEMISTRY II LABORATORY.** (1) A continuation of the laboratory work of Ch 141 with increased emphasis on the reactions and synthesis of organic systems. Prerequisite: Ch 141.
- 151 **ANALYTICAL CHEMISTRY.** (1) Lecture and Laboratory course. Basic concepts. Application of wet and instrumental analytical methods to substances of clinical interest. Prerequisite: Ch 113.
- 190 **CHEMICAL LITERATURE.** (1) An introduction to the nature and use of the chemical literature, general research procedures, and technical report writing. Prerequisite: junior standing.

Upper Division Courses

- 230 **PHYSICAL CHEMISTRY III.** (2) An introduction to quantum chemistry, kinetic theory, and molecular structure. Prerequisite: Ch 132.
- 245 **ORGANIC PREPARATIONS.** (1-2) Lecture or consultation and laboratory work dealing with the fundamental techniques and manipulations of organic synthesis. Prerequisite: Ch 143.
- 250 **QUALITATIVE ORGANIC ANALYSIS.** (3) The systematic identification of pure organic compounds and of mixtures. Instrumental methods of structure determination are included. Prerequisites: Ch 142, 143.
- 260 **INORGANIC CHEMISTRY.** (3) Modern theories of bonding and structure. Acid-base and redox chemistry based on thermodynamic principles. Coordination compound chemistry. Prerequisite: Ch 230.
- 261 **INORGANIC CHEMISTRY LABORATORY.** (1) Laboratory techniques and practice in synthetic inorganic chemistry. One laboratory period per week. Corequisite: Ch 260.
- 265 **INORGANIC PREPARATIONS.** One lecture or individual consultation, and three hours of laboratory work per credit hour. Laboratory preparation of various classes of inorganic compounds.
- 280 **INSTRUMENTAL ANALYSIS.** (2-3) Discussion of modern analytical chemistry with emphasis on instrumentation and measurement techniques. Prerequisite: Ch 132.
- 281 **INSTRUMENTAL ANALYSIS LABORATORY.** (2) Practice in the use of chemical instrumentation as available. Two three-hour periods per week. Prerequisites: Ch 133, 280.
- 290 **PROBLEMS IN PHYSICAL CHEMISTRY.** Credit by arrangement. Conferences and direction in library and/or laboratory work in some area of physical chemistry. A charge will be made for materials used.
- 291 **PROBLEMS IN ORGANIC CHEMISTRY.** Description as for Ch 290, but work done is in some area of organic chemistry.
- 292 **PROBLEMS IN INORGANIC CHEMISTRY.** Description as for Ch 290, but work done is in some area of inorganic chemistry.
- 293 **PROBLEMS IN BIOCHEMISTRY.** Description as for Ch 290, but work done is in some area of biochemistry.
- 294 **PROBLEMS IN ANALYTICAL CHEMISTRY.** Description as for Ch 290, but work done is in some area of analytical chemistry.
- 295 **PROBLEMS IN RADIOCHEMISTRY.** (See Ch 290-294).
- 300 **CHEMISTRY SEMINAR.** (0).
- 320 **INTRODUCTION TO RADIOCHEMISTRY.** (2-3) Lecture and laboratory totaling four hours per week. Basic principles of radiochemistry and the methodology of instrumental techniques in the field.
- 340 **TOPICS IN ORGANIC CHEMISTRY.** (2) An extension of fundamental organic chemistry to include more specialized topics not previously considered or extensively treated. Prerequisite: Ch 142.
- 370 **BIOCHEMISTRY.** (3) A lecture course treating the chemistry and biochemistry of carbohydrates, lipids, and proteins. Special topics are included as time permits. Prerequisite: Ch 142.
- 395 **DIRECTED STUDY.** Credit to be arranged.
- 398 **CHEMICAL RESEARCH I.** (1) Directed reading and undergraduate laboratory research required of all chemistry majors in their senior year. A charge will be made for materials used.
- 399 **CHEMICAL RESEARCH II.** (1) A continuation and conclusion of research begun in Ch 298. No additional charge for materials will be made. A written thesis is required as a final report of the activities of Ch 298 and 299.

Chemistry

Graduate Courses

- 500 **GRADUATE CHEMISTRY SEMINAR.** No credit. Critical discussion of, and progress reports on, theses and special topics by graduate students and staff members. Required each semester for all full-time graduate students.
- 520 **RADIOCHEMISTRY.** (2) Principles of radiochemistry, properties of nuclides, advanced instrumental techniques, and methodology of radiochemical applications. Prerequisite: Ch 320 or its equivalent.
- 521 **RADIOCHEMISTRY LABORATORY.** (1-2) Laboratory and instrumental technique in radiochemistry. Prerequisite: Ch 320. Corequisite: Ch 520.
- 525 **THERMODYNAMICS.** (2) Classical and statistical thermodynamics and the kinetic theory of gases.
- 530 **CHEMICAL KINETICS.** (2) Subjects covered include collision and transition state theories, experimental methods, and the differential and integrated rate expressions for a variety of mechanisms.
- 535 **THE CHEMICAL BOND.** (2) An introduction to the quantum theory of valence emphasizing calculations on molecular structure.
- 538 **INTRODUCTION TO VIBRATIONAL SPECTROSCOPY.** (2) The theory of vibrational-rotational molecular spectroscopy.
- 550 **ORGANIC STEREOCHEMISTRY.** (2) Fundamental structural theory applied to organic compounds. Geometrical, optical, and conformational isomerism. The stereochemical factors in certain organic reactions.
- 555 **HETEROCYCLIC ORGANIC CHEMISTRY.** (2) The application of fundamental organic reactions as applied to the heterocyclic organic molecules. Two lectures per week.
- 570 **NEWER METHODS OF SYNTHETIC ORGANIC CHEMISTRY.** (2) Treatment of recently developed reagents, techniques, and processes in synthetic organic chemistry.
- 580 **ADVANCED ORGANIC PREPARATIONS.** (1-3) Lectures and/or consultation, and three hours of laboratory work per week per credit hour. A laboratory course.
- 590 **ORGANIC REACTION MECHANISMS.** (2) Theories of reaction mechanisms in organic systems and the experimental bases for these theories.
- 595 **ORGANOMETALLIC CHEMISTRY.** (2) Organometallic compounds and their chemistry. Synthesis, isolation, bonding, structure, and reactions are covered.
- 610 **TRANSITION METAL CHEMISTRY.** (2) The structure and reactions of coordination compounds based on an adjusted crystal field approach.
- 612 **ADVANCED INORGANIC CHEMISTRY.** (2) The structure, bonding, and periodic properties of the representative elements. Acid-base and redox reactions will be covered.
- 630 **ADVANCED BIOCHEMISTRY.** (2) A review and extension of fundamental biochemistry. Lectures supplemented by library assignments. Prerequisite: Ch 370 or its equivalent.
- 640 **MEDICINAL CHEMISTRY.** (2) The organic chemistry of medicinal products. Structure-activity relationships will be stressed.
- 660 **CHEMICAL SEPARATIONS.** (2) Methods of chemical separation and their application in chemical analysis. Emphasis to be placed on the theory, techniques, and applications of current importance.
- 670 **CHEMICAL MEASUREMENTS.** (2) Methods for measuring the properties of chemical systems. Modern methods will be stressed, especially those based on the optical and electrical properties of systems.
- 680 **INSTRUMENTAL METHODS.** (1-2) A lecture and laboratory course to prepare the student for graduate study and research. Laboratory work consists of practice in the use of available instruments.

- 685 **SYNTHESIS AND CHARACTERIZATION OF CHEMICAL COMPOUNDS.** (2) Laboratory course. Synthesis of organic and inorganic materials. Demonstration of their identity and purity. Prerequisite: Ch 680 or equivalent.
- 690, 694 **SPECIAL TOPICS.** (2) Selections from the four major fields of chemistry. Varied topics representative of important phases of chemistry not treated in regular course work.
- 695 **SPECIAL STUDY.** (1) A short-term lecture series on special topics, emphasizing continuing education for practicing scientists. May be taken as a lecture series without credit.
- 699 **MASTER'S THESIS.** (6) Laboratory and library research under the supervision of a departmental research advisor. A final written thesis is required for those desiring the Master's degree in chemistry.

Classical Languages

Staff: DR. MURRAY, *chairman*; FR. BURKE, FR. FELTEN, SR. RUTH GRAF, DR. HARKINS, DR. RETTIG

(*) Courses so designated are approved as electives for curricular requirements in humanities, subject to limitations as indicated.

Classical Culture (CI)

NOTE: Courses with the CI designation require no knowledge of an ancient language.

Upper Division Courses

- 202 **HISTORY OF ANCIENT GREECE.** (3) The prehistoric period to the Hellenistic Age. (Gk 202, Hs 202).
- 206 **HISTORY OF ANCIENT ROME.** (3) The legendary beginnings. The period of the republic. The first century of the principate. (Hs 206, Lt 206).
- *241 **GREEK LITERATURE IN TRANSLATION.** (3) Masterworks of classical Greece: the epic, comedy, tragedy, lyric, the historians and philosophers. (En 241).
- *244 **LATIN LITERATURE IN TRANSLATION.** (3) Great works of ancient Rome: drama, epic, didactic poetry, lyric, satire, the "novel", history. (En 244).
- *248 **CLASSICAL MYTHOLOGY.** (3) The major myths reflected in ancient Greek and Latin literature. The meaning of the myths. Their influence on later ages. (En 248).
- *333 **MEN AND IDEAS IN GREECE AND ROME.** (3) Cultural ideals and values which shaped and motivated the institutions and persons of Greece and Rome. The outstanding personalities who typified, or actually helped shape those values.
- *345 **INTRODUCTION TO THE CHURCH FATHERS.** (3) The first centuries of Christianity as they are reflected in patristic writers. The chief Fathers. The evolution of doctrine. The unfolding of revelation. The consciousness of the indwelling spirit. (Th 345).
- 395 **DIRECTED STUDY.** Credit to be arranged.

Greek (Gk)

Lower Division Courses

- 101 **ELEMENTARY GREEK.** (5) One semester. The ancient Greek language. Syntax, vocabulary and morphology. The skills necessary to read ancient Greek.
- 102 **INTRODUCTION TO GREEK LITERATURE.** (5) One semester. A continuation of Gk 101 with readings from simpler Greek texts.
- *151 **HOMER.** (3) Readings from *The Iliad*.
- *152 **HOMER.** (3) Selected portions of *The Odyssey*.
- *162 **EURIPIDES: MEDEA.** (3)
- *172 **PLATO.** (3) *The Apology* and other selections.

Classical Languages

Upper Division Courses

- *202 HISTORY OF ANCIENT GREECE. (3) (Hs 202).
- *207 XENOPHON. (3)
- *208 DEMOSTHENES: PHILIPPICS AND OLYNTHIACS. (3)
- *212 HERODOTUS. (3)
- *217 LYSIAS. (3)
- *251 HOMER: ILIAD. (3) A study of the Greek epic.
- *252 HOMER: ODYSSEY. (3)
- *260 SOPHOCLES. (3) *The Oedipus Tyrannus* and *Antigone*.
- *262 EURIPIDES. (3)
- *303 DEMOSTHENES: THE CROWN. (3)
- *331 THUCYDIDES. (3-4)
- *363 AESCHYLUS. (3)
- *364 ARISTOPHANES. (3)
- *371 PLATO: THE REPUBLIC. (3)
- *372 PLATO: DIALOGUES. (3)
- *388 HISTORY OF GREEK LITERATURE. (3)
- *397 SPECIAL STUDY. Credit to be arranged. Greek poetry.
- *398 SPECIAL STUDY. Credit to be arranged. Greek prose.
- 399 SENIOR COMPREHENSIVE REVIEW. (2)

Hebrew (He)

Lower Division Courses

- 111 ELEMENTARY BIBLICAL HEBREW I. (3)
- 112 ELEMENTARY BIBLICAL HEBREW II. (3)
- 121 INTERMEDIATE BIBLICAL HEBREW I. (3)
- 122 INTERMEDIATE BIBLICAL HEBREW II. (3)

Latin (Lt)

Lower Division Courses

- 101 ELEMENTARY LATIN. (3) The ancient Latin language. Syntax, vocabulary and morphology. The skills necessary to read Latin.
- 102 INTRODUCTION TO LATIN LITERATURE. (3) A continuation of Lt 101 with readings from simpler Latin texts.
- 113 LATIN COMPOSITION I. (3)
- 114 LATIN COMPOSITION II. (3)
- 115 INTERMEDIATE LATIN. (3) For students who have already had some Latin. Review of Latin grammar, syntax and vocabulary with some readings.
- 128 CICERO. (3) *The De Senectute* and/or the *De Amicitia*.
- 131 HORACE: ODES. (3)
- 151 VIRGIL: AENEID I-VI. (3)
- *153 VIRGIL: AENEID VII-XII. (3)
- 161 PLAUTUS AND TERENCE. (3) Selected readings.

Upper Division Courses

- *206 HISTORY OF ANCIENT ROME. (3) (Hs 206).
- *211 LIVY. (3)
- *212 TACITUS: AGRICOLA, GERMANIA. (3)
- *214 LATIN PROSE STYLE. (3)
- *220 CICERO: PRO ARCHIA, PRO LEGE MANILIANA, AND PRO MARCELLO. (3)
- *221 CICERO: PRO MILONE. (3)
- *222 INTRODUCTION TO A STUDY OF THE LATIN FATHERS. (3)
- *231 HORACE: ODES. (3)
- *251 VIRGIL: AENEID. (3)
- *261 ROMAN COMEDY. (3)
- *301 ROMAN ORATORY. (3)
- *308 CAESAR. (3)
- *309 PLINY: SELECTED LETTERS. (3)
- *312 TACITUS: THE ANNALS. (3)
- 313 ADVANCED LATIN COMPOSITION. (3)
- 314 LATIN STYLE. (3)
- *318 ROMAN HISTORIANS. (3)
- *319 CICERO: LETTERS. (3)
- *328 CICERO: ESSAYS. (3)
- *331 HORACE: SATIRES, EPISTLES. (2-3)
- *332 CATULLUS. (3)
- *335 EARLY CHRISTIAN POETS. (3)
- *338 MEDIAEVAL LATIN. (3)
- *355 JUVENAL. (3)
- *356 ROMAN SATIRE. (3)
- *371 CICERO: TUSCULAN DISPUTATIONS. (3)
- *372 CICERO: DE OFFICIIS. (3)
- *388 HISTORY OF LATIN LITERATURE. (3)
- *391 LUCRETIVS. (3)
- *397 SPECIAL STUDY. Credit to be arranged. Latin poetry.
- *398 SPECIAL STUDY. Credit to be arranged. Latin prose.
- 399 SENIOR COMPREHENSIVE REVIEW. (2-3)

Communication Arts (CA)

Staff: FR. FLYNN, *chairman*; MR. ADRICK, FR. HAGERTY, MR. KVAPIL,
DR. LUNSFORD, MR. MAUPIN

Assisted by: MR. ANTHONY, MR. BENKERT, MR. GUSHURST, MR. POHLMAN,
MR. ROGERS, MR. WILSON

(*) Courses so designated are approved as electives for curricular requirements in humanities, subject to limitations as indicated.

Basics

- *101 **ORAL COMMUNICATION.** (3) Speech fundamentals as applied to interpersonal, public and group speaking. Projects in listener analysis, development of ideas, and delivery.
- 102 **VOICE AND DICTION.** (3) Principles and practice of voice production as applied to expression and vocal variety. Articulation, enunciation, and pronunciation, following IPA and dictionary usage.
- 122 **WRITTEN COMMUNICATIONS AND REPORTS.** (3) Basic written communication. Effective business letters and reports. Devices of practical communication.
- *200 **INTERPERSONAL COMMUNICATION.** (3) Understanding of and laboratory practice in effective communication between persons.
- 201 **ORAL INTERPRETATION.** (3) Projection, body control, communication of mood and emotion, and vocal amplification as related to public reading. Prerequisite or corequisite: CA 101, 102, or approval of chairman.
- *203 **COMMUNICATION THEORY.** (3) Nature, purpose, scope, and process of communication. Models, learning, language, and certain theories of communication.
- *204 **THEORIES OF MASS MEDIA.** (3) Models and processes of mass communication. Reciprocal effects of media and audiences. Theorists studied: McLuhan, Lasswell, Katz and Lazarsfeld. Prerequisite: CA 203 or approval of instructor.
- 206 **EFFECTIVE WRITING.** (3) Basic elements of compositional style. Format for research writing. Open only to CA majors.

Film

- 207 **PHOTOGRAPHY I.** (3) The camera—its structure and use. Composition, pictorial arrangement, techniques in shooting. Optics and exposures. Emulsions, filters, and lighting. Techniques of laboratory developing.
- 208 **PHOTOGRAPHY II.** (3) Lecture-lab experience to improve skills in creating and developing quality photographs. Prerequisite: CA 207 or approval of instructor.
- *211 **ART OF THE FILM.** (3) Film as an art form, treating grammar, sound, color, light, motion, animation, editing, rhythm, and directors. Each student will make a short film connected with lab sessions.
- *212 **FILM HISTORY AND DIRECTORS.** (3) Motion picture history. Current Hollywood and foreign film-makers. Underground and *avant-garde* films. Screenings.
- *213 **MEDIA AESTHETICS.** (3) Principles of visual and auditory aesthetics, as applied to motion pictures and television. Use of films, tapes and slides. Creative project required.
- *214 **FILM CRITICISM.** (3) Cultivating criteria for judging films, from viewing, analysis, reviews, and student critiques.
- *215 **NON-FICTION FILM.** (3) Documentary techniques of Grierson, Flaherty, Wiseman and others. Methods used in the propanganda films of Riefenstahl and Capra. Student project.
- 216 **FILM MAKING TECHNIQUES.** (3) Basic studies in the making of a film—economic, social, technical, planning, shooting, and editing. Students will make short films.

Radio-Television

- 218 **BROADCAST STATION MANAGEMENT.** (3) Study of station management, organization, and operational techniques.
- 219 **BROADCAST STATION SALES.** (3) Broadcast media as advertising vehicles. Station advertising, sales philosophy, operation, rates, ratings, analysis, guests and class sales presentations. Role of advertiser, agency and REP.
- 220 **BROADCAST ANNOUNCING.** (3) Career and qualifications. Principles, preparation and delivery of announcements, newscasts, and other projects. Lab work in WVVU-FM and XU-TV studios. Pre- or corequisite: CA 102 or approval of instructor.
- *221 **FUNDAMENTALS—RADIO-TV.** (3) American and foreign broadcasting systems bearing on technical, legal, and economic factors. Relations to programming, public responsibility, and mass audience research.
- 222 **CONTINUITY WRITING.** (3) Announcement and program writing for radio and television. Broadcast styles, scripts, and formats. Prerequisite: CA 206 or En 101 or equivalent.
- 223 **RADIO PRODUCTION.** (3) Basic radio composition. Audio techniques of program elements for commercials, drama, documentary and musical production, related to commercial, educational, and public broadcasting. Lab work in connection with WVVU-FM.
- 224 **BASIC EQUIPMENT OPERATION.** (3) Tools, techniques, and skills of radio and television production. On-the-job experiences taping the XU-TV Institute. M. Ed. students substitute CA 229 as basic course.
- 225 **BASIC TV DIRECTION-PRODUCTION.** (3) Procedures and techniques of program production by director and crew. The director, control room directing, and team cooperation. Programs are produced for regular airing. Pre- or corequisite: CA 224.
- 226 **ADVANCED TV DIRECTION-PRODUCTION.** (3) Theories and techniques of control room directing: staging, pacing, acting, dramatic effect, audience influence, and analysis of professional productions. Lab. Prerequisites: CA 224 and CA 225.
- 228 **EDUCATIONAL TELEVISION.** (2-4) (Ed 228). No prerequisite.
- 229 **TV TECHNIQUES FOR TEACHERS.** (3-4) Instructional television as incorporated into the field of instructional technology. Insight and understanding in applying television as a learning tool. (Ed 229).
- 230 **SPECIAL EFFECTS: TV PRODUCTION.** (3) Application of film, graphics, animation, lighting, studio and electronic effects to production of programs. Lab work in campus TV Studios and in Dana Film Studios. Prerequisite: CA 224 or 229.

Theatre

- *231 **HISTORY OF THE THEATRE.** (3) Theatrical practice in the western world from Greek to current times. Theatre and staging techniques.
- 232 **ACTING TECHNIQUES.** (3) Pantomime, improvisation, coordinating speech and movement, grouping, tempo rhythm and line reading. Lab work. Prerequisite: CA 102 or approval of instructor.
- 233 **PLAY DIRECTING.** (3) Basic directing. Interpreting a play in oral and visible form. Student participation in direction and stage management. Lab work.
- 234 **STAGECRAFT: THEATRE AND TV.** (3) Stagecraft for theatre and television. Construction and painting. Projects coordinated with television and theatrical productions. Lab work.
- 235 **PLAY PRODUCTION.** (3) The elements of production: organization, analysis and selection of plays, rehearsal and technical problems. Lab work.
- 237 **LIGHTING: THEATRE, TV, FILM.** (3) Lighting instruments, control units, and color. Theories on illumination for stage, television, and film studios. Lab work coordinated with campus productions.

Communication Arts

- *238 **THEATRE APPRECIATION.** (3) Critical analysis of the play as a composite art, experienced through performance. Reports on theatrical productions.
- 239 **THEATRE ARTS I.** (3) History of stage costume. Basic design elements, fabrics, and patterns. Principles, materials, and procedures for effective execution of theatrical makeup.
- 240 **ACTING I.** (3) Styles of acting. Creating different kinds of roles and characterization. Lab work.
- 331 **STUDIES IN THE MUSICAL COMEDY.** (3) Origins and current technical styles of the American musical comedy. Productions. Oral and visual aids. Lab work.

Journalism—Public Relations

- *241 **PRINCIPLES OF JOURNALISM.** (3) Modern journalism. Print media. Extensive writing practice.
- 242 **NEWS WRITING.** (3) News writing, editing, and reporting. Stories—straight news, features, and humor. Development of individual style.
- 243 **RADIO-TV NEWS WRITING.** (3) Style and techniques of writing for radio and television. The visual content of television and news shows.
- 244 **COPYEDITING.** (3) The techniques of newspaper copyediting, writing headlines, makeup, news evaluation, picture editing. The law and the copyreader. Ethics for copyreaders and editorial management.
- 249 **JOURNALISM FOR TEACHERS AND PUBLICATIONS ADVISORS.** (3) Fundamentals of journalism. Writing, copy editing, headline writing and make-up applied to school publications.
- *251 **PUBLIC RELATIONS IN MODERN SOCIETY.** (3) Public relations in the modern world. Nature of communication and public opinion. Image concept and PR research. Public relations techniques.
- 252 **ADVANCED PUBLIC RELATIONS.** (3) Public relations for business, urban affairs, financial relations, trade associations, professional societies, labor unions, non-profit organizations and government. Prerequisite: CA 251.
- 253 **TECHNIQUES OF PUBLICITY.** (3) Public releases for mass media. Work with media representatives. News stories development. Planning general publicity programs.
- *254 **PUBLIC OPINION AND PROPAGANDA.** (3) Nature and functions of public opinion. Measurement by polls. Propaganda and its relationship to news and publicity. Techniques and role of propaganda.
- 344 **MAGAZINE WRITING.** (3) Writing non-fiction for American magazines. "Fillers" and full-length articles. Marketing. Querying editors.

Communication-Speech

- *260 **PRESENTATIONAL SPEAKING.** (3) Preparation and delivery of oral presentations for business and professions. Emphasizes persuasion, evidence, organized sequences, and uses of multimedia aids.
- 261 **PERSUASION.** (3) Logical, psychological, and personal appeals to influence belief, attitude, and behavior. Major forms of presuasive speaking. Prerequisite: approval of instructor.
- *263 **GROUP DISCUSSION.** (3) Principles and performance in group functions of leadership and participation. Procedures in decision-making and information-sharing. Study of major discussion forms.

- *265 **CREATIVE SPEAKING.** (3) Aristotle's logical, emotional, and ethical appeals of speech rhythm and of personal idiom. Distinctive American speeches since 1932. Prerequisite: approval of instructor.
- 266 **INTERVIEWING.** (3) Interpersonal situations as related to exercises in varied kinds of interviews. Preparation and participation in classroom and extra-classroom interviews.
- 268 **ADVANCED VOICE AND DICTION.** (3) Study of articulation and pronunciation, regional differences, dialectal variants. Practice in oral reading techniques for radio, television and public speaking.
- *269 **HISTORY OF COMMUNICATION.** (3) Man's efforts to exchange and record messages from primitive ages to our own times. Systems and methods, pictogram, ideogram, alphabet, language, printing, telegraphy, wireless, and television.
- *312 **MORALITY AND MASS MEDIA.** (3) (Th 312).
- 365 **CURRENT DIALOGUE: ISSUES AND SPEAKERS.** (3) Case study. Contemporary vital issues. Ideas about effective communication. TV talk shows, news programs, contemporary addresses and campaigns by prominent speakers.

Practicums

(CA Undergraduates Only)

Three hours of weekly lab or privately directed study merit one hour of credit. Arrangements to be made with instructor before registration, requiring written approval of chairman. Repeatable up to four hours. Prerequisite: a background of courses in a specific area.

- 271 **PRACTICUM IN FILM.** (1)
- 272 **PRACTICUM IN RADIO-TELEVISION.** (1)
- 273 **PRACTICUM IN THEATRE.** (1)
- 274 **PRACTICUM IN JOURNALISM—PUBLIC RELATIONS.** (1)
- 275 **PRACTICUM IN SPEECH.** (1)

Institutes and Workshops

- 281 **INSTITUTE: TEACHING FILM ART.** (2) (Summer Intersession only.) The grammar, technology, business, content, and art of film. Lectures and film.
- 282 **INSTITUTE: FILM—SIGNIFICANT FOREIGN DIRECTORS.** (2) (Summer Intersession only.) Lectures and films.
- 284 **WORKSHOP: CLASSROOM USE OF EDUCATIONAL TV.** (2) (Summer Intersession only.) Coordination of classroom teaching and television instruction.
- 287 **INSTITUTE: FILM—SIGNIFICANT AMERICAN DIRECTORS.** (2) (Summer Intersession only.)
- 288 **INSTITUTE: MEDIA TRAINING.** (2) (Summer only.) Audio and video studio operations. Use of graphics.

Educational Media

- 290 **AUDIOVISUAL COMMUNICATION.** (3) Audiovisual materials in the learning process. Uses, advantages, and limitations. Making basic instructional materials. Use of audiovisual equipment. (Ed 290).
- 291 **VISUAL COMMUNICATIONS DESIGN.** (3) Visualization in the communication process. Research, selection, and utilization of visual material. Evaluation of visual communication. (Ed 291).
- 292 **ORGANIZATION AND ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS.** (3) (Ed 292).

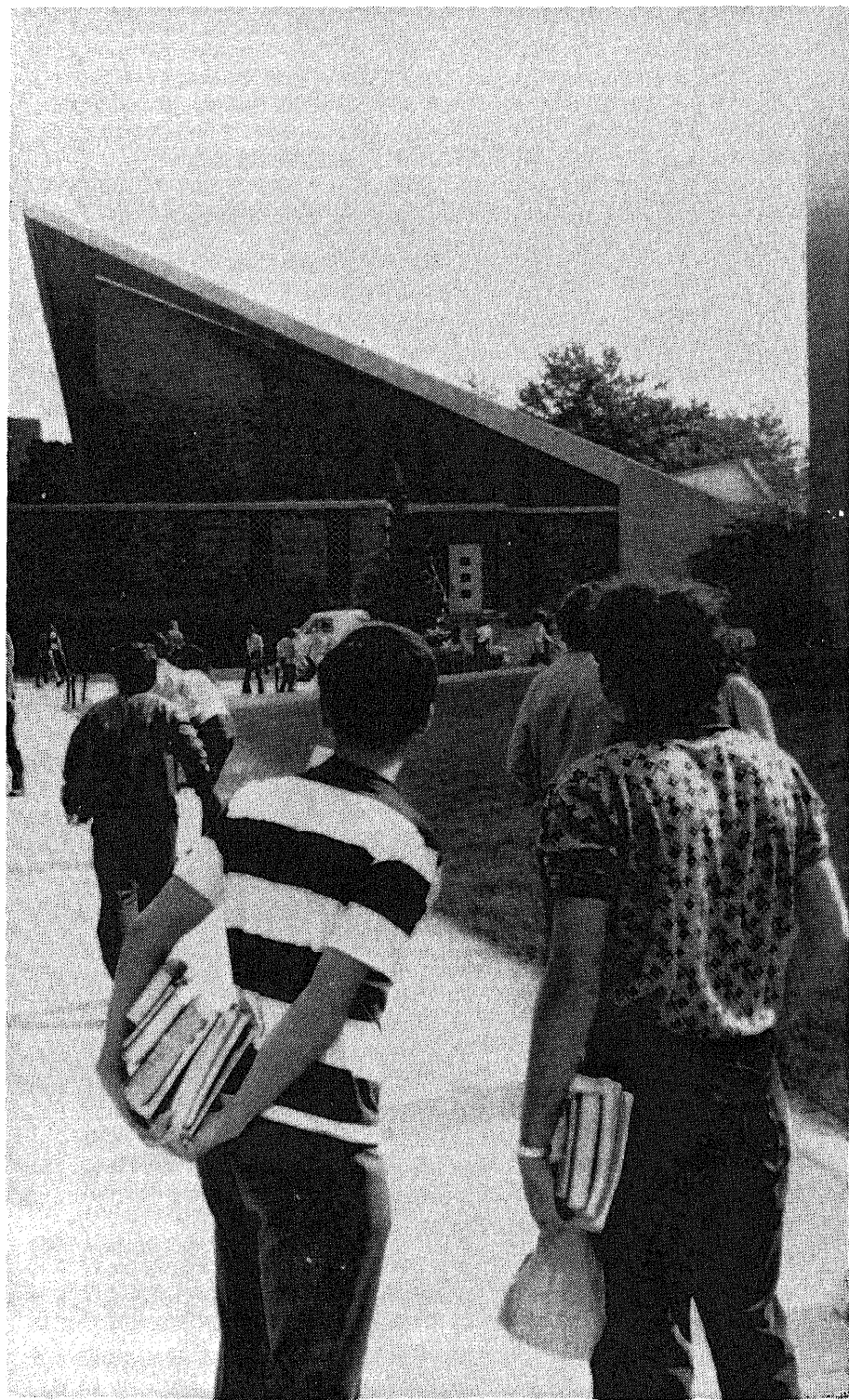
Special Study

299 **SPECIAL STUDY.** Credit to be arranged. Applicable to all areas and to all students.

Computer Science (CS)

Staff: DR. DELANEY, *director*; Mathematics Department Staff.

- 113 **FORTRAN PROGRAMMING.** (3) FORTRAN-IV computer programming language. Writing programs. Computer experience. Problems in science and business. (Not acceptable for Computer Science major).
- 125 **INTRODUCTION TO COMPUTING I.** (2) Use of the Xavier Time-Sharing System. Basic-plus language. Introduction to programming. Applications in calculus and other areas. Corequisite: A Calculus course.
- 126 **INTRODUCTION TO COMPUTING II.** (1) Advanced topics in basic-plus, algorithms, structured programming, verification, documentation. To be taken concurrently with lab. Corequisite: CS 125.
- 127 **INTRODUCTION TO COMPUTING II LAB.** (1) Must be taken concurrently with CS 126.
- 132 **COBOL PROGRAMMING.** (3) COBOL computer programming language. Writing programs. Computer experience. Problems in business data processing. (Not acceptable for Computer Science major).
- 135 **NUMERICAL CALCULUS I.** (1) Numerical algorithms for scientific computing, errors, interpolation, integration, differentiation, linear and non-linear equations, differential equations. Prerequisite: CS 125. Corequisites: Mt 110, Mt 130.
- 136 **NUMERICAL CALCULUS II.** (2) Computer implementation of the algorithms taught in CS 135. Corequisite: CS 135.
- 205 **HEALTH INFORMATION SYSTEMS I.** (3) Data processing/communication network needs of a hospital. The health care delivery system. Hospital information systems. Prerequisite: CS 125.
- 255 **ASSEMBLY LANGUAGE.** (3) Features of the IBM 360, data representation, number systems, data movement, arithmetic, program control. Prerequisite: CS 125. (IS 348)
- 256 **ASSEMBLY LANGUAGE LAB** (1) Substantial programming project in the IBM 360 assembly language. Prerequisite: CS 255.
- 265 **DISCRETE STRUCTURES.** (3) Set algebra. Mappings and relations. Algebraic structures. Boolean algebra. Propositional logic. Applications. Corequisites: CS 126, CS 255.
- 275 **HIGHER LEVEL LANGUAGES.** (3) FORTRAN, COBOL and PL/I with applications. Prerequisites: CS 126, CS 255.
- 325 **DATA STRUCTURES.** (3) Linear lists, strings and arrays. Trees and graphs. Storage structures, allocation and collection, symbol tables, sorting, formal data structures. Prerequisites: CS 265, CS 275.
- 335 **OPERATING SYSTEMS.** (3) Batch process systems, components. Operating characteristics. User services. Parallel processing. System accounting, updating, documentation and operation. Prerequisite: CS 325.
- 390 **SENIOR PROJECT.** (3) Completion of a significant computer project. Design of system, verification and documentation.
- 395 **SENIOR SEMINAR.** (1)



Economics (Ec)

Staff: DR. MASTRIANNA, *chairman*; DR. H. BRYANT, DR. DONNELLY,
DR. HAILSTONES, DR. LINK, DR. MARMO, MR. ROTHWELL, DR. SCHULTZ,
DR. ZIMMERMAN

Assisted by: FR. BESSE, MR. BEYER, DR. FREIBERG, MR. GOOD,
DR. THIEMANN, DR. TUREL, DR. WEBB

- (*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Lower Division Courses

- *101 **PRINCIPLES OF ECONOMICS.** (3) General economic activity. National income, employment, money and banking, business fluctuations, and economic stability. The economy as a whole is examined.
- *102 **PRINCIPLES OF ECONOMICS.** (3) Market forces of supply and demand in allocating the nation's resources and securing efficiency in their use. Economic behavior of consumers, firms, and resource owners.

Upper Division Courses

- 200 **MICROECONOMIC ANALYSIS.** (3) Economic principles. Fundamental concepts of value and price, rent, interest, wages and profits. Relationship to problems of production, distribution, and exchange. Prerequisite: Ec 102.
- 201 **MACROECONOMIC ANALYSIS.** (3) The determinants of Gross National Product, employment levels, and rates of economic growth. The developing body of modern macroeconomic theory. Prerequisite: Ec 101.
- *202 **HISTORY OF ECONOMIC THOUGHT.** (3) World economic movements. Aristotle, Thomas Aquinas, Adam Smith, Ricardo, Mills, Malthus, George, Clark, Bentham, Jevons, and Keynes. Prerequisite: Ec 101, 102.
- *210 **HUMAN RESOURCES.** (3) Prerequisite: Ec 102. (IR 210, Mg 210).
- 222 **ECONOMETRICS.** (3) Mathematical and statistical techniques used by economists to test the validity of economic theories. Hypothesis testing and regression analysis. Prerequisites: Ec 200, 201.
- *235 **ECONOMIC HISTORY OF THE UNITED STATES.** (3) The American economy from the period of colonization. The progress of population, agriculture, industry, domestic and foreign commerce, banking and finance, and transportation.
- 240 **ECONOMIC GEOGRAPHY.** (3) The economic implications of natural resources. Production of goods in relation to the development of agriculture, commerce, and industry in the United States and foreign countries.
- 245 **URBAN ECONOMICS.** (3) Interdisciplinary. Tools for problem solving. Forces leading to urbanization and differing rates of growth in urban areas. Affluence, equity, and stability are investigated. Prerequisite: Ec 102. (Po 245).
- 250 **MONEY AND BANKING.** (3) Prerequisite: Ec 101. (Fi 250).
- 300 **LABOR RELATIONS.** (3) (IR 300).
- 310 **CURRENT LABOR PROBLEMS.** (3) (IR 310).
- 311 **HISTORY OF THE LABOR MOVEMENT.** (3) (IR 311).
- 313 **LABOR LAW.** (3) (IR 313).
- *320 **ECONOMIC THEORY AND SOCIAL ORDER.** (3) Economics and Christian ethics. The Encyclicals. The businessman and a code of ethics founded on Christian principles.

- 325 **INDUSTRIAL ORGANIZATION.** (3) Basic conditions, market structures, conduct and performance of American industry. Public policy as related to the problems of bigness and monopolization. Prerequisite: Ec 102.
- 330 **GOVERNMENT AND BUSINESS.** (3) United States government structure and government regulation of business. Constitutional limitations. Due process of law. Equal protection. Privileges and immunities. Obligation of contract. (Po 330).
- 335 **PUBLIC FINANCE AND TAXATION.** (3) Forms of taxation; incidence of taxation; borrowing; non-tax revenues; expenditures; the effects of government finance on the economy. Prerequisite: Ec 101. (Po 335, Fi 335).
- *341 **COMPARATIVE ECONOMIC SYSTEMS.** (3) Origin and development of economic systems. Their operations and purposes. Socialism, Fascism, Communism, and Capitalism.
- 343 **ECONOMICS OF THE COMMUNIST STATE.** (3) The principles of Marxist Communism. Marx, Engels, Lenin, and Stalin. Popular and orthodox communism.
- 345 **INTERNATIONAL ECONOMICS.** (3) United States trade and the world. Causal relationships. Role of government. International, private agreements. International business. Prerequisite: Ec 200.
- 348 **ECONOMICS OF TRANSPORTATION.** (3)
- *360 **CURRENT ECONOMIC PROBLEMS.** (3) Current problems: labor, monetary and fiscal policy, debt management, social security legislation and public regulation.
- 377 **MANAGERIAL ECONOMICS.** (3) Microeconomic analysis for decision making within the business firm. The relationship between theory and the decision process. Prerequisite: Ec 102.
- 395 **SEMINAR IN ECONOMICS.** (3) Major economic topics are examined in depth. Student research and classroom discussion. Prerequisites: Ec 101, 102.
- 397 **TUTORIAL COURSE.** (2-3) Special reading and study for advanced students.
- Other courses are acceptable for a major in economics at the discretion of the Chairman or the student's advisor.

Graduate Courses

- 521 **MICROECONOMICS: THEORY AND APPLICATIONS.** (3) The economic principles of price theory. Analyses are conducted within a framework of traditional and modern contributions in the field. (BA 521).
- 522 **MACROECONOMICS: THEORY AND POLICY.** (3) Theories of employment. Classical. Keynesian. Modern. Interrelationships implied in the determination of interest rates. The demand and supply for money. Price levels. Growth and development. Monetary and fiscal policy. (BA 522).
- 523 **QUANTITATIVE TECHNIQUES IN ECONOMIC ANALYSIS.** (3) Concepts and techniques of economic theory: elasticity, marginal analysis, linear programming, capital budgeting. Quantitative methods. (BA 523).
- 524 **SEMINAR: DEVELOPMENT OF ECONOMIC THOUGHT.** (3) Neo-Classical and contemporary thought. The rise of marginalism. Theories of production, partial equilibrium, and general equilibrium. Growth of welfare economics. (BA 524).
- 527 **MULTINATIONAL TRADE AND FINANCE.** (3) Growth and direction of trade. Internationalization of businesses. Role of governments. Mechanics of financing foreign trade and investment.
- 530 **MANAGERIAL ECONOMICS.** (3) Economic analysis as applied to practical business operation. Tools of economic analysis; types of economic competition and their effect on individual firms and industries. (BA 530).
- 532 **BUSINESS FORECASTING.** (3) (BA 532).
- 535 **BUSINESS AND PUBLIC POLICY.** (3) (BA 535).

Economics

- 538 **ECONOMICS OF LABOR.** (3) Determinants of the competitiveness of labor markets; study of economic determinants of employment levels. Seminar method is used. (BA 538).
- 539 **SEMINAR: CURRENT ECONOMIC PROBLEMS.** (3) (BA 539).
- 540 **INDUSTRIAL PRICING.** (3) The basic conditions, market structure, conduct and performance of American industry. Pricing behavior of competitive and oligopolistic enterprises.
- 546 **LOCATION OF BUSINESS AND INDUSTRIAL ACTIVITY.** (3) (BA 546).
- 548 **TRANSPORTATION ECONOMICS.** (3)
- 550 **PROBLEMS IN BUSINESS FINANCE.** (3) (BA 550).
- 552 **INVESTMENT MANAGEMENT.** (3) (BA 552).
- 612 **SEMINAR: COLLECTIVE BARGAINING.** (3) (BA 612).
- 690 **BUSINESS AND SOCIETY.** (3) (BA 690).
- 695 **SPECIAL STUDY.** Credit by arrangement.
- 697- **RESEARCH SEMINAR.** (6)
698
- 699 **MASTER'S THESIS.** (6)

Education (Ed)

Staff: DR. SCHWEIKERT, *chairman*; DR. ANDERSON, MR. BAKER, MR. BRUENEMAN, DR. N. BRYANT, DR. CLARKE, DR. COSGROVE, DR. DAILY, DR. DICKEY, MS. DORNHEGGEN, MS. DRENNAN, MR. EICK, DR. FRY, DR. GAFFNEY, DR. GRIFFITH, DR. HANNA, DR. HELMES, DR. KLEIN, MS. KNOLLMAN, MS. KOFFEL, MR. LaGRANGE, DR. LINK, DR. LOZIER, DR. MAYANS, DR. McCOY, MS. McDERMOTT, DR. PARTRIDGE, MR. POHLMAN, MRS. PRUDEN, MS. RAMBUSCH, DR. RINSKY, DR. RIORDAN, MS. ROTHSCHILD, MR. SCHEURER, MR. SULLIVAN, DR. VORDENBERG, DR. WUBBOLDING.

Assisted by: MR. BLACKWELL, MR. BOLSEN, DR. BOOTHE, MR. BRANDT, MR. BROCKHOFF, MR. CONWAY, MS. DAVIS, MR. DRAUD, MS. DWYER, DR. FALKENSTEIN, MR. FERGUSON, DR. FRERICKS, MR. GIBBS, SR. HABIG, DR. HOSTY, MR. G.JACOBS, DR. LODGE, MR. MATTHEWS, DR. MEIER, DR. MOLICA, MR. MURPHY, DR. O'CONNOR, MR. NEFF, MRS. PERRY, DR. PREYAR, MR. QUINN, MRS. REBER, MR. SETA, MR. W. SMITH, MR. SORIANO, MR. WATSON, MRS. WESSEL, AND THE DEPARTMENT OF PSYCHOLOGY

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Lower Division Courses

- 131 **SCHOOL AND SOCIETY.** (3) The role of the school in society.
- *141 **EDUCATIONAL PSYCHOLOGY.** (3) Psychological principles applied to learning and teaching. (Ps 141).
- 151 **READING: SKILLS AND ACTIVITIES.** (2)

Upper Division Courses

- 200 **ADVANCED COMPOSITION FOR TEACHERS.** (3) (En 200).
- 201 **SECONDARY METHODS.** (3) Methodology applicable to high school teaching in general. Methods best suited to each of the major content fields. Materials fee \$10.00.

- 202 **SECONDARY CURRICULUM AND EVALUATION.** (3) Functions of secondary education; curricular experiences; new technology as applied to the curriculum. Classroom evaluation techniques.
- 203 **STUDENT TEACHING AND SEMINAR (SECONDARY).** (9) Laboratory experience in high school teaching under the supervision of a critic teacher for one semester. Development reading instruction integrated into seminar. UNDERGRADUATE CREDIT ONLY.
- 204 **STUDENT TEACHING (ELEMENTARY).** (6) Laboratory experience under the supervision of a critic teacher. One semester. Ed 304 is required concurrently. UNDERGRADUATE CREDIT ONLY.
- 205 **PLANNED OBSERVATION (SECONDARY).** Credit to be arranged. UNDERGRADUATE CREDIT ONLY.
- 206 **PLANNED OBSERVATION AND PARTICIPATION.** (3) A special course offered only to students preparing to be school psychologists. UNDERGRADUATE CREDIT ONLY.
- 207 **TEACHING INTERNSHIP (SECONDARY).** (9) Open only to fully employed graduate students. The teacher is supervised by a clinical professor in the student's area of major competency. A 30-clock-hour seminar is part of the internship.
- 208 **TEACHING INTERNSHIP (ELEMENTARY).** (6) Description is the same as 207. Ed 304 Seminar: Professional Problems in Elementary Education two credit hours, is required concurrently. UNDERGRADUATE CREDIT ONLY.
- 209 **LINGUISTICS.** (3) (En 206).
- 210 **SECONDARY CURRICULUM, EVALUATION, AND METHODS.** (6) An integrated curriculum, evaluation, and methods course including observation and in-school activities. Materials fee \$10.00.
- 214 **METHODS OF TEACHING READING.** (3) Developmental process of reading. Reading as an art of communication, as a perceptual-conceptual process. Reading in the content areas.
- 215 **DEVELOPMENTAL READING IN THE SECONDARY SCHOOLS.** (3) Skill development, diagnostic techniques, readability formulas, textbook evaluation, innovative programs and materials specially designed for secondary reading.
- 216 **DIAGNOSTIC READING INSTRUCTION.** (3) Reading techniques and instruments for diagnosis of groups or individual students. Determining reading level and potential by the pre-service teacher. Programs of remediation and enrichment. Reading in content areas.
- *218 **SOCIOLOGY OF EDUCATION.** (2-3) (So 218).
- 220 **INTRODUCTION TO SOCIAL WORK.** (3) (So 220).
- 222 **PRINCIPLES OF SOCIAL CASE WORK.** (3) (So 222).
- 226 **CHILDREN'S LITERATURE.** (3) Interpretative and critical study of literature, classic and contemporary, for children and/or adolescents. (En 226).
- 227 **ADOLESCENT LITERATURE.** (3)
- 229 **TV TECHNIQUES FOR TEACHERS.** (3-4) (CA 229).
- *231 **DEVELOPMENTAL PSYCHOLOGY.** (3) (Ps 231).
- 232 **CHILD PSYCHOLOGY.** (2-3) (Ps 232).
- 233 **ADOLESCENT PSYCHOLOGY.** (2) (Ps 233).
- 235 **DIFFERENTIAL PSYCHOLOGY.** (2) (Ps 235).
- 237 **PSYCHOLOGY OF LEARNING.** (3) (Ps 237).
- 239 **PSYCHOLOGY OF MOTIVATION.** (3) (Ps 239).
- 245 **APPALACHIAN IN URBAN LIFE.** (3) (So 245).
- 249 **JOURNALISM FOR TEACHERS AND PUBLICATIONS ADVISORS.** (2-3) (CA 249).

Education

- *253 **THE SCHOOL AND THE BLACK COMMUNITY.** (3) (So 253).
- 254 **BLACK FAMILIES IN WHITE AMERICA.** (3)
- *261 **SOCIAL PSYCHOLOGY.** (2) (Ps 261, So 261).
- 262 **SOCIAL DYNAMICS OF COMMUNICATION.** (2) (Ps 262, So 262).
- 263, 264 **THEORIES OF PERSONALITY I, II.** (2,2) Two semesters. (Ps 263-264).
- *266 **CRIME AND PERSONALITY.** (3) (Cr 266, Ps 266).
- 271 **INTRODUCTION TO THE EMOTIONALLY DISTURBED CHILD.** (2) Symptoms of maladaptive behavior in youngsters. Evaluation of etiological factors. Personality disorders. Services, facilities, and agencies for treatment (Ps 271).
- 272 **GUIDING THE EMOTIONALLY DISTURBED CHILD.** (2) Total programming for severely disturbed youngsters. Behavioral maladaptations within group settings. Modification resources. Physical, psychological, and sociological causes.
- 273 **EDUCATING THE DISTURBED CHILD.** (2) Special methods, materials, and curricula for a therapeutic, educational atmosphere. Behavioral modification and classroom management techniques.
- 274 **MENTAL HYGIENE.** (2) (Ps 274).
- 275 **DYNAMIC PSYCHOLOGY.** (2) (Ps 275).
- 276 **PSYCHOLOGY OF DELINQUENCY.** (2) Definition, causes and categories of delinquency. Court processes. Court rulings. Current philosophies. Service agencies. Personality and maladaptive disorders. (Ps 276).
- *277 **ABNORMAL PSYCHOLOGY.** (2-3) (Ps 277).
- 283 **PRACTICUM IN PSYCHOLOGICAL TESTING.** (2-3) (Ps 283).
- 284 **WORKSHOP: CLASSROOM USE OF EDUCATIONAL TV.** (2) (CA 284, Ed 612).
- 290 **AUDIOVISUAL COMMUNICATION.** (3) (CA 290).
- 291 **VISUAL COMMUNICATION DESIGN.** (3) Prerequisite: Ed 290. Fee \$15.00. (CA 291).
- 292 **ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS.** (3) (CA 292).
- 300 **INTRODUCTION TO ELEMENTARY EDUCATION.** (3) Considers elementary school in school system and society and relates curriculum thereto. Classroom observations.
- 301 **ELEMENTARY METHODS AND MATERIALS I.** (2) Integrated course in science. Prerequisite: Ed 300. Materials fee \$5.00.
- 302 **ELEMENTARY METHODS AND MATERIALS II.** (4) Integrated course in language arts and social studies. Prerequisite: Ed 300. Materials fee \$10.00.
- 303 **SEMINAR: PROFESSIONAL PROBLEMS IN MONTESSORI ELEMENTARY EDUCATION.** (3) Must be taken in conjunction with Ed 357 by undergraduate students.
- 304 **SEMINAR: PROFESSIONAL PROBLEMS IN ELEMENTARY EDUCATION.** (3) Must be taken in conjunction with Ed 204.
- 305, 306 **KINDERGARTEN METHODS AND MATERIALS I, II.** (2,2) Two semesters. Pre-school children's physical, intellectual, social, and emotional development. Current research, materials, activities, and experiences appropriate for kindergarten level. Classroom observations and/or lab experiences. Individual development of materials.
- 313 **ART IN THE ELEMENTARY SCHOOL.** (1) Taken concurrently with Ed 314.
- 314 **MUSIC IN THE ELEMENTARY SCHOOL.** (1) Methods and materials used in elementary school instruction. Students must implement various techniques. Taken concurrently with Ed 313.
- 315 **NEW MATHEMATICS: ELEMENTARY SCHOOL TEACHERS.** (3) The modern mathematics curriculum in the elementary school. Materials, methods, and content.

- 317 **TEACHING HIGH SCHOOL ENGLISH.** (3) (May replace Ed 201 for teachers of English.)
- 318 **LINGUISTICS FOR TEACHERS.** (3)
- 319 **EARTH SCIENCE FOR TEACHERS.** (2) (Elementary teachers) Content and methodology. Table-top experiments. Rocks, minerals, crystalline substances, stratified rocks, sedimentation, landforms, and processes.
- 320 **NEW TRENDS IN TEACHING SCIENCE.** (3) Materials fee \$5.00.
- 322 **CONTEMPORARY SCIENCE CURRICULUM PROJECTS: INTERMEDIATE AND JUNIOR HIGH.** (3) Materials fee \$5.00.
- 325 **TEACHING MODERN LANGUAGES.** (3) Command of the student's language with a view to teaching. Psychology of language learning—motivation, evaluation, and testing. May replace Ed 201 for teachers of modern languages. (ML 325).
- 326 **FRENCH TEACHING: PRACTICUM AND CRITIQUE.** (3) (Fr 326).
- 327 **SEMINAR: GERMAN LANGUAGE CULTURE.** (3) (Gr 327).
- 331 **REFERENCE SERVICE.** (3) Bibliographical and reference materials in subject fields. Training and practice in solving questions arising in reference services.
- 332 **BASIC CATALOGING AND CLASSIFICATION.** (3) Theory and practice. Subject cataloging. Complex entries. Dewey Decimal and Library of Congress Classifications. Library of Congress subject headings.
- 340 **DRUG COUNSELING.** (2) Drug culture; counseling the user; family counseling; crisis intervention; legal and ethical responsibilities of the counselor. (Ed 634).
- 350 **METHODS AND OBSERVATION OF CHILDREN.** (3) Techniques and strategies for systematic observation in the classroom. Records of observations. Instruments for addressing curiosities or problems. Analysis of live and video-taped classroom behavior.
- 351 **MONTESSORI EDUCATION: PHILOSOPHICAL APPROACH.** (3)
- 354 **MONTESSORI MATERIALS OVERVIEW.** (3)
- 355 **ADVANCED MONTESSORI MATERIALS OVERVIEW.** (3)
- 356 **MONTESSORI: CURRICULUM DESIGN AND TEACHING STRATEGIES. ELEMENTARY GRADES.** (3)
- 357 **MONTESSORI ELEMENTARY INTERNSHIP.** (6)
- 359 **FULL-DAY CHILD CARE METHODS.** (3)
- 360 **COMMUNICATION: SMALL GROUP DYNAMICS.** (3) (CA 360).
- 365 **CURRENT DIALOGUE—ISSUES AND SPEAKERS.** (3) (CA 365).
- 370 **COACHING WRESTLING.** (2) Elective open to upper division students only.
- 371 **COACHING TUMBLING AND GYMNASTICS.** (2) Open to upper division students only.
- 372 **COACHING FOOTBALL.** (2)
- 373 **COACHING BASKETBALL.** (2)
- 374 **COACHING BASEBALL.** (1)
- 375 **COACHING TRACK AND FIELD.** (1)
- 376 **THEORY OF OFFICIATING.** (2) Elective open to upper division students only.
- 377 **ADMINISTRATION OF PHYSICAL EDUCATION.** (3) Principles, organization, and administration of physical education program. The intramural athletic program. FOR UNDERGRADUATE CREDIT ONLY.
- 378 **ADMINISTRATION OF HEALTH EDUCATION.** (3) Methods and materials. Organizational techniques and the administration of the school health program. FOR UNDERGRADUATE CREDIT ONLY.

Education

- 379 **PHYSICAL EDUCATION METHODS AND MATERIALS** (4) Theory and practice. Touch football, soccer and speedball, tumbling and apparatus, basketball, volleyball, conditioning, track and field, softball. Testing.
- 381 **TESTS AND EVALUATION IN PHYSICAL EDUCATION.** (2)
- 382 **ELEMENTARY SCHOOL HEALTH AND HYGIENE.** (2)
- 383 **COACHING WOMEN'S TEAM SPORTS.** (2)
- 384 **COACHING TENNIS.** (2)
- 385 **PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** (2)
- 386 **KINESIOLOGY.** (2) Prerequisites: BI 106-107, 108-109.
- 387 **FIRST AID AND SAFETY.** (2) The American Red Cross Standard and the Advanced First Aid course. The prevention and treatment of athletic injuries.
- 388 **PERSONAL AND COMMUNITY HEALTH.** (2) Personal and community health for use in teaching that subject.
- 389 **ADAPTIVE PHYSICAL EDUCATION.** (3) Methods, materials, and programs for the organization and administration of physical education for atypical individuals in schools and the community. (Formerly Ed 594).
- 390 **SPECIAL WORKSHOPS, SEMINARS, INSTITUTES.** (1-6) as designated. Courses will be specified as to title when offered.
- 391 **WORKSHOP: MULTI-SENSORY PERCEPTION.** (2) Materials fee \$5.00.
- 392 **PERCEPTUAL MOTOR PROBLEMS IN EDUCATION.** (2)
- 403 **TEACHING PRACTICUM.** (2)
- 419 **PRIMARY SOCIAL STUDIES.** (4)
- 442 **EDUCATING THE EXCEPTIONAL CHILD.** (2-3) Current educational trends for gifted, mentally retarded, emotionally disturbed, speech-impaired, hearing impaired, visually handicapped, physically handicapped, and neurologically impaired children.
- 454 **MONTESSORI METHODS AND MATERIALS I.** (3)
- 455 **MONTESSORI METHODS AND MATERIALS II.** (3)
- 456 **MONTESSORI CURRICULUM DESIGN AND TEACHING STRATEGIES.** (3)
- 457, 458 **MONTESSORI PRE-SCHOOL INTERNSHIP I, II.** (3, 3) Two semesters.
- 460 **UNIVERSITY OF CINCINNATI CONSORTIUM**
- 461 **MIAMI UNIVERSITY CONSORTIUM**
- 462 **ST. THOMAS INSTITUTE CONSORTIUM**
- 463 **EDGECLIFF COLLEGE CONSORTIUM**
- 464 **MT. ST. JOSEPH COLLEGE CONSORTIUM**
- 465 **THOMAS MORE COLLEGE CONSORTIUM**
- 466 **HEBREW UNION COLLEGE CONSORTIUM**
- 467 **ATHENAEUM CONSORTIUM**
- 468 **NORTHERN KENTUCKY STATE COLLEGE CONSORTIUM**
- 470 **BASIC AQUATICS.** (1)
- 471 **ADVANCED AQUATICS.** (1)
- 472 **LIFE SAVING.** (2)
- 473 **WATER SAFETY.** (2)
- 476 **COACHING SOCCER.** (2)

- 480 **SPECIAL WORKSHOPS, SEMINARS, INSTITUTES.** (1-6) as designated. Courses will be specified as to title when offered.
- 481 **READING AND STUDY SKILLS.** (2)
- 487 **LOCAL RESOURCES, FINE ARTS AND SOCIAL STUDIES.** (2)
- 498 **SPECIAL STUDY.** (2-6) Credit to be arranged. Special reading and directed study for advanced students.

Graduate Courses

The Department of Education of the Graduate School is organized to offer the in-service teacher or school administrator opportunities for advanced professional training through individual courses or through balanced programs leading to the Master of Education degree.

Ed 501, 503, 505, 507 are required of all Candidates for M.Ed. Degree

- 501 **PHILOSOPHY OF EDUCATION.** (3) The historical development of educational philosophy and theories. Evaluation of major current philosophies.
- 503 **ADVANCED EDUCATIONAL PSYCHOLOGY.** (3) Major aspects of child and adolescent growth and development. The learning process and factors influencing learning.
- 505 **EDUCATIONAL ADMINISTRATION.** (3) The relationships of the federal government, the state, and the local government to public and private education. Major administrative functions as operable in the elementary, middle, and secondary school.
- 507 **EDUCATIONAL RESEARCH.** (3) Methodology of educational research. Statistics in research. Locating educational research. Two credits. Research Project. One credit. A separate grade is given for each phase of the course.
- 510 **STATISTICAL TECHNIQUES.** (2-3) (Ps 210).
- 511 **ADVANCED STATISTICS.** (3) (Ps 511).
- 529 **BEHAVIOR MODIFICATION.** (3) (Ps 529).
- 530 **LEARNING AND MOTIVATION.** (2-3) (Ps 530).
- 531 **COUNSELING MINORITIES.** (2) Theory, techniques and research in counseling of minority groups, such as blacks, Southern Appalachian migrants, etc. in settings of the school and other agencies. (Ps 531).
- 532 **PRINCIPLES OF GUIDANCE.** (2) Principles of guidance for the helping professions. Educational, vocational and personal-social aspects of the individual. Essentials of a guidance program. (Ps 532).
- 533 **COUNSELING PRINCIPLES AND TECHNIQUES.** (2) Theory of counseling. Case method. Relationships to testing and to other sources of data. Interviewing. Place and value of records. Clinical procedures. (Ps 533).
- 534 **ELEMENTARY SCHOOL GUIDANCE.** (2) Principles, philosophy, administration, and organization of guidance services in the elementary school setting. Role and function of the counselor.
- 535 **OCCUPATIONAL INFORMATION.** (2) Sources of information about occupational fields and their utilization in counseling. Psychology of career choice. (Ps 535).
- 536 **GROUP GUIDANCE.** (2) Laboratory course. Individual roles in the group. Interpersonal relations. For counseling, teaching, and persons involved in personnel work. (Ps 536).
- 539 **GUIDANCE LABORATORY.** (2) Study of individual pupils; collecting pertinent data, interviewing, recording, diagnosis, interagency collaboration. Practicum. Prerequisites: Ed 532, 533, 579. By reservation only.
- 541 **ELEMENTARY SCHOOL ADMINISTRATION.** (2) Criteria for an effective elementary school organization. Patterns of school organization. Administrative problems.
- 542 **SECONDARY SCHOOL ADMINISTRATION.** (2) Organization of secondary schools. Techniques of schedule-making. Administrative problems.

Education

- 543 **SUPERVISION OF INSTRUCTION.** (2) Techniques of improving instruction through supervision.
- 544 **ELEMENTARY CURRICULUM.** (2) Aims of elementary education. Specific objectives of primary and upper-elementary divisions. Classroom techniques for realizing these objectives.
- 545 **SECONDARY CURRICULUM.** (2) Aims of secondary education. Specific objectives of curricular areas. Class room techniques for realizing these objectives.
- 547 **CURRENT PROBLEMS OF ELEMENTARY EDUCATION.** (1-2) A seminar.
- 548 **CURRENT PROBLEMS OF SECONDARY EDUCATION.** (1-2) A seminar.
- 561 **ADMINISTRATION OF PUPIL PERSONNEL SERVICES.** (2-3) Duties and functions involved in administering pupil personnel services and in pupil accounting. Responsibilities of the director of pupil personnel. Systematized records management.
- 562 **SCHOOL PUBLIC RELATIONS.** (2) Relations of school and community. Effective use of media of public relations—press, radio, television.
- 563 **SCHOOL BUSINESS MANAGEMENT PROBLEMS.** (2) Techniques of budgetary control, public and internal funds. School purchasing. Food service. Supplies. Equipment and machinery. School insurance. Plant records. Maintenance and repair. Pupil transportation. School investment. Management techniques.
- 564 **ADMINISTRATION OF STAFF PERSONNEL.** (2) Prerequisites: Ed 505 and Ed 543 or equivalent.
- 565 **SCHOOL LAW.** (2) Legal framework within which schools operate. Federal and state precedents. State code. Legal provisions for school finance.
- 566 **SCHOOL FINANCE.** (2)
- 567 **SCHOOL BUILDINGS.** (2)
- 568 **ADMINISTRATIVE PRACTICUM.** (2) Planned field experience for students seeking administrative certification. Only students who meet University requirements may register. *Registration by reservation only.* Prerequisites: Ed 505, 541 or 542, 543, and 544 or 545 (or 660).
- 579 **PSYCHOLOGICAL AND ACHIEVEMENT TESTS.** (2-3) Group tests. Testing procedures. Rationale of intelligence, aptitude, achievement, interest, and personality tests. Selection and evaluation of group tests. (Ps 279).
- 580 **PSYCHOPATHOLOGY.** (2) (Ps 580).
- 582 **INDIVIDUAL TESTS OF INTELLIGENCE.** (4) Underlying theory, administration, scoring, interpretation, and reporting of the individual tests of intelligence. (Ps 582).
- 586 **PSYCHO-EDUCATIONAL ASSESSMENT.** (3) (Ps 586).
- 590 **ADMINISTRATION OF SCHOOL ATHLETICS.** (3) Investigation and discussion of current problems and policies pertinent to administration of school athletics.
- 591 **LEADERSHIP IN OUTDOOR EDUCATION.** (3) Consideration is given to settings for outdoor education, school camp functions, and administration. Emphasis on group and individual camping techniques.
- 592 **ADMINISTRATION OF INTRAMURAL ACTIVITIES.** (3) Treatment of administrative problems, policies, and procedures involved in intramural activities as applied to school systems.
- 595 **ADMINISTRATION OF COMMUNITY RECREATION.** (3) Structure and principles as they are related to the organization and administration of school and community recreational programs.
- 596 **ADMINISTRATION OF PHYSICAL FITNESS PROGRAMS.** (3) Components. Organizing and administering a functional physical fitness program for sports and physical education. The individual. Physical education tests.

- 597 **TRENDS: PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOLS.** (3)
- 600, **SPECIAL WORKSHOPS, INSTITUTES, SEMINARS, INTERSESSIONS.** (1-6) Courses
625 will be specified as to title when offered. Those listed below regularly recur. Course numbers, titles, and descriptions of courses not listed are available upon request from the Dean of the Summer Sessions.
- 602 **INTRODUCTION TO COMPUTER ASSISTED INSTRUCTION.** (2)
- 603 **COMPUTER PROGRAMMING FOR SECONDARY SCHOOL TEACHERS.** (2)
- 607 **EDUCATIONAL PROJECT MANAGEMENT.** (2)
- 609 **RESOURCES COORDINATION LABORATORY IN GUIDANCE.** (2) Materials fee \$6.00.
- 612 **WORKSHOP: CLASSROOM USE OF EDUCATIONAL TELEVISION.** (2) (CA 284).
- 615 **WORKSHOP: GROUP DYNAMICS.** (2) Materials fee \$10.00.
- 616 **INDIVIDUALIZED INSTRUCTION.** (2) Fee \$5.00.
- 617 **LABORATORY: INNER-CITY STUDENT BEHAVIORAL PROBLEMS.** (2)
- 618 **GROUP TESTING: THEORY AND PRACTICE.** (2)
- 620 **ALCOHOL EDUCATION.** (2)
- 621 **WORKSHOP: SPECIAL EDUCATION.** (2)
- 622 **WORKSHOP: COACHING BASKETBALL.** (2)
- 630, **ISSUES: SCHOOL COUNSELORS I, II.** (3,3)
631
- 634 **DRUG COUNSELING.** (2) (Ed 340).
- 635 **GUIDANCE AND DISCIPLINE.** (2) Approaches to discipline. Discipline and punishment. Current theories concerning discipline are reviewed that are helpful to teachers, counselors, and administrators.
- 636 **CAREER EDUCATION: K-12.** (2) Also given as Career Development Workshop. Career development models. Techniques useful to teachers, counselors, and administrators. Community resources.
- 639 **SURVEY: LEARNING DISABILITIES.** (2) The learning disabled (neurologically impaired) child. Etiology. Diagnosis. Educational evaluation and programming.
- 640 **LEARNING DISABILITIES: METHODS AND MATERIALS.** (2) Instructional models with the learning disabled. Materials. Practical application. Pre-requisite: Ed 639 or Ed 392.
- 642 **PRACTICUM: THE NEUROLOGICALLY IMPAIRED CHILD.** (2-3) 60-90 clock hours of work experience with neurologically impaired children, under supervision.
- 643 **SEMINAR: INDUSTRIAL PSYCHOLOGY.** (2) Readings, student-led discussions, written and critical reviewing of literature in industrial psychology. (Ps 643, BA 643).
- 644 **MOTIVATION AND BEHAVIOR IN ORGANIZATIONS.** (3) (Ps 644, BA 644).
- 645 **ADVANCED DEVELOPMENTAL PSYCHOLOGY.** (3) Additional time beyond class period must be arranged weekly with the professor. (Ps 645).
- 646 **PSYCHOLOGY OF THE EXCEPTIONAL CHILD.** (3) Atypical child in regular and special classrooms. Methods of facilitating growth. Development of children who are crippled, retarded, hard of hearing, defective in vision, defective in speech, etc. (Ps 646).
- 647 **CLINICAL STUDIES: EMOTIONALLY DISTURBED CHILD.** (2) Treatment procedures and resources. Therapy for behavior and personality problems. The use of the school and community resources. Attitude altering. Direct treatment procedures. (Ps 647).
- 648 **PRACTICUM: THE EMOTIONALLY DISTURBED CHILD.** (2-3) 60-90 clock hours of work experience with emotionally disturbed children, under supervision. (Ps 648).

Education

- 651 **MONTESSORI EDUCATION: PHILOSOPHICAL APPROACH.** (3) Seminar. Philosophy, historical development, contemporary critique, and current methodology. Classroom observation. Varieties of resources.
- 652 **CURRENT THEORY AND RESEARCH IN CHILD DEVELOPMENT.** (3) The pre-schooler. Current theory and research are related to Maria Montessori's concept of the child. (Ps 652).
- 653 **EARLY COGNITIVE DEVELOPMENT.** (3) Research findings related to childhood education. Principles of Montessori education: early enriched environment, critical periods for learning, and the role of the early activation drive. Play theory, beauty, creativity, and self-esteem. (Ps 653).
- 654 **MONTESSORI METHODS AND MATERIALS I.** (3) Daily living activities. Prepared environment. Sensitive periods. Creative materials. Introduction of learning on the sensory level. Requires time for materials familiarization in addition to class time.
- 655 **MONTESSORI METHODS AND MATERIALS II.** (3) Concrete to abstract learning in natural sciences, social studies, arithmetic, language arts, music, dramatic activities, art. Observation and evaluation. Requires time for materials familiarization in addition to class time.
- 656 **CURRICULUM DESIGN AND TEACHING STRATEGIES: PRIMARY GRADES.** (3) Description same as Ed 660 with emphasis on the primary grades.
- 657, **MONTESSORI INTERNSHIP I, II.** (3,3) Two semesters.
658
- 660 **CURRICULUM DESIGN AND TEACHING STRATEGIES.** (3) Elementary and secondary school curriculum as personal and social environments and constructs within a complex society. Appropriate teaching strategies. Examining personal/professional attitudes, practices, values, roles, goals. Evaluation.
- 661 **CURRICULUM DESIGN AND TEACHING STRATEGIES: ELEMENTARY.** (3) Description same as 660 except limited to elementary teachers.
- 662 **CURRICULUM DESIGN: PRACTICUM.** (3-6) Instructional systems' concepts in school situation. Identification data. Problems analysis. Revision of plans. Evaluation. Prerequisites: Ed 510 or 511, and Ed 660 or 661.
- 663 **WORKSHOP: CURRICULUM DESIGN AND TEACHING STRATEGIES.** (6) Same as Ed 660-662 combined and given as one course in summer. Theory and practicum combined. Fee: \$5.00.
- 666 **EDUCATIONAL MEDIA PRACTICUM.** (3-6) By arrangement. Field experience working in a media center under supervision for one or two semesters at the level of certification desired.
- 667 **SCHOOL SOCIAL WORK PRACTICUM.** (2-4)
- 668 **SCHOOL SOCIAL WORK INTERNSHIP.** (6)
- 670 **PSYCHOLOGY OF READING.** (2) The perceptual nature of reading. Learning principles and reading process. Psychological basis of reading. Personality factors in reading. Motivation and reading interest. Scope of the reading process.
- 671 **READING IN THE CONTENT AREAS.** (2) Skill development, diagnostic techniques, prescriptive teaching, readability formulas and materials for elementary content reading.
- 672 **NEW THEORIES IN TEACHING READING.** (2) Sociological, psychological, and educational analysis of new trends. Objectives, curriculum planning, organizational plans, and instructional materials. Inter-relationship of general reading skills and content-reading study skills.
- 673 **SUPERVISION OF READING PROGRAMS.** (2) The role of the Reading Supervisor at all levels. Curriculum design for planning reading programs at different levels and in content areas. Evaluation of reading programs and personnel.

- 678 **DIAGNOSIS AND CORRECTION OF READING DISABILITIES.** (3) Factors associated with reading problems. Diagnostic tests and remedial procedures. Materials fee \$10.00. Prerequisite: Ed 214. (Ps 678).
- 679 **PRACTICUM IN READING.** (3) Supervised practice in remedial and developmental reading. Laboratory fee \$15.00. Prerequisite: Ed 678.
- 688 **RESEARCH: HISTORY AND PHILOSOPHY OF EDUCATION.** (1-2) Individual research. Prerequisite: Ed 507.
- 689 **RESEARCH: ADMINISTRATION.** (1-2) Individual research. Prerequisite: Ed 507.
- 690 **RESEARCH: SECONDARY EDUCATION.** (1-2) Individual research. Prerequisite: Ed 507.
- 691 **RESEARCH: ELEMENTARY EDUCATION.** (1-2) Individual research. Prerequisite: Ed 507.
- 692 **RESEARCH: GUIDANCE.** (1-2) Individual research. Prerequisite: Ed 507.
- 693 **RESEARCH: READING.** (1-2) Individual research. Prerequisite: Ed 507.
- 694 **RESEARCH: PSYCHOLOGY.** (1-2) Individual research. Prerequisite: Ed 507.
- 695 **RESEARCH: SPECIAL AREA.** (1-2) Individual research in any special area to be specified. Prerequisite: Ed 507.
- 697 **TUTORIAL STUDY.** (2-6) Credit by arrangement.
- 698 **SPECIAL STUDY.** (2-3) Credit to be arranged. Special reading and directed study for advanced students.
- 699 **MASTER'S THESIS.** (6) For students desiring a program leading to the degree of Master of Arts.

English (En)

Staff: MR. WESSLING, *acting chairman*; FR. CONNOLLY, DR. FONTANA, MR. GETZ, MR. GLENN, FR. TRAUB, DR. WENTERSDORF

Assisted by: DR. BEIGEL, FR. BRENNAN, MR. CAHILL, MR. GUTTING, MISS HEILE, DR. JOHNSON, MR. KORAL, MR. MILLER, DR. MURRAY, MR. NEFF, DR. RETTIG, DR. RINSKY, DR. SCHWEIKERT, MS. WALDRIP, MR. WIESEN.

- (*) Courses so designated are approved as electives for curricular requirements in area of humanities, subject to limitations as indicated.

Lower Division Courses

- 101 **ENGLISH COMPOSITION.** (3)
- *115 **LITERATURE AND COMPOSITION I.** (3) Fiction and non-fiction. Emphasis on written composition. Recommended for students who already have acquired the basic skills of writing. Required of English majors.
- *116 **LITERATURE AND COMPOSITION II.** (3) Poetry and drama. Emphasis on written composition. Recommended for students who have already acquired the basic skills of writing. Required of English majors.
- *121 **STUDIES IN POETRY.** (3)
- *122 **STUDIES IN DRAMA.** (3)
- *123 **STUDIES IN PROSE AND CULTURE.** (3) Cultural and stylistic study of selected English and American non-fictional prose texts.
- *124 **STUDIES IN FICTION.** (3)
- *125 **STUDIES IN SATIRE.** (3)

English

- *126 **STUDIES IN LITERATURE AND LIFE.** (3) Thematic approach to literature of several genres, emphasizing the view of life expressed in the literary work.
- *128 **STUDIES IN AFRO-AMERICAN LITERATURE.** (3) Not open to students who have taken or expect to take En 388 or En 389.
- *129 **STUDIES IN THE BLACK EXPERIENCE.** (3) Not open to students who have taken or expect to take En 388 or En 389.
- *135 **STUDIES IN SHAKESPEARE.** (3)
- *147 **STUDIES IN WORLD LITERATURE.** (3)
- *148 **WORLD LITERATURE TO 1650.** (3)
- *149 **WORLD LITERATURE SINCE 1650.** (3)

Upper Division Courses

- 200 **ADVANCED COMPOSITION FOR TEACHERS.** (3) Instruction and practice in invention, organization, and style in the modes of writing appropriate to teachers of junior and senior high school English. For students preparing to teach English in the secondary school. (Ed 200).
- 203 **HISTORY OF THE ENGLISH LANGUAGE.** (3) Origins and development of the English language from c. 450 to the present. Etymology and vocabulary, syntax and grammar, semantics, and phonology.
- *206 **LINGUISTICS.** (3) Contemporary linguistic theory concerning the nature and history of language including graphics, phonetics, phonology, morphology and syntax. (Fr, Gr, Sp 206 and Ed 209).
- 207 **ADVANCED WRITING.** (3)
- 209 **CREATIVE WRITING.** (3)
- 210 **CONTEMPORARY PROSE COMPOSITION.** (3)
- 226 **CHILDREN'S LITERATURE.** (3) (Ed 226).
- *241 **GREEK LITERATURE IN TRANSLATION.** (3) (Cl 241).
- *244 **LATIN LITERATURE IN TRANSLATION.** (3) (Cl 244).
- *248 **CLASSICAL MYTHOLOGY.** (3) (Cl 248).
- *250 **WORLD DRAMA.** (3)
- *251 **WORLD FICTION.** (3)
- *255 **THE COMIC SPIRIT IN WORLD LITERATURE.** (3)
- *260 **AESTHETICS AND LITERARY CRITICISM.** (3) Philosophical basis of aesthetics; elements of taste; critical standards.
- *267 **YOUTH IN AMERICAN LITERATURE.** (3)
- *268 **LITERATURE AND THE HUMAN PERSON.** (3)
- *269 **MAN AND MYTH IN WORLD LITERATURE.** (3)
- *281 **BELIEF AND NON-BELIEF IN MODERN LITERATURE.** (3) (Th 281).
- *287 **LOVE IN THE WESTERN WORLD.** (3) The forms of love in scripture and in the great works of secular literature from Plato through the medieval revolution of courtly love to modern times. (Th 287).
- *290 **THE HERO IN LITERATURE.** (3)
- *292 **IMAGES OF MAN IN WORLD LITERATURE.** (3) The changing image of man in major works of world literature from ancient to modern times.
- *293 **JESUS IN MODERN FICTION.** (3) Modern fiction as it illuminates and is illuminated by a study of the Jesus of the gospel and of contemporary Christology. (Th 293).

- *295 **IMAGES OF WOMEN IN WORLD LITERATURE.** (3) Women as they appear in World Literature with emphasis on their appearance in twentieth-century literature.
- *300 **THE BRITISH LITERARY EXPERIENCE.** (3) The major themes and texts in British literature from the Anglo-Saxon Period to the twentieth century. Required of English majors.
- *303 **THE AMERICAN LITERARY EXPERIENCE.** (3) The major themes and texts in American literature from the beginning through the twentieth century.
- *306 **OLD ENGLISH LITERATURE.** (3) Old English literature exclusive of *Beowulf*, read in the original.
- *310 **CHAUCE: THE CANTERBURY TALES.** (3)
- *326 **SHAKESPEARE: HISTORIES AND COMEDIES.** (3)
- *327 **SHAKESPEARE: TRAGEDIES AND TRAGI-COMEDIES.** (3)
- *330 **SEVENTEENTH CENTURY LITERATURE.** (3) Milton is not included.
- *341 **THE AGE OF EXPERIENCE (1660-1780).** (3) Poetry and prose of the period from Dryden to the forerunners of romanticism.
- *344 **THE ENGLISH NOVEL TO HARDY.** (3)
- *348 **SELF AND SOCIETY IN THE ENGLISH NOVEL I.** (3) The major novels of the eighteenth and nineteenth centuries with emphasis on their social, moral and psychological themes and perceptions.
- *350 **ROMANTIC LITERATURE.** (3) English romantic poetry and selected non-fiction prose from 1780-1830.
- *360 **VICTORIAN POETRY.** (3) Study of selected works of Victorian poets from 1830 to 1910.
- *361 **VICTORIAN NON-FICTIONAL PROSE.** (3) Non-fictional prose of the Victorian period according to the important issues of that historical era.
- *362 **VICTORIAN LITERATURE TO 1860.** (3) Poetry, non-fictional prose, and the novel.
- *363 **VICTORIAN LITERATURE SINCE 1860.** (3) Poetry, non-fictional prose, and the novel.
- *365 **IRISH LITERARY REVIVAL.** (3) The works of Yeats, Synge, O'Casey and Joyce with emphasis on their interrelationships.
- *370 **MODERN BRITISH LITERATURE.** (3) Twentieth Century British poetry, novel, and drama.
- *371 **TWENTIETH CENTURY BRITISH POETRY.** (3)
- *372 **MODERN DRAMA.** (3) Drama from Ibsen to Arthur Miller.
- *373 **CONTEMPORARY DRAMA SINCE 1950.** (3)
- *375 **THE SHORT STORY.** (3)
- *376 **SELF AND SOCIETY IN THE ENGLISH NOVEL II.** (3) The major English novels of the twentieth century with emphasis on their social, moral and psychological themes and perceptions.
- *384 **THE AMERICAN NOVEL TO 1920.** (3)
- *385 **THE AMERICAN NOVEL, 1920-1950.** (3)
- *386 **THE AMERICAN NOVEL SINCE 1950.** (3)
- *388 **AFRO-AMERICAN LITERATURE: POETRY, DRAMA, AND THE ESSAY.** (3) Not open to students who have completed En 128.
- *389 **AFRO-AMERICAN LITERATURE: FICTION AND AUTOBIOGRAPHY.** (3) Not open to students who have completed En 129.
- *393 **CONTEMPORARY AMERICAN POETRY.** (3)
- 399 **SPECIAL STUDY.** Credit by arrangement. Directed study.

Graduate Courses

- 508 **MEDIEVAL LITERATURE.** (3) Special emphasis on the Pearl poet, Langland, and the mystical writers.
- 510 **CHAUCER'S MAJOR WORKS.** (3)
- 515 **STUDIES IN THE RENAISSANCE.** (3)
- 530 **STUDIES IN SEVENTEENTH CENTURY LITERATURE.** (3)
- 540 **STUDIES IN NEO-CLASSICAL LITERATURE.** (3)
- 542 **RESTORATION AND EIGHTEENTH CENTURY DRAMA.** (3)
- 544 **ENGLISH NOVEL OF THE EIGHTEENTH CENTURY.** (3)
- 548 **COMMUNAL MAN IN LITERATURE: 1720-1820.** (3)
- 550 **STUDIES IN ROMANTIC LITERATURE.** (3)
- 551 **NARRATIVES IN ROMANTIC LITERATURE.** (3)
- 552 **THE GREATER ROMANTIC LYRIC.** (3)
- 560 **STUDIES IN VICTORIAN POETS.** (3)
- 561 **STUDIES IN VICTORIAN NON-FICTIONAL PROSE.** (3)
- 564 **ENGLISH NOVEL OF THE NINETEENTH CENTURY I.** (3) The novels of Scott, Austen, Thackeray, and Eliot.
- 565 **ENGLISH NOVEL OF THE NINETEENTH CENTURY II.** (3) The novels of Dickens, Hardy, Meredith, Wilde, and James.
- 570 **STUDIES IN TWENTIETH CENTURY POETRY.** (3)
- 572 **MODERN DRAMA.** (3)
- 574 **ENGLISH NOVEL OF THE TWENTIETH CENTURY.** (3)
- 575 **MODERN BRITISH SHORT FICTION.** (3)
- 576 **DOCUMENTARY AS LITERATURE.** (3)
- 582 **STUDIES IN MODERN AMERICAN DRAMA.** (3)
- 615 **SEMINAR IN RENAISSANCE AUTHORS.** (3)
- 618 **SEMINAR IN LITERATURE AND HUMAN MORTALITY.** (3)
- 626 **SEMINAR IN SHAKESPEARE: HISTORIES AND COMEDIES.** (3) Prerequisite: En 326 or its equivalent.
- 627 **SEMINAR IN SHAKESPEARE: TRAGEDIES AND TRAGI-COMEDIES.** (3) Prerequisite En 327 or its equivalent.
- 630 **SEMINAR IN SEVENTEENTH CENTURY AUTHORS.** (3)
- 631 **SEMINAR IN METAPHYSICAL POETRY.** (3)
- 632 **SEMINAR IN SEVENTEENTH CENTURY POETRY.** (3)
- 650 **SEMINAR IN ROMANTICISM.** (3)
- 660 **SEMINAR IN VICTORIAN AUTHORS.** (3)
- 670 **SEMINAR IN THE TWENTIETH CENTURY AUTHORS** (3)
- 674 **SEMINAR IN D.H. LAWRENCE.** (3)
- 680 **SEMINAR IN AMERICAN ROMANTICISM.** (3)
- 681 **SEMINAR IN HAWTHORNE AND MELVILLE.** (3)
- 682 **SEMINAR IN AMERICAN REALISM.** (3)

- 683 **SEMINAR IN EMERSON AND POE.** (3)
- 685 **SEMINAR IN FAULKNER AND HEMINGWAY.** (3)
- 690 **SEMINAR IN MODERN JEWISH FICTION.** (3)
- 699 **MASTER'S THESIS.** (6)

Fine Arts (FA)

Staff: BR. PRYOR, MR. SORIANO

The Department of Fine Arts is administered by the Dean of the College of Arts and Sciences.

(*) Courses so designated are approved as electives for curricular requirements in humanities subject to limitations as indicated.

Lower Division Courses

Lecture and laboratory sections of each course must be taken concurrently.

- *103 **FIGURE DRAWING.** (2) Lecture. Studio drawing from the live model using examples from history to define and inspire the students' solutions.
- *104 **FIGURE DRAWING.** (1) Lab.
- *105 **FIGURE PAINTING.** (2) Lecture. Studio painting from the live model. Slide-illustrated lectures and visits to the museums. Utilizes art history examples.
- *106 **FIGURE PAINTING.** (1) Lab.
- *107 **DESIGN PROBLEMS.** (2) Lecture. Studio art class. The students' work as an aid to understanding the elements and principles of art. Presented in an art history context.
- *108 **DESIGN PROBLEMS.** (1) Lab.
- *109 **LANGUAGE OF COLOR AND DESIGN.** (2) Lecture. Basic design problems. The basic relationships between the elements of visual art and the principles which condition their use.
- *110 **LANGUAGE OF COLOR AND DESIGN.** (1) Lab.

Upper Division Courses

- *201 **HISTORY OF ART I.** (3) Prehistoric times to the Renaissance period. Principles and elements of visual organization are emphasized.
- *202 **HISTORY OF ART II.** (3) The Reformation to the present time. Aesthetic appreciation is emphasized. Painting, sculpture and architecture are included.
- *213 **MEDIA AESTHETICS.** (3) Appreciation of the motion-picture and television media, through analytical examination of the elements and principles of each. (CA 213).
- *220 **LANGUAGE OF ART.** (3) Appreciation of the visual arts. Aesthetic analysis of elements and principles. Symbol patterns that recur in world art.
- *221 **CLASSICAL HUMANITIES.** (3) Greek literature, philosophy and art on a comparative basis. Sources and influences from Egypt, Crete and Mesopotamia.
- *222 **INTRODUCTION TO VISUAL CONCEPTS.** (3) Knowledge and understanding of the integrity of art in human life. Man's relationship to his whole environment. Design.
- *223 **HISTORY OF THE FINE ARTS I.** (3) The inter-relationships of art, music, literature and history, and aesthetic appreciation. Prehistoric times to the Renaissance.
- *224 **HISTORY OF THE FINE ARTS II.** (3) Music, art and literature in relation to history. The Reformation to the present.
- *225 **THE CLASSICAL JOURNEY.** (3) Film, art, music and literature which has been influenced either in subject matter or structure, or both, by ancient Greece and Rome.

Geography

- *226 **THE SOUTHERN MYTH.** (3) The Southern myth using films such as *Birth of a Nation*, *Gone With the Wind*, *A Streetcar Named Desire* and *Duel in the Sun*. The art, music and literature of the Southern states.
- *227 **ROMANTICISM IN THE ARTS.** (3) The Romantic movement as seen in music, art, and literature. Films such as *Wuthering Heights*, *Gone To Earth*, *Jane Eyre*.
- *251 **HISTORY AND LITERATURE OF MUSIC I.** (3) Ancient times to the Baroque period, illustrating and describing musical forms and principles.
- *252 **HISTORY AND LITERATURE OF MUSIC II.** (3) The Baroque period to the present time. Musical examples to document forms. The symphony, grand opera. Music as an outgrowth of the cultural fabric.
- *254 **LANGUAGE OF MUSIC.** (3) Elements and principles of music. Forms and instruments are compared. Musical examples. The symphony, sonata, opera, art song.
- *395 **DIRECTED STUDY.** Credit by arrangement.

Geography (Gg)

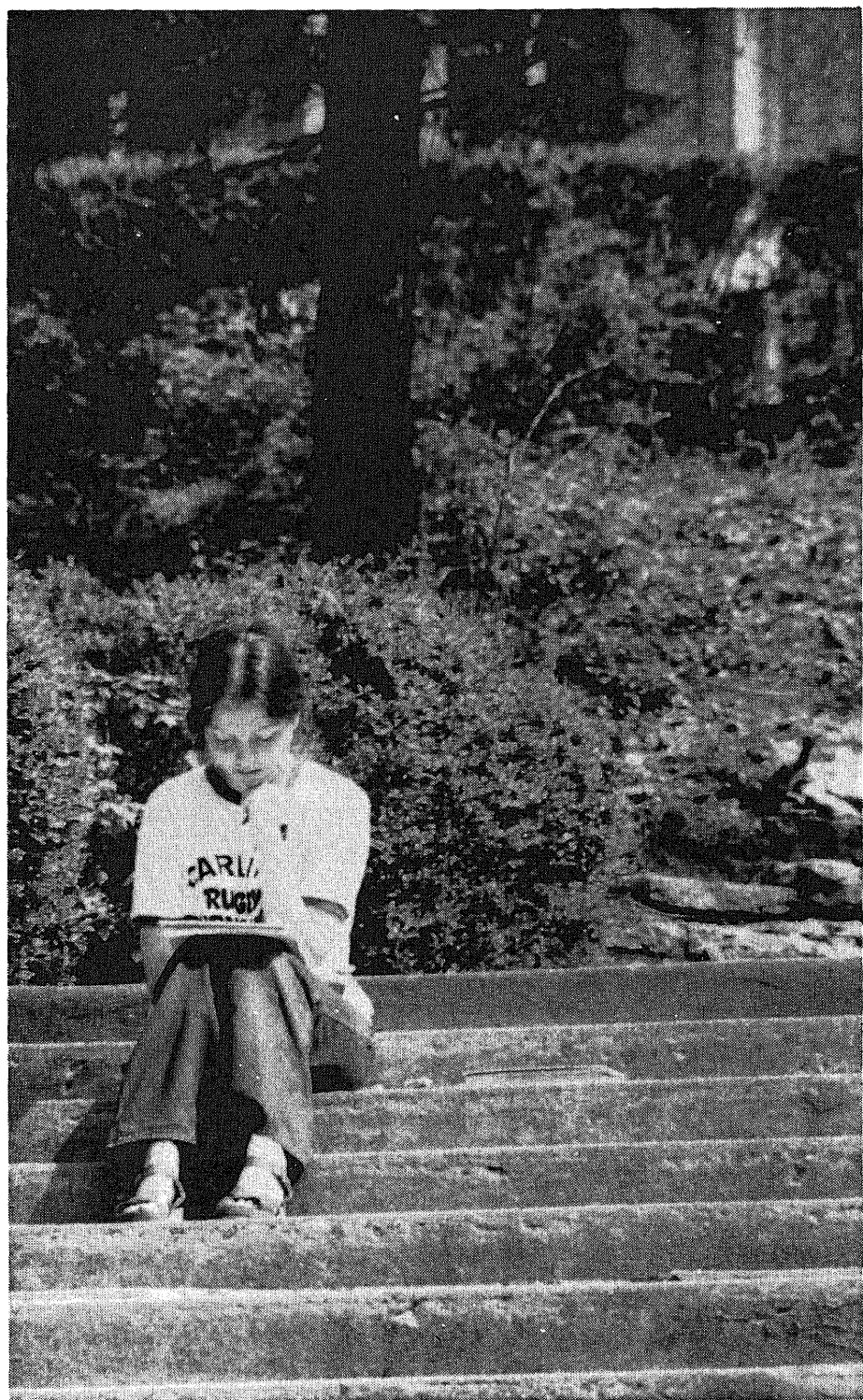
Staff: MR. WILLIAMS

The Department of Geography is administered by the Dean of the College of Continuing Education. Courses augment the student's background in economics, science, and education.

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Upper Division Courses

- *207 **WORLD GEOGRAPHY.** (3) Physical and cultural regions of the world. Human systems, patterns, and diffusions. Man-environmental relationships.
- 220 **GEOGRAPHY OF EUROPE.** (3)
- 260 **GEOGRAPHY OF LATIN AMERICA.** (2-3) Topical and regional. Location patterns and regional development.
- *261 **GEOGRAPHY OF SOUTHEAST ASIA.** (3) Political, economic and social. The People: ethnic background, human activity, population number and distribution.
- 375 **POLITICAL GEOGRAPHY.** (3) (Po 375).
- 395 **DIRECTED STUDY.** Credit to be arranged.



History and Political Science

Staff: DR. SIMON, *chairman*; FR. BENNISH, DR. FORTIN, DR. GOODMAN,
DR. GRUBER, DR. HEIGHBERGER, FR. JOHNSON, MR. McVAY, DR. MOULTON,
MR. SEHER

Assisted by: MRS. BURKE, MISS SMITH, DR. PATTON

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

History (Hs)

Lower Division Courses

- *133 **WESTERN CIVILIZATION I.** (3)
- *134 **WESTERN CIVILIZATION II.** (3)
- *137 **GREAT EPOCHS OF WESTERN MAN I.** (3) Prehistoric man. Empires of antiquity. Ancient Greece. The Hellenistic age. Roman Civilization. Christianity. Islam. The high middle ages.
- *138 **GREAT EPOCHS OF WESTERN MAN II.** (3) The Crusades. The Renaissance. Discovery. The religious upheaval. Religious wars and the modern state. The Baroque.
- *141 **IDEAS AND INSTITUTIONS I.** (3) The evolution of Western ideas and prevailing assumptions and their relations to the institutions which regulate societies. The ancient Near East to the scientific revolution.
- *142 **IDEAS AND INSTITUTIONS II.** (3) A continuation of Hs 141, from the scientific revolution to the present.
- *145 **ATLANTIC CIVILIZATION I.** (3) The development of Europe and America, emphasizing their relationship to one another. The Age of Columbus to the Age of Napoleon.
- *146 **ATLANTIC CIVILIZATION II.** (3) A continuation of Hs 145, from the industrial revolution to the present.
- *157 **CITIES AND THE WESTERN WORLD I.** (3) The growth of cities. The development of urbanization. Technology in the Western World.
- *158 **CITIES AND THE WESTERN WORLD II.** (3) A continuation of Hs 157.

Upper Division Courses

- *202 **HISTORY OF ANCIENT GREECE.** (3) (Gk 202, Cl 202).
- *206 **HISTORY OF ANCIENT ROME.** (3) (Lt 206, Cl 206).
- *211 **EARLY MIDDLE AGES, 300-1154.** (3) Social and cultural change from the Age of Constantine to the Twelfth Century Renaissance.
- *212 **THE HIGH MIDDLE AGES, 1154-1453.** (3) Social organization. Political and artistic achievements. Education. Secularism and decline.
- 215 **THE RENAISSANCE.** (3) The decline of medieval culture. Cultural changes in Florence and their impact in Italy. Political and socio-economic transformation in Western and Eastern Europe. Critical awareness of the past. Imitation of classical norms.
- 216 **THE REFORMATION.** (3) Impact of the Renaissance. Luther's break from Rome. Lutheranism. Calvinism. Reform within the Church. Religious conflicts in England, France and Eastern Europe. Secularized territorial states.
- 220 **EUROPE, SEVENTEENTH CENTURY.** (3) The culture and politics of the Century of Expansion.
- 221 **EUROPE, EIGHTEENTH CENTURY.** (3)
- 222 **REVOLUTIONARY EUROPE, 1763-1848.** (3)
- *224 **MIDDLE EAST TODAY.** (3) (Po 224).

- 225 **EUROPE, 1848-1918.** (3)
- *226 **EUROPE SINCE 1918.** (3)
- 228 **MODERN FRANCE.** (3) France since the Enlightenment, with attention to its unique role in Western society.
- 230 **MODERN GERMANY.** (3) (Po 230).
- 231 **NAZI GERMANY.** (3) (Po 231).
- 232 **HISTORY OF SPAIN AND PORTUGAL.** (3) From earliest times to present. Their roles as the parent nations of Latin America.
- 233 **HISTORY OF POLITICAL THEORY.** (3) (Po 233).
- 234 **NINETEENTH CENTURY RUSSIA.** (3) Impact of French Revolution and Napoleonic wars. Decembrist uprising. Socio-economic and cultural developments in Imperial Russia.
- 235 **SOVIET RUSSIA AND COMMUNISM.** (3) The government, foreign policy and ideology of the Union of Soviet Socialist Republics. Interaction with the government, policies and ideals of the United States. (Po 235).
- 236 **THE RUSSIAN REVOLUTION (1917-23).** (3) Downfall of the Romanov Dynasty, Bolshevik Revolution, Civil War and Intervention. (Po 236).
- 238 **TWENTIETH CENTURY EASTERN EUROPE.** (3) Cultural and political developments since 1900. (Po 238).
- 240 **ENGLAND 1485 to 1763.** (3)
- 241 **ENGLAND, 1763 to 1867.** (3)
- 242 **ENGLAND SINCE 1867.** (3) (Po 242).
- 243 **MODERN IRELAND.** (3)
- 245 **THE ATLANTIC COMMUNITY: THE INTERACTION OF EUROPE AND NORTH AMERICA.** (3) Non-diplomatic relationships (political, economic, intellectual, and social) among the communities of the North Atlantic. (Po 245).
- 249 **THE UNITED NATIONS.** (3) (Po 249).
- *251 **LATIN AMERICA: THE COLONIAL PERIOD.** (3) The Indian background. Age of Discovery. Foundation, organization, and development of Spanish and Portuguese empires in America.
- *252 **LATIN AMERICA: THE NATIONAL PERIOD.** (3) Wars of independence. Formation and development of various national states. Contemporary problems. Latin America and the United States.
- 253 **HISTORY OF MEXICO.** (3) Archaeology. Fusion of Spaniard and native spirit. Missions. Viceroyalty. Independence. Juarez and Positivism. Díaz and dictatorship. Carranza, "Revolution," and peace.
- 254 **ARGENTINA, BRAZIL AND CHILE.** (3)
- 260 **WORLD CIVILIZATIONS I: THE EARLY PERIOD.** (3)
- 261 **WORLD CIVILIZATIONS II. THE MODERN PERIOD.** (3) A continuation of Hs 260.
- 272 **NATIONALISM AND COMMUNISM IN ASIA.** (3)
- 273 **HISTORY OF KOREA.** (3)
- *274 **SOUTHEAST ASIA TO WORLD WAR II.** (3) (Po 274).
- *275 **SOUTHEAST ASIA SINCE WORLD WAR II.** (3) (Po 275).
- *278 **INDIA TO 1857.** (3) (Po 278).
- *279 **INDIA SINCE 1857 AND PAKISTAN.** (3) (Po 279).
- *283 **JAPAN TO 1868.** (3) (Po 283).

History

- *284 **JAPAN SINCE 1868.** (3) (Po 284).
- *285 **CHINA TO 1644.** (3) (Po 285).
- *286 **CHINA SINCE 1644.** (3) (Po 286).
- 287 **CHINA: INTELLECTUAL HISTORY.** (3) Confucianism, Legalism, Taoism and Buddhism. Neo-Confucianism in the Sung period. Intuitionism of Wang Yang-ming. The Ch'ing period. Antecedents of Socialism and Communism. (Po 287).
- 288 **JAPAN: INTELLECTUAL HISTORY.** (3) Indigenous Shintoism. Impact of Chinese Buddhism. Reaction of Neo-Confucianism. National Learning. Changes in the late Tokugawa period. Impact of Western thought. Liberalism. Revolutionary nationalism. Post World War II. (Po 288).
- 289 **CHINA: MAO'S FOREIGN POLICY.** (3)
- *290 **EUROPEAN INTELLECTUAL HISTORY TO THE EIGHTEENTH CENTURY.** (3) Ideas and their influence from antiquity to the Enlightenment.
- *291 **EUROPEAN INTELLECTUAL HISTORY IN THE NINETEENTH AND TWENTIETH CENTURIES.** (3) Ideas and their influence from the French Revolution to the present.
- 292 **NATIONALISM IN MODERN TIMES.** (3) The principle of nationality. The development of national consciousness and nationalist doctrines. Nationalist movements. (Po 292).
- 294 **HISTORICAL CRITICISM.** (3) Undergraduate study of the canons of historical literature as found in its more notable productions. The problem of evidence. Truth in history. Historical research.
- 295 **SENIOR SEMINAR: EUROPE.** (3)
- 296 **SENIOR SEMINAR: ASIA.** (3)
- 297 **SENIOR SEMINAR: LATIN AMERICA.** (3)
- 298 **ADVANCED READING.** (3) Tutorial course under staff direction.
- 301 **COLONIAL AMERICA, 1607-1763.** (3) England and America on the eve of colonization, the founding and development of the American colonies. Differences in religion, culture, and politics.
- 302 **FORMATIVE YEARS OF THE REPUBLIC, 1763-1789.** (3) Thirteen colonies become a national state. Emphasis on the causes of the American Revolution and the writing of the Constitution of 1789.
- 303 **THE NEW NATION, 1785-1825.** (3) The Constitution, origins of the two-party system. Federalists and Democratic Republicans, War of 1812, and ideas which conceived the new nation.
- 304 **THE AGE OF JACKSON, 1825-1861.** (3) Development of sectionalism and attempted solutions, slavery problems, secession, constitutional discussion, Northern industry, the West, and unity and disunity.
- 309 **U.S. MILITARY HISTORY.** (3) Equivalent of MS 104.
- 310 **CIVIL WAR AND RECONSTRUCTION, 1861-1885.** (3) War. Healing wounds. Railroads and Western states. A "New South." Republican national hegemony. Higher education. Impacts of immigration and labor.
- 311 **AGE OF BIG BUSINESS, 1885-1920.** (3) Economic surge with its social and political sequel.
- 312 **UNITED STATES IN THE TWENTIETH CENTURY.** (3) The United States since 1919. Social and political tensions found in America during these years.
- 314 **SOCIAL UNREST IN RECENT AMERICA.** (3) Major causes and effect of social unrest in post-World War II America.
- *330 **THE AMERICAN WEST TO 1789.** (3) The western movement as a mold of national character. English, French, and Spanish contributions. Peopling virgin land. Origins of American political ideas.

- *331 **THE AMERICAN WEST SINCE 1789.** (3) The process of occupying the entire continental territory. State-making. Cultural changes. Paternalism and hardy pioneers. Repeated frontier experiences. The Far West.
- 340 **THE PRESIDENCY.** (3) (Po 340).
- *341 **AMERICAN CIVILIZATION TO 1865.** (3) Colonial base. Break from England. Confederation and Constitution. Federalists, Jeffersonian and Jacksonian democracy. The Tragic Era.
- *342 **AMERICAN CIVILIZATION SINCE 1865.** (3) Reconstruction. Continental expansion. Rise of cities. Social questions. International influence.
- 348 **CONSTITUTIONAL AMERICA TO 1865.** (3) Elements active in colonial times. Making the Constitution. Amendments and interpretations. (Po 348).
- 349 **CONSTITUTIONAL AMERICA SINCE 1865.** (3) Amendments and interpretations. Changing attitudes, new conditions of life, fresh ideas. (Po 349).
- 350 **INTELLECTUAL HISTORY OF THE UNITED STATES.** (3) Puritanism, political Revolutionary thought. American Renaissance, Social Darwinism, and pragmatism in American history.
- 351 **AMERICAN REVOLUTION: CONFLICT & CONSENSUS.** (3) Revolutionary spirit and ideological bases. Revolutionary mentality. English, French, and Russian counterparts. Revolutionary writings. (Po 351).
- 358 **URBAN AMERICA.** (3) Emergence and importance of the city in socio-political America, particularly 1865-1915, but continuing to the 1960's (Po 358).
- 360 **AMERICAN POLITICAL PARTIES.** (3) Role in government and society. Their contribution to the American system of government. Foreign party systems and American pressure groups. (Po 360).
- 361 **HISTORY OF AMERICAN POLITICAL INSTITUTIONS.** (3) Colonial Congresses, the Articles of Confederation, the Constitutional Convention, and the legislative, executive, and judicial departments of the federal government. (Po 361).
- 363 **UTOPIAN COMMUNITIES: MYTHS & MODELS.** (3) (Po 363).
- 364 **AFRICAN BACKGROUND OF THE AMERICAN NEGRO.** (3) The history and culture of the people of West Africa immediately preceding and at the time of the slave trade. (So 364).
- 365 **THE NEGRO IN AMERICA.** (3) African background, the slave trade, slavery, Civil War and Reconstruction, Jim Crowism, Harlem Renaissance, civil rights' revolution, and Black Power. (Po 365, So 365).
- 366 **A HISTORY OF RACIAL AND ETHNIC MINORITIES IN AMERICA.** (3) The major racial and ethnic groups in America. Interrelationships. Slavery, immigration, and the assimilation of these groups into the American character.
- 369 **WOMEN IN AMERICAN HISTORY.** (3)
- 371 **INTER-AMERICAN RELATIONS.** (3) United States interest in and association with the other American states. Interrelations. The concept of hemispheric unity.
- 374 **UNITED STATES FOREIGN POLICY.** (3) (Po 374).
- 375 **HISTORICAL POLITICAL GEOGRAPHY.** (3) (Po 375).
- 377 **INTERNATIONAL RELATIONS.** (3) (Po 377).
- 382 **AMERICAN STUDIES TO 1877.** (3) Puritan times through Reconstruction. The religious, political, and social influences forming the American character. Taken concurrently with En 382. History majors may take Hs 382 instead of Hs 341.
- 383 **AMERICAN STUDIES FROM 1877.** (3) Social Darwinism and Marxism in America. The effects of isolationism and internationalism on the American character. Taken concurrently with En 383. History majors may take Hs 383 instead of Hs 342.

History

- 386 **CHURCH AND STATE IN AMERICA.** (3) (Th 386).
- 395 **SENIOR SEMINAR: UNITED STATES.** (3)
- 398 **ADVANCED READING AND RESEARCH.** (3)

Graduate Courses

- 501 **HISTORICAL METHOD.** (3) Ordinarily prerequisite to and required in all cases for graduate students in history. Approach to research adapted to the Master of Arts in history and to seminar work for that degree.
- 524 **SEMINAR: THE MIDDLE EAST TODAY.** (3) (Po 524).
- 525 **SEMINAR: EUROPE.** (3) Research in the history of Western Europe or of Great Britain.
- 526 **SEMINAR: MODERN BRITAIN AND EUROPE.** (3)
- 527 **SEMINAR: THE EXPANSION OF EUROPE.** (3)
- 528 **SEMINAR: TWENTIETH CENTURY EASTERN EUROPE.** (3)
- 546 **SEMINAR: AMERICAN GOVERNMENT.** (3) (Po 546).
- 551 **SEMINAR: COLONIAL LATIN AMERICA.** (3) (Po 551).
- 552 **SEMINAR: CONTEMPORARY LATIN AMERICA.** (3) (Po 552).
- 572 **SEMINAR: SOUTHEAST ASIA TO WORLD WAR II.** (3) (Po 572).
- 573 **SEMINAR: SOUTHEAST ASIA SINCE WORLD WAR II.** (3) (Po 573).
- 576 **SEMINAR: INDIA TO 1857.** (3) (Po 576).
- 577 **SEMINAR: INDIA SINCE 1857 AND PAKISTAN.** (3) (Po 577).
- 583 **SEMINAR: JAPAN TO 1868.** (3) (Po 583).
- 584 **SEMINAR: JAPAN SINCE 1868.** (3) (Po 584).
- 585 **SEMINAR: CHINA TO 1644.** (3) (Po 585).
- 586 **SEMINAR: CHINA SINCE 1644.** (3) (Po 586).
- 602 **SEMINAR: COLONIAL UNITED STATES.** (3)
- 603 **SEMINAR: EARLY NATIONAL PERIOD.** (3)
- 611 **SEMINAR: THE AGE OF BIG BUSINESS.** (3)
- 612 **SEMINAR: THE UNITED STATES IN THE TWENTIETH CENTURY.** (3)
- 614 **SEMINAR: SOCIAL UNREST IN RECENT AMERICA.** (3)
- 630 **SEMINAR: THE WEST TO 1783.** (3)
- 631 **SEMINAR: THE WEST SINCE 1783.** (3)
- 648 **SEMINAR: CONSTITUTIONAL HISTORY OF THE UNITED STATES.** (3)
- 650 **SEMINAR: UNITED STATES' INTELLECTUAL HISTORY.** (3)
- 658 **SEMINAR: URBAN AMERICA.** (3)
- 674 **SEMINAR: UNITED STATES' FOREIGN RELATIONS.** (3) (Po 674).
- 695 **SPECIAL STUDIES.** (3)
- 699 **MASTER'S THESIS.** (6)

Political Science (Po)

Lower Division Courses

- *101 **GOVERNMENT IN SOCIETY.** (3) Principles of political parties, national government, foreign policy and international relations. Contemporary problems. Professional thought patterns and motivation.

- *110 **AMERICAN GOVERNMENT.** (3)
- *140 **INTRODUCTION TO PUBLIC POLICY.** (3) Governments, institutions and processes will be examined within the context of various problems. Consequences of governmental action.

Upper Division Courses

- 221 **COMPARATIVE GOVERNMENT—EUROPE.** (3) The political development of Great Britain, France and the Soviet Union. Political parties, electoral systems, pressure groups, and the structure of society.
- *224 **MIDDLE EAST TODAY.** (3) (Hs 224).
- 229 **FRENCH POLITICS.** (3) France since Revolution of 1789. Napoleon I. The Restoration. Napoleon III. The Third Republic. The Vichy regime. The Fourth and Fifth Republics.
- 230 **MODERN GERMANY.** (3) German politics from Bismarck to the present. The Weimar Republic. The Nazi period. The contemporary division of Germany. (Hs 230).
- 231 **NAZI GERMANY.** (3) The rise and fall of Adolf Hitler. Origins. Ideology. Seizure of power. "Co-ordination" of domestic society. The SS relations with the Army. Foreign policy. The opposition to Hitler. (Hs 231).
- 233 **HISTORY OF POLITICAL THEORY.** (3) Men and ideas. The major thinkers in history are studied for their effects on political problems today.
- 235 **SOVIET RUSSIA AND COMMUNISM.** (3) The government, foreign policy and ideology of the Union of Soviet Socialist Republics. Interaction with the government, policies and ideals of the United States. (Hs 235).
- 236 **THE RUSSIAN REVOLUTION (1917-23).** (3) Downfall of the Romanov Dynasty, Bolshevik Revolution, Civil War and Intervention. (Hs 236).
- 238 **TWENTIETH CENTURY EASTERN EUROPE.** (3) (Hs 238).
- 242 **ENGLAND SINCE 1867.** (3) (Hs 242).
- 243 **CONSTITUTIONAL GOVERNMENT OF ENGLAND.** (3) Constitutional and current political trends in contemporary England. Weekly review of events in the order established by the British Constitution.
- 245 **THE ATLANTIC COMMUNITY.** (3) (Hs 245, Ec 245).
- 249 **THE UNITED NATIONS.** (3) The League of Nations. The United Nations. Purposes and principles, politics and law in the U.N. basic structure, voting procedures, and political transformation. Major cases. (Hs 249).
- 251 **INTERNATIONAL LAW.** (3) Origins. Development. Territory and jurisdiction of States. Nationality. International claims. Diplomatic and consular officials. Treaties. Legal use of force. International organizations.
- 272 **NATIONALISM AND COMMUNISM IN ASIA.** (3)
- 273 **HISTORY OF KOREA.** (3)
- *274 **SOUTHEAST ASIA TO WORLD WAR II.** (3) (Hs 274).
- *275 **SOUTHEAST ASIA SINCE WORLD WAR II.** (3) (Hs 275).
- *278 **INDIA TO 1857.** (3) (Hs 278).
- *279 **INDIA SINCE 1857 AND PAKISTAN.** (3) (Hs 279).
- *283 **JAPAN TO 1868.** (3) (Hs 283).
- *284 **JAPAN SINCE 1868.** (3) (Hs 284).
- *285 **CHINA TO 1644.** (3) (Hs 285).
- *286 **CHINA SINCE 1644.** (3) (Hs 286).

Political Science

- 287 **CHINA: INTELLECTUAL HISTORY.** (3) (Hs 287).
- 288 **JAPAN: INTELLECTUAL HISTORY.** (3) (Hs 288).
- 289 **CHINA: MAO'S FOREIGN POLICY.** (3)
- 291 **CONTEMPORARY POLITICAL ANALYSIS.** (3) The behavioralist school and its critics. Max Weber: the fact-value distinction. Functionalism, simulation, decision-making, communications theory, game theory, and systems theory.
- 292 **NATIONALISM IN MODERN TIMES.** (3)
- 298 **ADVANCED READING AND RESEARCH.** Credit arranged.
- 330 **GOVERNMENT AND BUSINESS I.** (3) (Ec 330).
- 332 **INTRODUCTION TO PUBLIC ADMINISTRATION.** (3) Local and state. Primary emphasis is on national problems and the federal civil service.
- 335 **PUBLIC FINANCE AND TAXATION.** (3) (Fi 335, Ec 335).
- 340 **THE PRESIDENCY.** (3) Federal-State relationships. The constitutional concept of the office. The President as administrator, as commander-in-chief in wartime, as organ of foreign relations, and as political leader.
- 346 **THE CONGRESS.** (3) The American legislative process. The structure and functions of the United States Congress. U.S. State legislatures and foreign legislative systems.
- *348 **CONSTITUTIONAL HISTORY OF U.S. TO 1865.** (3) (Hs 348).
- *349 **CONSTITUTIONAL HISTORY OF U.S. SINCE 1865.** (3) (Hs 349).
- 351 **AMERICAN REVOLUTION: CONFLICT & CONSENSUS.** (3) (Hs 351).
- 352 **PRINCIPLES OF RESEARCH.** (3) Survey research and data analysis as used in modern political and social research. (So 352).
- *358 **URBAN AMERICA.** (3) (Hs 358).
- 359 **STATE AND LOCAL GOVERNMENT.** (3)
- 360 **AMERICAN POLITICAL PARTIES.** (3) (Hs 360).
- *361 **HISTORY OF AMERICAN POLITICAL INSTITUTIONS.** (3) (Hs 361).
- 362 **PUBLIC OPINION AND VOTING BEHAVIOR.** (3) How and why Americans formulate and express their political attitudes. Voting behavior. The measurement of public opinion.
- 363 **UTOPIAN COMMUNITIES: MYTHS & MODELS.** (3) From Plato's *Republic* to Orwell's 1984. Influence on the western world. Structures of representative utopias. Impact. Significance for today. (Hs 363).
- 365 **THE NEGRO IN AMERICA.** (3) (Hs 365).
- 370 **FOREIGN AFFAIRS IN THE UNITED STATES.** (3) Current policies and operations. State Department organization. The Career Foreign Service and related agencies.
- 371 **INTER-AMERICAN RELATIONS.** (3) (Hs 371).
- 374 **UNITED STATES FOREIGN POLICY.** (3) The emerging policies of the United States of America from the period of its revolutionary origin through the crises of the present time. (Hs 374).
- 375 **HISTORICAL POLITICAL GEOGRAPHY.** (3) Contemporary foreign policy in its many geographical and environmental relationships. Population, raw materials, and the history of geopolitical theories. (Hs 375).
- 377 **INTERNATIONAL RELATIONS.** (3) The theory of international relations. Nationalism. Imperialism. Disarmament and Arms Control. Diplomacy. Collective Security. (Hs 377).
- 390 **SEMINAR IN INTERNATIONAL RELATIONS.** (3) Senior comprehensive paper. Research methods.

- 391 **PROBLEMS IN AMERICAN GOVERNMENT.** (3) Selected problems. The processes of American government in dealing with problems. Taken in senior year.
- 395 **DIRECTED STUDY.** Credit to be arranged.

Graduate Courses

- 524 **SEMINAR: THE MIDDLE EAST TODAY.** (3) (Hs 524).
- 546 **SEMINAR: AMERICAN GOVERNMENT.** (3) The national political system. Designed to meet the needs of teachers in service as well as students doing advanced work in History and Political Science. (Hs 546).
- 572 **SEMINAR: SOUTHEAST ASIA TO WORLD WAR II.** (3) (Hs 572).
- 573 **SEMINAR: SOUTHEAST ASIA SINCE WORLD WAR II.** (3) (Hs 573).
- 576 **SEMINAR: INDIA TO 1857.** (3) (Hs 576).
- 577 **SEMINAR: INDIA SINCE 1857 AND PAKISTAN.** (3) (Hs 577).
- 583 **SEMINAR: JAPAN TO 1868.** (3) (Hs 583).
- 584 **SEMINAR: JAPAN SINCE 1868.** (3) (Hs 584).
- 585 **SEMINAR: CHINA TO 1644.** (3) (Hs 585).
- 586 **SEMINAR: CHINA SINCE 1644.** (3) (Hs 586).
- 674 **SEMINAR: UNITED STATES FOREIGN RELATIONS.** (3) (Hs 674).
- 699 **MASTER'S THESIS.** (6)

Mathematics (Mt)

Staff: DR. LARKIN, *chairman*; MR. BRUGGEMAN, DR. COLLINS, DR. DELANEY, DR. FLASPOHLER, FR. ISENECKER, MR. TRUNNELL

Assisted by: DR. BUTEN, MR. CHARRIER, MR. COLLINS, MR. DEVANNEY, DR. DOHERTY, DR. HERBOLD, DR. KLEE, MR. KLOECKER

- (*) Courses so designated are approved as electives for curricular requirements in mathematics, subject to limitations as indicated.

Lower Division Courses

The Xavier University admission requirement of two units of high school mathematics is assumed for all mathematics courses. Students deficient in arithmetic and basic algebra may require remedial work before taking any college mathematics courses.

Descriptions of mathematics courses in Computer Science are found in the Computer Science section.

- 000 **REFRESHER MATHEMATICS.** No credit.
- 100 **MATHEMATICS FOR RADIOLOGY.** (3) Topics in mathematics useful to students studying to become X-ray technologists.
- *101 **ELEMENTS OF STATISTICAL INFERENCE.** (3) Description of sample data, simple probability, theoretical distributions, normal and binomial, estimation, tests of hypotheses, correlation, and regression.
- *102 **MATHEMATICS OF FINANCE.** (3) Selecting the optimum investment plan from competing alternatives. Personal and business decision-making. Time value analysis applied to stocks, bonds, insurance.
- *103 **STATISTICS FOR THE BIOLOGICAL SCIENCES.** (3) Descriptive statistics, probability, point estimation and hypothesis testing, regression and correlation. For students in biological and health sciences.

Mathematics

- *104 **COLLEGE MATHEMATICS.** (3) Sets. Construction of Number Systems. Integers, rational, real and complex numbers. Space Coordinates. Functions. Equations and Inequalities. Logic, algorithms and computers.
- *110 **VECTORS AND GEOMETRY.** (3) Lines and planes, conics, quadrics, Cartesian, polar, cylindrical and spherical coordinates, systems of linear equations, determinants, matrices, matrix algebra, characteristic values and vectors.
- *112 **COLLEGE MATHEMATICS WITH BUSINESS APPLICATIONS.** (3) Graphical analysis, functions systems of equations and matrices, inequalities, maxima and minima, linear programming, series, difference equations.
- 113 **FORTRAN PROGRAMMING.** (3) FORTRAN-IV computer programming language. Writing FORTRAN-IV programs. Computer experience. Solving problems in science and engineering.
- *120 **CALCULUS I.** (3) Rate of change of a function, derivatives of algebraic functions, curve plotting, max-min problems, integration.
- *121 **CALCULUS OF ONE VARIABLE** (Scientific Applications). (3) Derivatives and integrals of algebraic and other functions, parametric equations, change of coordinates and series. Applications of the calculus in science.
- *122 **CALCULUS OF ONE VARIABLE** (Business Applications). (3) Derivatives and integrals of algebraic and other functions used in economics. Marginal and optimality analysis and determination of elasticities.
- 125 **INTRODUCTION TO COMPUTING.** (2) (CS 125).
- 130 **CALCULUS II.** (3) Applications of integration, transcendental functions, methods of integration, elementary mechanics of series introduction to differential equations. Prerequisite: Mt 120.
- 132 **COBOL PROGRAMMING.** (3) COBOL computer programming language. Writing effective COBOL programs. Computer experience. Solving problems in business data processing.
- 135 **NUMERICAL CALCULUS.** (1) (CS 135).
- 197 **TUTORIAL STUDY.** Credit by arrangement.

Upper Division Courses

- 201 **MATHEMATICAL STATISTICS I.** (3) Probability, probability distributions (discrete, continuous, univariate, multivariate), characteristics of distributions, sampling, estimation. Prerequisite: Mt 220.
- 210 **INTRODUCTION TO INFINITE SERIES.** (2-3) Limit of sequence and series of real numbers, comparison, ratio and root tests, sequences and series of functions, L'Hospital's Rule, power series. Prerequisite: Mt 130.
- 211 **MATHEMATIC STATISTICS II.** (3) Hypothesis testing, confidence methods, regression analysis, factorial designs, experimental design, sampling inspection, non-parametric methods. Prerequisite: Mt 201.
- 215 **DIFFERENTIAL EQUATIONS.** (2-3) Second and higher order differential equations, series solutions, applications. Prerequisite: Mt 130.
- 220 **ADVANCED CALCULUS I.** (3) Functions of several variables, partial differentiation, exact differentials, vector calculus. Implicit functions, composite functions, chain rule, Mean Value Theorems, Jacobians. Prerequisites: Mt 110, 130.
- 230 **ADVANCED CALCULUS II.** (2-3) Multiple integrals, change of variable, line and surface integrals, divergence and curl, Divergence, Green's and Stoke's theorems. Prerequisite: Mt 220.
- 232 **TOPICS IN APPLICATIONS OF ELEMENTARY MATHEMATICS.** (3) Credit may be applied toward M. Ed. degree only.

- 233 **TOPICS IN GEOMETRY.** (3) Credit may be applied toward M.Ed. degree only.
- 234 **TOPICS IN COMPUTER MATHEMATICS.** (3) Credit may be applied toward M.Ed. degree only.
- 235 **TOPICS IN COMPUTERS AND LANGUAGES.** (3) Credit may be applied toward M.Ed. degree only.
- 236 **TOPICS IN CALCULUS.** (3) The rate of change of a function, derivatives of algebraic functions, integration. Credit may be applied only toward M.Ed. degree.
- 237 **TOPICS IN LOGIC.** (3) Credit may be applied only toward M.Ed. degree.
- 238 **TOPICS IN STATISTICS.** (3) Credit may be applied only toward M.Ed. degree.
- 239 **TOPICS IN MODERN ALGEBRA.** (3) Credit may be applied only toward M.Ed. degree.
- 240 **LINEAR ALGEBRA.** (3) Algebra of matrices, determinants, inverses, groups of transformations, vector spaces, linear and bilinear mappings, eigenvalues. Prerequisite: Mt 110.
- 250 **INTRODUCTION TO MODERN ALGEBRA.** (3) Groups, isomorphism, homomorphism, rings, ideals, fields, linear congruences, real numbers.
- 260 **ELEMENTARY TOPOLOGY.** (3) Topology of metric spaces, limits, continuity, compactness, and connectedness. Prerequisite: Mt 220.
- 270 **INTERMEDIATE ANALYSIS.** (3) Elements of set theory, numerical sequences and series, continuity, differentiation. Sequences and series of functions, and Riemann-Stieltjes integral. Prerequisite: Mt 210, 260.
- 280 **COMPLEX VARIABLES I.** (3) Complex numbers, sequences and series of numbers and functions, analytic functions. Cauchy integral theorem, power series, residues. Prerequisite: Mt 230.
- 303 **NUMERICAL ANALYSIS I.** (3) Mathematical problem solving on digital computers. Interpolation, error analysis, numerical differentiation and integration, approximation of functions by polynomials. Prerequisite: Mt 220 and Programming.
- 310 **PROJECTIVE GEOMETRY.** (3)
- 314 **ADVANCED ORDINARY DIFFERENTIAL EQUATIONS I.** (3) Existence and uniqueness, phase-plane concepts, elementary critical points and stability theory, second order linear equations with variable coefficients.
- 320 **MATHEMATICAL LOGIC.** (3) Model and proof theoretic investigation of the propositional and predicate calculi. Paradoxes, formal systems, Godel's theorems.
- 330 **THEORY OF NUMBERS.** (3)
- 342 **LINEAR PROGRAMMING.** (3) The assignment problem, transportation problem, the simplex method, quality. Emphasis is on computer methods. Prerequisites: Mt 220.
- 344 **VECTOR AND TENSOR ANALYSIS I.** (3) Fundamental operations, differentiation and integration of tensor fields, integral theorems, tensors in Cartesian orthogonal coordinates. Prerequisites: Mt 230, 240.
- 350 **FOUNDATIONS OF MATHEMATICS.** (3)
- 354 **CALCULUS OF VARIATIONS.** (3) Necessary and sufficient conditions for an extremum, the Euler equations, variational problems with movable boundaries, constrained extrema and Hamilton's principle. Prerequisite: Mt 230.
- 360 **MEASURE THEORY AND INTEGRATION.** (3) Linear spaces, additive classes and Borel sets, outer measures. Lebesgue-Stieltjes Measure, measurable functions, integration, convergence theorems, differentiation.
- 397 **SPECIAL READING AND STUDY FOR ADVANCED STUDENTS.** Credit by arrangement.

Graduate Courses

Advanced Calculus is assumed as prerequisite for all graduate courses.

- 510 **GENERAL TOPOLOGY I.** (3) Ordinals and Cardinals, topological spaces, connectedness, separation axioms, and covering axioms.
- 530 **GENERAL TOPOLOGY II.** (3) Metric spaces, convergence, compactness, function spaces, complete spaces, homotopy. Prerequisite: Mt 510.
- 540 **ABSTRACT ALGEBRA I.** (3) Groupoids, semigroups and groups, ring and fields, subgroups and subrings, isomorphism and imbedding, normal subgroups and ideals. Prerequisite: Mt 240.
- 550 **ABSTRACT ALGEBRA II.** (3) Universal Algebras, homomorphism, groups with multioperators, automorphisms and endomorphisms, normal and composition series, abelian, nilpotent and solvable groups. Prerequisite: Mt 540.
- 560 **REAL ANALYSIS I.** (3) Functions spaces, category, compactness and continuity. Hahn-Banach Theorem, dual space, Lebesgue measure. Prerequisites: Mt 240, 260, 270.
- 570 **REAL ANALYSIS II.** (3) Hilbert space, orthonormal sets, Mean Ergodic Theorem, Banach Algebra, Harr measure. Prerequisite: Mt 560.
- 580 **COMPLEX VARIABLES II.** (3) Number systems, complex plane, Mobius transformations, powers and roots, holomorphic functions, and infinite series. Prerequisites: Mt 260, 270.
- 602 **OPERATIONS RESEARCH I.** (3) Stochastic processes, queuing theory and its applications, statistical estimation of parameters. Prerequisites: Mt 211 or 302, and Mt 240.
- 612 **OPERATIONS RESEARCH II.** (3) Reliability models, inventory theory, game theory, and simulation techniques. Prerequisite: Mt 602.
- 613 **NUMERICAL ANALYSIS II.** (3) Extension of Mt 303. Solution of ordinary and partial differential equations, non-linear systems of equations, non-polynomial approximation of functions, Fourier series. Prerequisite: Mt 303.
- 621 **APPLIED REGRESSION ANALYSIS.** (3) Fitting a straight line by least squares, the matrix approach to linear regression, the examination of residuals, two independent variables, polynomials, Prerequisite: Mt 211.
- 631 **STOCHASTIC PROCESSES.** (3) Random variables and stochastic processes, conditional probability and conditional expectation, normal processes and covariance stationary processes, counting processes. Prerequisite: Mt 201.
- 641 **STATISTICAL DECISION THEORY.** (3) Games, values and optimal strategies in games, general structure of statistical games, utility and principles of choice classes of optimal strategies, sequential games. Prerequisite: Mt 211.
- 697 **SPECIAL READING FOR ADVANCED GRADUATE STUDENTS.** Credit by arrangement.
- 699 **MASTER'S THESIS.** (6)

Military Science (MS)

The Reserve Officers' Training Corps

Staff: LTC. FINGER, *chairman*; CPT. MULLORI, CPT. BENNETT, CPT. SCHIESS

Assisted by: SGM QUINONES, SFC DINGESS, SFC PECK

The Department of Military Science provides an opportunity for the study of subjects of recognized military and educational value to assist the student in gaining the foundations of intelligent citizenship. The primary purpose of this four year program is to produce junior leaders who have the qualities and attributes essential to service as commissioned officers in the United States Army. The course of instruction is open to enrollment for both male and female students.

Female students will not be obliged to participate in instruction directly related to offensive military tactics nor activities beyond their normal physical capacities.

The complete program of instruction comprises four semesters of lower division (basic) courses and four semesters of upper division (advanced) courses. An optional flight instruction program is available to eligible seniors.

The lower division (basic) courses are taken on a voluntary basis. THERE IS NO MILITARY OBLIGATION INCURRED BY ENROLLMENT IN LOWER DIVISION COURSES (Freshman and Sophomore year). A military obligation is incurred by enrollment and completion of the upper division (advanced) courses.

The advanced courses qualify students for commission in the United States Army. Admission to MS 201 must be approved by the Chairman of the Military Science Department and will depend upon fulfillment of the following conditions:

1. Voluntary application on the part of the student.
2. Completion of MS 101, 102, 103, and 104. Advanced placement for these basic courses will be determined by the Chairman of the Military Science Department. Placement will be considered for such courses completed in ROTC at other institutions, Junior ROTC, and prior service for veterans. Students may satisfy requirements for the basic courses by completing the ROTC Basic Camp (six weeks).
3. Demonstration of potential leadership and scholarship.
4. Successful passing of a prescribed medical examination.
5. Attainment of a prescribed minimum score on the ACT or SAT (or in the absence of such scores, meeting prescribed minimum standards on a special aptitude test).
6. Signing the ROTC Advance Course Student Contract which entitles the student to receive a \$100 per month subsistence allowance during the school year, not to exceed 20 months for the two years.

ROTC students, upon graduation and commissioning, will be obliged to satisfy a service agreement which may be (1) two years active duty service followed by four years in the reserves; or (2) three to six months active duty for training followed by eight years in the reserve program.

Credit for Military Science courses will be given on the same basis as for other courses offered in the university. The credit hours for these courses may be used to satisfy unspecified electives.

Leadership Development Laboratory is a required portion of the curriculum but does not receive academic credit.

Lower Division Courses

- 101 **INTRODUCTION TO ROTC AND THE ARMY.** (1) ROTC and the Army. Small bore rifle marksmanship. Basic military organization. Leadership Development Laboratory.
- 102 **NATIONAL DEFENSE STRUCTURE.** (1) The organization of the US Army, the US Defense Establishment, and their roles in national security. Basic leadership principles. Leadership Development Laboratory.
- 103 **LEADERSHIP.** (1) Theory of leadership. Leadership Development Laboratory.

Military Science

- 104 **AMERICAN MILITARY HISTORY.** (3) American Military History. Leadership traits exhibited. Leadership Development Laboratory.

Upper Division Courses

- 201 **FUNDAMENTALS OF MILITARY TACTICS AND METHODS OF INSTRUCTION.** (2) Map reading. Tactics. Methods of instruction. Leadership Development Laboratory.
- 202 **ADVANCED MILITARY TACTICS.** (3) Small unit tactics and communications. Branches of the Army. Leadership Development Laboratory.
- 203 **THE MILITARY TEAM.** (3) Theory and dynamics of the military team. Company administration and logistics. Leadership Development Laboratory.
- 204 **PROFESSIONAL DEVELOPMENT AND MILITARY LAW.** (2) Military Law. Professional development. Preparation for active duty. Leadership Development Laboratory.
- 290 **SPECIAL INSTRUCTIONS.** Credit to be arranged.

Modern Languages

Staff: DR. VEGA, *chairman*; DR. BEIGEL, DR. BOURGEOIS, MR. EICK, FR. KENNEALY, MR. REISELMAN

Assisted by: DR. BARNES, MR. CASSINI, MR. CHAVES, DR. COATES, MR. HOLMAN, MRS. KATZ, DR. MIYAR, MISS MOSCHINSKY, MRS. TROEGER, FR. TRUMMER, MISS RODRIGUEZ, FR. WHEELER, DR. ZINAM

Students who present two or more high school units of a modern language are exempted from taking the 111 course if they continue the same language. For better placement and also for further reducing the number of hours required, they are encouraged to take the Modern Language Proficiency Test.

The successful completion of ML 122 course or the equivalent is a prerequisite for enrollment in upper division courses.

All modern language majors must take a departmental Senior Comprehensive Examination in their major language.

(*) Courses so designated are approved as electives for curricular requirements in humanities, subject to limitations as indicated.

French (Fr)

Lower Division Courses

- 111 **ELEMENTARY FRENCH I.** (3) The mechanics of speaking, reading and writing basic French.
- 112 **ELEMENTARY FRENCH II.** (3) A continuation of Fr 111. Prerequisite: Fr 111.
- 121 **INTERMEDIATE FRENCH I.** (3) Advanced facility in reading and conversation. Prerequisite: Fr 112.
- 122 **INTERMEDIATE FRENCH II.** (3) A continuation of Fr 121. Prerequisite: Fr 121.

Upper Division Courses

- 200 **ORAL AND WRITTEN COMMUNICATION IN FRENCH.** (3) Required of French majors.
- *206 **LINGUISTICS.** (3) Not applicable for French majors. (En 206).
- *207 **STYLE IN LITERATURE AND LANGUAGE.** (3)
- 209 **FRENCH PRONUNCIATION.** (3)
- *220 **CONTEMPORARY FRANCE.** (3)

- *235 **FRENCH CULTURE.** (3)
- *236 **THE FRENCH NOVEL.** (3)
- *237 **FRENCH POETRY.** (3)
- *239 **FRENCH THEATER.** (3)
- *245 **THE RENAISSANCE IN FRANCE.** (3)
- *252 **FRENCH CLASSICISM.** (3)
- *260 **THE AGE OF REASON IN FRANCE.** (3)
- *277 **FRENCH ROMANTICISM AND REALISM.** (3)
- *287 **CONTEMPORARY FRENCH LITERATURE.** (3)
- 290 **TODAY'S FRENCH-ADVANCED CONVERSATION.** (3)
- *294 **SELECTED READINGS.** Credit to be arranged.
- 298 **FRENCH STUDIES IN FRANCE.** Credit by arrangement. French language and civilization. Grants-in-aid may be available through the Fredin Memorial Scholarship Fund.
- 325 **TEACHING MODERN LANGUAGES.** (3) (Ed 325).
- 395 **DIRECTED STUDY.** Credit to be arranged.

German (Gr)

Lower Division Courses

- 111 **ELEMENTARY GERMAN I.** (3) The basic skills of German.
- 112 **ELEMENTARY GERMAN II.** (3) Further development of the skills acquired in Gr 111, its prerequisite.
- 121 **INTERMEDIATE GERMAN I.** (3) German culture through readings. Review of Grammar. Prerequisite: Gr 112.
- 122 **INTERMEDIATE GERMAN II.** (3) Advanced readings and discussions of German literature and culture. Prerequisite: Gr 121.

Upper Division Courses

- 200 **ORAL AND WRITTEN COMMUNICATION.** (3) Required of all German majors.
- *206 **LINGUISTICS.** (3) Not applicable for German majors. (En 206).
- 209 **GERMAN PRONUNCIATION.** (3)
- *210 **DOCUMENTARY THEATRE SINCE 1945.** (3) Dorst, Grass, Hochhuth, Weiss, and others.
- *211 **GERMAN DRAMA AND RADIO PLAYS.** (3)
- *213 **GERMAN CONTEMPORARY FICTION I.** (3)
- *214 **GERMAN CONTEMPORARY FICTION II.** (3)
- 217 **CONVERSATIONAL GERMAN.** (3) Topic: Current events.
- 218 **CONVERSATIONAL GERMAN.** (3) Topic: The humanities.
- 219 **SCIENTIFIC GERMAN.** (3) Topic: The sciences.
- *220 **INTRODUCTION TO GERMAN CIVILIZATION.** (3) German history, politics, philosophy, literature, and art from the middle of the Eighteenth Century to the present.
- *230 **READINGS IN GERMAN LITERATURE.** (3) Lyric, prose, and drama. German literature with readings and discussion of major works and discussion of basic literary terms.
- *232 **LITERARY CURRENTS IN GERMAN LITERATURE FROM THE BEGINNINGS TO 1750.** (3) Required of all German majors.

Modern Languages

- *260 **THE CLASSICAL PERIOD.** (3) *Sturm und Drang*, Goethe, and Schiller. Required of all German majors.
- *261 **GERMAN ROMANTICISM.** (3) Novalis, Eichendorff, Brentano, Tieck, and others.
- *265 **GERMAN NOVEL IN THE NINETEENTH CENTURY.** (3) Keller, Storm, Raabe, and Fontane.
- *270 **THE GERMAN SHORT STORY.** (3) Thomas Mann, Heinrich Mann, Rilke, and Schnitzler.
- *272 **MODERN POETRY.** (3) Representative German poets from Rilke to the present time.
- *273 **CONTEMPORARY LITERATURE—EAST AND WEST.** (3) Present-day authors in East and West Germany. Grass, Boell, Johnson, Walser, Hildesheimer, Seghers and others.
- *294 **SELECTED READINGS.** Credit by arrangement. Directed reading and study for summer and special students.
- 298 **GERMAN STUDIES ABROAD.** Credit by arrangement. German language and civilization (in German). History, economics, (in English). In collaboration with the University of Vienna (Strobl) and other Austrian and German universities.
- 325 **TEACHING MODERN LANGUAGES.** (3) (Ed 325).
- *327 **SEMINAR: GERMAN LANGUAGE AND CULTURE.** (3) For high school teachers. Phonetics, grammar, syntax, and style. Contemporary cultural developments. (Ed 327).
- *343 **HESSE (IN TRANSLATION).** (3) Selected works of Hermann Hesse.
- *345 **KAFKA (IN TRANSLATION).** (3) Selected works of Franz Kafka.
- *346 **FAUST IN LEGEND AND LITERATURE (IN TRANSLATION).** (3) The Faustian motif through the ages with special emphasis on Goethe's *Faust*, I and II.
- *347 **MAN IN MODERN LITERATURE (IN TRANSLATION).** (3) German prose and drama from 1900. Hebbel, Kleist, Hauptmann, Brecht, Schopenhauer, Nietzsche, Thomas Mann, Boell and Grass.
- 395 **DIRECTED STUDY.** Credit to be arranged.
- Sequence for non-majors: Gr 200, 210, 211, 212, 213, 214, 215, and 216.*

Japanese (Ja)

- 111 **ELEMENTARY JAPANESE I.** (3) The mechanics of speaking, reading and basic writing in Japanese. Offered in Fall semester 1976-77.
- 112 **ELEMENTARY JAPANESE II.** (3) A continuation of Ja 111. Prerequisite: Ja 111. Offered in Spring semester 1976-77.
- 121 **INTERMEDIATE JAPANESE I.** (3) Advanced facility in reading and conversation. Prerequisite: Ja 112. Offered in Fall semester 1977-78.
- 122 **INTERMEDIATE JAPANESE II.** (3) A continuation of Ja 121. Prerequisite: Ja 121. Offered in Spring semester 1977-78.

Russian (Ru)

Lower Division Courses

- 111 **ELEMENTARY RUSSIAN I.** (3) The Russian language. The mechanics, reading, and writing in Russian.
- 112 **ELEMENTARY RUSSIAN II.** (3) A Continuation of Ru 111. Prerequisite: Ru 111.
- 121 **INTERMEDIATE RUSSIAN I.** (3) A grammar review. Emphasis on composition. Prerequisite: Ru 112.
- 122 **INTERMEDIATE RUSSIAN II.** (3) Reading of literary and cultural texts. Grammar review continued. Prerequisite: Ru 121.

Upper Division Courses

- 200 **ORAL AND WRITTEN COMMUNICATION IN RUSSIAN.** (3)
- *206 **LINGUISTICS.** (3) (En 206).
- *232 **RUSSIAN AUTHORS I.** (3) Russian Literature. Readings and analysis of major works and genres.
- *233 **RUSSIAN AUTHORS II.** (3) A continuation of Ru 232.
- *294 **SELECTED READINGS.** Credit by arrangement. Independent readings and individual study of specific works of Russian literature under the supervision of a faculty member.
- *374 **19th CENTURY RUSSIAN LITERATURE (IN TRANSLATION).** (3) Critical survey of major writers of the period and their works.
- *375 **20th CENTURY RUSSIAN LITERATURE (IN TRANSLATION).** (3) Critical survey of major writers and their works of the period.
- *395 **DIRECTED STUDY.** Credit by arrangement.

Spanish (Sp)

Lower Division Courses

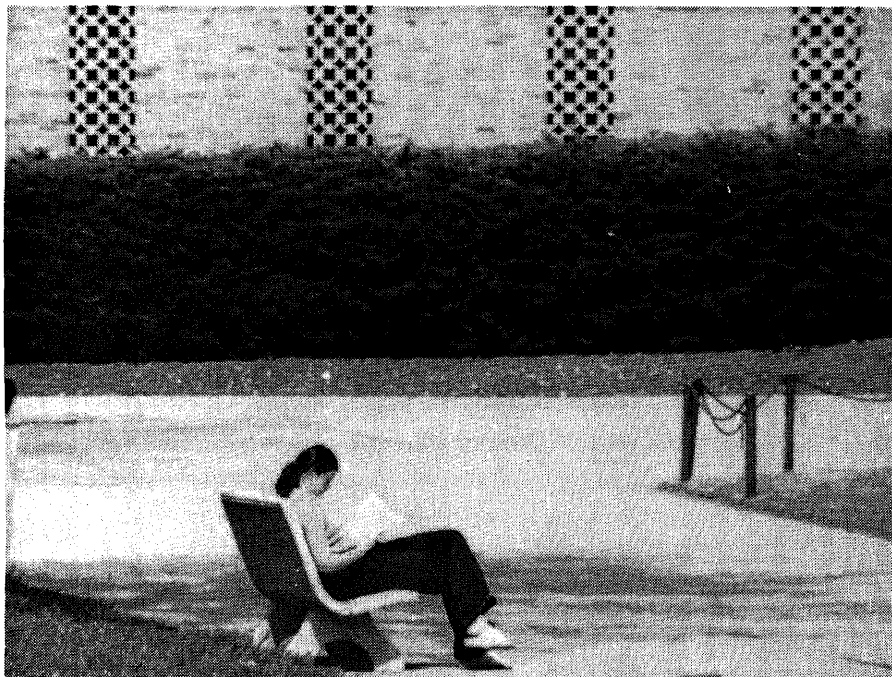
- 111 **ELEMENTARY SPANISH I.** (3) Basic grammar and vocabulary.
- 112 **ELEMENTARY SPANISH II.** (3) Basic grammar and conversation. Prerequisite: Sp 111.
- 121 **INTERMEDIATE SPANISH I.** (3) Grammar review and basic composition. Prerequisite: Sp 112.
- 122 **INTERMEDIATE SPANISH II.** (3) Readings of literary and cultural texts. Grammar review continued. Prerequisite: Sp 121.

Upper Division Courses

- 200 **ORAL AND WRITTEN COMMUNICATION IN SPANISH.** (3) Required of majors.
- *204 **INTRODUCTION TO SPANISH LITERATURE.** (3) Presentation based on genres, movements, and analyses of readings from Spanish and Latin-American literature.
- *206 **LINGUISTICS.** (3) (En 206).
- 209 **SPANISH PRONUNCIATION.** (3) A practical presentation of applied phonetics. Notions of linguistic science.
- *220 **SPANISH CIVILIZATION.** (3) The essential characteristics of Spanish civilization and its contribution to the Occidental world.
- *224 **LATIN-AMERICAN CIVILIZATION.** (3) The essential characteristics of the culture and civilization of Latin-America. Essays of Marti, Montalvo, Rodo, and others.
- *232 **SPANISH AUTHORS I.** (3) Spanish literature from the beginnings to the end of the Golden Century. Selected readings.
- *233 **SPANISH AUTHORS II.** (3) Spanish literature of the eighteenth, nineteenth, and twentieth centuries.
- *234 **LATIN AMERICAN LITERATURE I.** (3) From beginnings to end of Romantic period.
- *235 **LATIN AMERICAN LITERATURE II.** (3) From end of Romantic period to present day.
- *242 **EPIC POETRY.** (3) *Cantar del Mio Cid*, basic work of this genre, will be analyzed in the classroom. Other readings from the epic literature of Spain and Latin-America.
- *250 **THE NOVEL OF THE GOLDEN CENTURY.** (3) Idealism and realism. The development of the Baroque. Selected readings.
- *252 **CERVANTES.** (3) Life and works with analytical study of *Don Quixote*.

Modern Languages

- *255 **THE DRAMA OF THE GOLDEN CENTURY.** (3) Development and characteristics. Three plays by Lope, Tirso, and Calderon.
- 260 **HISTORY OF THE SPANISH LANGUAGE.** (3) Recommended for Spanish majors and teachers of Spanish.
- *271 **THE PROSE OF THE NINETEENTH CENTURY.** (3) Literary movements. The costumbrista writers. Pereda and Galdos.
- *273 **THE POETRY OF THE NINETEENTH CENTURY.** (3) Foreign influences and the national tradition. Rivas, Espronceda, Becquer, Campoamor, and others.
- *275 **THE DRAMA OF THE NINETEENTH CENTURY.** (3) The major dramatists. Moratin, Zorrilla, Tamayo y Baus, and Echegaray. The role of Galdos.
- *283 **THE DRAMA OF THE TWENTIETH CENTURY.** (3) Major trends and developments. The art of Benavente and Lorca. The *genero chico* and the Quintero brothers.
- *284 **THE GENERATION OF 1898.** (3) Major characteristics. Esthetic, moral and philosophical content. Unamuno, Baroja, Valle-Inclan, Machado, and others.
- *285 **MODERNISM.** (3) The development of the "Modernista" movement from 1880 to 1920. The role of Ruben Dario.
- *286 **CONTEMPORARY LATIN-AMERICAN NOVEL.** (3) Development of this genre. Gallegos, Azuela, and Ciro Alegria.
- *287 **CONTEMPORARY LATIN-AMERICAN THEATRE.** (3) The period since 1940.
- *289 **PRESENT-DAY LITERARY TRENDS.** (3) Various literary trends in Spain and in Latin America from the mid-20's to the present.
- *294 **SELECTED READINGS.** Credit by arrangement. Independent readings and individual study of specific works of Hispanic literature under the supervision of a faculty member.
- 325 **TEACHING MODERN LANGUAGES.** (3) (Ed 325).
- *395 **DIRECTED STUDY.** Credit to be arranged.



Philosophy (Pi)

Staff: DR. GENDREAU, *chairman*; FR. BADO, MRS. BLAIR, DR. BONVILLAIN,
FR. CURRAN, DR. DUMONT, DR. JONES, MR. MARRERO, FR. OPPENHEIM,
FR. R. SCHMIDT, DR. SOMERVILLE, FR. TILLMAN

Assisted by: FR. FOLEY

- (*) Courses so designated are approved as electives for curricular requirements in humanities, subject to limitations as indicated. For courses satisfying philosophy requirements see explanation in curricular guidelines. (p. 34).

Upper Division Courses

- *200 **ORIGINS OF PHILOSOPHY.** (3) Philosophy as a way of inquiry and a way of life. Philosophy in contrast to myth. Greek philosophy from the beginnings to Plato and Aristotle. Reserved to HAB students.
- *210 **LOGIC.** (3) Formal aspects of reasoning, the functions of language and the forms of argument in traditional syllogistic logic and symbolic logic.
- *220 **PHILOSOPHY OF MAN.** (3) Man's distinctive operations, powers, freedom, nature, complex unity; the soul and its properties; man as a person and as social.
- *230 **METAPHYSICS.** (3) Being and existence; plurality and unity; change, contingency, limitation and participation; intrinsic and extrinsic principles and causes; categories and properties of being. Prerequisite: PI 220.
- *232 **PHILOSOPHY OF GOD.** (3) A philosophical inquiry by natural reason into the source of finite and contingent beings; God, His knowability, existence, nature, and attributes. Prerequisites: PI 220, 230.
- *235 **THEORY OF KNOWLEDGE.** (3) Human knowledge from the viewpoint of its truth and certitude; error; judgment and the evidence that grounds it. Prerequisites: PI 220, 230.
- *237 **PHILOSOPHY OF NATURE.** (3) Nature, matter, motion, space, time, necessity and causality, and the relation of theories of physical reality to issues in other philosophical disciplines. Prerequisites: PI 220, 230.
- *240 **PRINCIPLES OF ETHICS.** (3) The first principles of right human action; the purpose of human life; morality and its norm; law and rights; conscience; virtue; variant ethical systems. Prerequisites: PI 220, 230.
- *241 **CURRENT MORAL PROBLEMS.** (3) Rights and duties in such contemporary concerns as education, religion, life and health, sex, marriage, society, communication, race relations, property, economic and political life, international relations. Prerequisite: PI 240.
- *242 **PHILOSOPHY OF LAW.** (3) Principal theories of law with reference to their roots in ethics and politics, human nature and metaphysics. Legal obligation, justice, custom, property, and punishment. Prerequisites: PI 220, 230, 240.
- *243 **PRINCIPLES OF POLITICAL PHILOSOPHY.** (3) Political society: its need, nature, and end; authority; the state; sovereignty; relations of state to citizens and to other societies. Prerequisite: PI 240.
- *244 **MEDICAL ETHICS.** (3) Rights and duties of physicians and of patients; life and health; euthanasia; mutilation; sterilization; pregnancy; contraception, abortion; professional conduct. Prerequisite: PI 241.
- *246 **BUSINESS ETHICS.** (3) Problems of rights, justice, and law in economic life; private enterprise; competition; buying and selling, prices, wages, labor relations, unions; government regulation. Prerequisite: PI 241.
- *250 **HISTORY OF ANCIENT PHILOSOPHY.** (3) Greek philosophy from its beginning to Neoplatonism. Plato and Aristotle. Fall semester only. Prerequisites: PI 220, 230.
- *260 **HISTORY OF MEDIEVAL PHILOSOPHY.** (3) Philosophy in the West from Augustine to the Fourteenth Century, including Islamic and Jewish philosophy. Spring semester only. Prerequisites: PI 220, 230.

Philosophy

- *270 **HISTORY OF MODERN PHILOSOPHY.** (3) Philosophy in Europe from the Seventeenth to the Nineteenth Century, especially rationalism, empiricism, critical philosophy, and idealism. Spring semester only. Prerequisites: PI 220, 230.
- *280 **HISTORY OF CONTEMPORARY PHILOSOPHY.** (3) The principal philosophies of the Twentieth Century in Continental Europe, Britain, and America. Fall semester only. Prerequisites: PI 220, 230.
- *286 **CLASSICAL THEMES IN HINDU PHILOSOPHY.** (3) Origins, central texts, key writers—R. Tagore and Sri Aurobindo.
- *310 **SYMBOLIC LOGIC.** (3) The elements of the propositional calculus and the predicate calculus, and the structure of deductive systems.
- *321 **PHILOSOPHY OF WOMAN.** (3) A systematically developed application of philosophical method to a contemporary issue. Historical survey of philosophers' conceptions of woman. Prerequisites: PI 220, 230, 240.
- *322 **PHILOSOPHY OF RELIGION.** (3) Theories on the nature and origins of religion. Epistemological structure of religious experience, belief, and language. The relation of religion to myth, morality, culture and philosophy. Prerequisites: PI 220, 230, 240.
- *324 **PHILOSOPHY OF HISTORY.** (3) The nature and sources of history; the temporality of human existence; historical evidence; evaluation and interpretation; interpretative theories; objectivity and certainty. Prerequisites: PI 220, 230, 240.
- *326 **PHILOSOPHY OF ART AND BEAUTY.** (3) Principal theories of beauty and contemplation, of art and creative intuition, and of the truth or symbolism of works of art. Prerequisites: PI 220, 230, 240.
- *327 **PHILOSOPHY OF LOVE.** (3) Historical and speculative study of love in its nature, its properties and its diversity in function and in meaningfulness. Classical and contemporary views on love. Prerequisites: PI 220, 230, 240.
- *338 **PHILOSOPHY OF SCIENCE.** (3) Basic issues in the logic, epistemology and ontology of science. The relation of scientific research and technology to humanistic and ethical concerns. Prerequisites: PI 220, 230.
- *347 **PHILOSOPHY OF REVOLUTION.** (3) Seminar and research study of the philosophical and social theory of revolution from Aristotle to Marcuse. Students responsible for one author of their choice. Prerequisites: PI 220, 230, 240.
- *348 **MARX AND MARCUSE.** (3) Marxist philosophy in its original statement and in its American development through Marcuse. Basic themes of Marxism and variety of interpretations. Prerequisites: PI 220, 230, 240.
- *366 **READINGS IN AQUINAS.** (3) Seminar, readings of Aquinas to study selected topics of value. The experience of a thinker in action. The historical context. Dialogue. Prerequisites: PI 220, 230, 240.
- *381 **CONTEMPORARY CONTINENTAL EUROPEAN PHILOSOPHY.** (3) One or more current continental philosophies; e.g., phenomenology, existentialism, personalism, Marxism, and their methods. Fall semester only. Prerequisites PI 220, 230.
- *382 **DIALECTICAL PHILOSOPHY.** (3) Origins of the idea of dialectic among the Greeks with main stress on Hegel and Marx. Prerequisites: PI 220, 230, 240.
- *383 **CONTEMPORARY BRITISH AND AMERICAN PHILOSOPHY.** (3) One or more philosophies current in Britain or America; e.g., linguistic analysis, naturalism, pragmatism, and their methods. Spring semester only. Prerequisites PI 220, 230.
- 384 **PHILOSOPHY OF BLACK EXPERIENCE.** (3) Philosophical study of the culture of black peoples; African philosophies and religions; Black culture in U.S. before and right after Civil War; contemporary world-wide negritude movement. Prerequisites: PI 220, 230.
- *385 **LINGUISTIC ANALYSIS.** (3) Contemporary British and American ordinary language philosophers. Origins in Moore and Russell. Wittgenstein. Ryle, Wisdom, Austin, S.E. Toulmin, Malcom and Max Black. Prerequisites: PI 220, 230, 240.

- *386 **WILLIAM JAMES.** (3) James as a moral and religious philosopher. His Americanism, faith in progress, defense of free choice, interest in survival after death. His pragmatism and radical empiricism. Prerequisites: PI 220, 230, 240.
- *387 **MAURICE BLONDEL.** (3) His method, originality, daring insights, controversies. A central figure in developing a Christian philosophy of religion prior to Vatican II. Prerequisites: PI 220, 230, 240.
- *388 **PERSONALISM.** (3) European existentialist and American idealistic personalism; personal and communal; anti-collectivism and anti-individualism; liberation, conscientization, self-appropriation; theistic and atheistic. Prerequisites: PI 220, 230, 240.
- *389 **AQUINAS AND BONAVENTURE.** (3) Thirteenth Century adventure of philosophizing Christians assimilating Jewish, Greek and Islamic philosophical thought. Intellectual crisis 1250-1275. Prerequisites: PI 220, 230, 240.
- *395 **SPECIAL STUDY.** Credit to be arranged.
- 398 **SENIOR COMPREHENSIVE REVIEW I.** (1) Re-examination of the principal conclusions of the systematic courses required of philosophy majors (except logic) with attention to their interrelations. Recommended for majors.
- 399 **SENIOR COMPREHENSIVE REVIEW II.** (1) Continuation of PI 398. Review of ancient, medieval, modern, and contemporary periods of history of philosophy. Recommended for majors.

Graduate Courses

The limited status of this program is explained in the Graduate School section of this catalogue.

- 524 **PHILOSOPHY OF LOVE.** (3)
- 525 **VIEWS ON MAN'S FREEDOM.** (3)
- 526 **AESTHETICS AND PHILOSOPHY OF ART.** (3)
- 538 **PHILOSOPHICAL PROBLEMS IN MODERN SCIENCE.** (3)
- 543 **SOCIETY AND COMMUNITY.** (3)
- 547 **PHILOSOPHY OF REVOLUTION.** (3)
- 548 **RECENT ETHICAL THEORIES.** (3)
- 549 **WAR AND PEACE.** (3)
- 572 **THE RATIONALISTS.** (3)
- 575 **THE BRITISH EMPIRICISTS.** (3)
- 583 **EXISTENTIALISM AND PHENOMENOLOGY.** (3)
- 586 **LINGUISTIC ANALYSIS.** (3)
- 592 **AMERICAN PRAGMATISTS.** (3)
- 562 **PLATO: MAJOR DIALOGUES.** (3)
- 655 **ARISTOTLE.** (3)
- 661 **PHILOSOPHY OF ST. AUGUSTINE.** (3)
- 663 **PHILOSOPHY OF ST. BONAVENTURE.** (3)
- 665 **PHILOSOPHY OF ST. THOMAS AQUINAS.** (3)
- 666 **WORKS OF ST. THOMAS AQUINAS.** (3)
- 671 **DESCARTES.** (3)
- 675 **HUME.** (3)
- 677 **KANT.** (3)

Philosophy

- 679 **HEGEL.** (3)
698 **SPECIAL STUDY.** Credit to be arranged.
699 **MASTER'S THESIS.** (6)

Physics (Ph)

Staff: DR. MILLER, *chairman*; FR. BRADLEY, MR. HART, FR. O'BRIEN,
MR. TOEPKER, FR. VOLLMAYER

Research Professor: DR. WERNER

Laboratory Manager: BRO. RIEHLE

- (*) Courses so designated are approved as electives for curricular requirements in science, subject to limitations as indicated.

Lower Division Courses

- *100, **ELEMENTARY ASTRONOMY I, II.** (2) each semester. The basic theories of astronomy,
*102 the telescope, rocket and satellite exploration of the solar system, cosmology, stars, and galaxies.
- *101, **ASTRONOMY LABORATORY I, II.** (1) each semester to accompany Ph 100, 102
*103 respectively. Observatory and planetarium facilities will be used.
- 104, **COLLEGE PHYSICS I, II.** (3) each semester. For pre-med, pre-dent, and others.
106 Mechanics, heat, sound, electromagnetism, optics, and modern physics. Corequisite: Ph 105 and Ph 107 laboratory. Prerequisite: Algebra.
- 105, **COLLEGE PHYSICS LABORATORY I, II.** (1) each semester. These laboratories accom-
107 pany Ph104, 106 lectures respectively.
- 108 **UNIVERSITY PHYSICS I.** (3) Course for Chemistry, Mathematics and Physics majors. Mechanics, heat, sound. Corequisite: Ph 109.
- 109 **UNIVERSITY PHYSICS LABORATORY I.** (1) Laboratory to accompany Ph 108.
- 110 **UNIVERSITY PHYSICS II.** (3) Continuation of Ph 108. Electromagnetism, optics, and modern physics. Corequisite: Ph 111.
- 111 **UNIVERSITY PHYSICS LABORATORY II.** (1) Laboratory to accompany Ph 110.
- 114 **INTRODUCTION TO PHYSICAL SCIENCES.** (3) For elementary education majors only.
- 115 **INTRODUCTION TO PHYSICAL SCIENCES LABORATORY.** (1)
- *116 **THE EARTH AND ITS ENVIRONMENT I.** (2) A non-mathematical study of geology and oceanography. Corequisite: Ph 117.
- *117 **THE EARTH AND ITS ENVIRONMENT LABORATORY I.** (1) Laboratory to accompany Ph 116.
- *118 **THE EARTH AND ITS ENVIRONMENT II.** (2) A non-mathematical study of astronomy and meteorology. Corequisite: Ph 119.
- *119 **THE EARTH AND ITS ENVIRONMENT LABORATORY II.** (1) Laboratory to accompany Ph 118.
- 120 **RADIATION PHYSICS I.** (2) Energy, the structure of matter, electricity, magnetism, radioactivity, and the nature and production of X-rays. Calculations in radiology. For radiologic technology students.
- 121 **RADIATION PHYSICS II.** (2) A continuation of Ph 120.
- 160 **TIME-SHARING COMPUTERS IN PHYSICS.** (1) The use of time-sharing computers and the BASIC computer language in solving physics problems.

- 161 **DIGITAL COMPUTERS IN PHYSICS.** (1) The use of the FORTRAN computer language and the digital IBM 360 computer.
- 162, **ANALOG COMPUTERS IN PHYSICS I, II.** (1) each semester. The use of the analog
163 computer in simulation of problems involving mechanical and electrical vibrations, probability, and biorhythms.

Upper Division Courses

- 204 **ANALOG COMPUTER WORKSHOP.** (3)
- 205 **TIME-SHARING COMPUTER WORKSHOP.** (3)
- 206, **ADVANCED STUDY OF BASIC PHYSICS I, II.** (3) each semester. The broad implications
207 of the fundamental principles of general physics. Prerequisite: General Physics or the equivalent.
- 242, **ELECTRONICS I, II.** (2) each semester. Lecture. Basic electronic circuits including power
244 supplies, amplifiers, oscillators, and switching circuits. Impedance relations and electronic filters. Theory of electronic measurements.
- 243, **ELECTRONICS LABORATORY I, II.** (1) each semester. Laboratory to accom-
245 pany Ph 242, 244 respectively.
- 350 **THEORETICAL MECHANICS I.** (3) Calculus of vectors, conservative forces, nonlinear oscillator, forced oscillations with damping, conservation of linear and angular momentum, and normal coordinates.
- 352 **ELECTROMAGNETISM I.** (3) Coulomb's law, Ampere's law, Faraday's law, Maxwell's electromagnetic equations in free space and material media. Course is given in vector notation.
- 356 **METHODS OF MATHEMATICAL PHYSICS.** (3) Matrix and vector algebra, complex variables, integral transforms, and linear partial differential equations.
- 364 **PHYSICAL OPTICS.** (3) Electromagnetic wave theory is used to derive the laws of optics; reflection, refraction, diffraction, Fresnel integrals, and theory of dispersion.
- 365 **OPTICS LABORATORY.** (1) Experiments in Physical Optics, including diffraction, Michelson's interferometer, multiple beam interference, polarization, and various experiments on the prism spectrograph.
- 366 **ATOMIC PHYSICS.** (3) The atomic view of matter, electricity, and radiation; the atomic models of Rutherford and Bohr, relativity, X-rays, and introduction to quantum mechanics.
- 372 **ELECTROMAGNETIC THEORY.** (3) Lasers, holography, spatial filtering, and coherence of electromagnetic radiation.
- 374 **NUCLEAR PHYSICS.** (3) Natural and artificial radioactivity, nuclear reactions, high-energy physics, and fundamental particles. Prerequisite: Ph 366.
- 375 **ATOMIC PHYSICS LABORATORY.** (2) Photoelectric effect, e/m for electrons, black body radiation, vacuum and glass work techniques, ionization potentials, Bragg diffraction, atomic spectra.
- 376 **INTRODUCTION TO QUANTUM MECHANICS.** (3) The mathematical formalism of quantum mechanics and its physical interpretation. Prerequisite: Ph 366.
- 380 **THEORETICAL MECHANICS II.** (3) Rigid body motion, moments of inertia, principal axes, Euler's equations, energy equation, Lagrange's equations, Hamilton's equations, principles of least action.
- 381 **NUCLEAR PHYSICS LABORATORY.** (1) Experiments in radioisotope techniques, nuclear particle counting, and instrumentation.
- 382 **THERMODYNAMICS.** (3) Thermodynamic variables and processes, internal energy of a system, first and second laws of thermodynamics. Carnot cycle, entropy and irreversibility.
- 386 **(GEOPHYSICS.) ELEMENTARY SEISMOLOGY.** (3) The nature of earthquakes, fundamental seismograph theory, and the location of earthquakes.

Physics

- 388 **GEO-ASTROPHYSICS.** (3) The applied fields of geophysics, atmospheric physics, astronomy, and astrophysics.
- 390 **SPECIAL STUDIES.** (3) Area to be specified.
- 397 **SPECIAL READINGS.** (1-3) Area to be specified.
- 398, **SENIOR RESEARCH I, II.** (1) each semester.
- 399

Psychology (Ps)

Staff: DR. BIELIAUSKAS, *chairman*; FR. FOLEY, *executive officer*; DR. BARRY, DR. BERG, DR. CERBUS, DR. CLARKE, DR. COSGROVE, DR. FEDORAVICIUS, DR. FEUSS, DR. GRIFFITH, DR. HELLKAMP, DR. KRONENBERGER, MR. LaGRANGE, DR. QUATMAN, DR. ROTH, DR. SCHMIDT

Assisted by: SR. BOSCO, MRS. BYRD, MRS. COHEN, DR. COLLIGAN, MR. DINERMAN, DR. KATKIN, DR. LIPPERT, MR. SETA, DR. SCHWEITZER, DR. SMITH, MS. UCHTMAN

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Lower Division Courses

- 100 **EFFICIENT READING AND STUDY SKILLS.** (0) Reading comprehension, rate of reading, study habits. Increase ability to interpret, analyze, and evaluate general reading material and specific course areas.
- *101 **GENERAL PSYCHOLOGY.** (3) Basic psychological processes such as sensation, perception, motivation, learning, psychological measurements, personality development.
- *102 **ADVANCED GENERAL PSYCHOLOGY.** (3) Scientific methodology in psychology. Application to experimental studies in perception, motivation, thinking, memory, learning, individual differences. Prerequisite: Ps 101.
- *121 **GENERAL EXPERIMENTAL PSYCHOLOGY.** (2) Principles of behavioral science: sensory functions, perception, learning, emotion, motivation. Fulfills science requirement for non-psychology majors. See Ps 122.
- *122 **GENERAL EXPERIMENTAL PSYCHOLOGY I LABORATORY.** (1) (three laboratory hours per week). Laboratory experiments demonstrating principles described in the lectures (Ps 121). To be taken with Ps 121.
- *123 **GENERAL EXPERIMENTAL PSYCHOLOGY II.** (2) Behavior problems: memory, language, interpersonal behavior, personality, human performance, man-machine systems. Fulfills science requirement for non-psychology majors. See Ps 124.
- *124 **GENERAL EXPERIMENTAL PSYCHOLOGY II LABORATORY.** (1) (three laboratory hours per week). Experiments demonstrating principles described in the lectures (Ps 123). To be taken with Ps 123.
- *141 **EDUCATIONAL PSYCHOLOGY.** (3) Prerequisite: Ps 101. (Ed 141).

Upper Division Courses

- *201 **HISTORY AND SYSTEMS OF PSYCHOLOGY.** (2-3) Modern scientific psychology including its various schools and their backgrounds. Reading in a broad field of psychological theory required.
- 210 **STATISTICAL TECHNIQUES.** (2-3) Basic statistics in psychology and education. Measures of central tendency and variability, correlational techniques, and experimental test of differences among groups. (Ed 510).

- 221 **EXPERIMENTAL PSYCHOLOGY I.** (3) Aims and techniques of experimental psychology. Physiological bases of behavior, senses, perception. One lecture, four hours lab per week. Prerequisites: Ps 101, 102, 210.
- 222 **EXPERIMENTAL PSYCHOLOGY II.** (3) Learning, emotion, motivation, social behavior. Animal and human subjects. Planning. Instrumentation. Controls. One lecture, four hours lab per week. Prerequisite: Ps 221.
- 223 **EXPERIMENTAL PSYCHOLOGY.** (5) Summers only.
- 226 **PHYSIOLOGICAL PSYCHOLOGY.** (3) Neuroanatomy and neurophysiology of central and autonomic nervous systems. Activation levels. Neurohormonal bases of motivation. Neural basis of conditioning. Brain disorders.
- 227 **THE BIOLOGICAL BASIS OF ANIMAL BEHAVIOR.** (4) (BI 340, 341).
- *231 **DEVELOPMENTAL PSYCHOLOGY.** (3) Factors influencing man's life span. Application to stages of physiological maturation, developmental tasks, social learning, personality integration. (Ed 231).
- 232 **CHILD PSYCHOLOGY.** (2) The genetic study of growth and development; hereditary and environmental factors; early and later childhood to puberty. (Ed 232).
- 233 **ADOLESCENT PSYCHOLOGY.** (2) Interrelated physical, physiological, and mental changes associated with adolescence. (Ed 233).
- 235 **DIFFERENTIAL PSYCHOLOGY.** (2) Existence, extent, significance of individual differences. Influence of heredity and environment. Psychological analysis of sex, racial, national, other group differences. (Ed 235).
- 237 **PSYCHOLOGY OF LEARNING.** (3) Experimental study of human and animal learning, including transfer, mediation, retention, verbal and concept learning. Prerequisite: Ps 101. (Ed 237).
- 239 **PSYCHOLOGY OF MOTIVATION.** (3) Theoretical and experimental approaches to the understanding of processes that determine the strength and direction of behavior. Prerequisite: Ps 301. (Ed 239).
- 251 **INDUSTRIAL PSYCHOLOGY.** (2-3) Principles of sound psychological procedure as applied to personnel in commerce and industry. Concentration upon human element in American industry. (IR 330).
- *261 **SOCIAL PSYCHOLOGY.** (2) The individual's personality, attitudes, and behavior in multi-individual situations. (Ed 261, So 261).
- 262 **SOCIAL DYNAMICS OF COMMUNICATION.** (3) Communication in human relations. The effects of attitudes, belief systems, and prejudices on both verbal and non-verbal interactions. Theoretical considerations. Practical demonstrations. (Ed 262, So 262).
- 263 **THEORIES OF PERSONALITY I.** (2) Concepts of personality dynamics. Emotions and their expressions. Mutual interrelationships and meaning. Sources of personality development. (Ed 263).
- 264 **THEORIES OF PERSONALITY II.** (2) Description and evaluation of current personality theories. Continuation of Ps 263. (Ed 264).
- *266 **CRIME AND PERSONALITY.** (3) Root causes of crime in the individual and in the culture. Consideration of personality dynamics and treatment approaches. (Cr 266, Ed 266).
- 271 **INTRODUCTION TO THE EMOTIONALLY DISTURBED CHILD.** (2) (Ed 271).
- 274 **MENTAL HYGIENE.** (2) Progressive stages of development in emotional growth. Factors of adjustment and maladjustment in education, social relations, and occupations. (Ed 274).
- 276 **PSYCHOLOGY OF DELINQUENCY.** (2) Types and causes of juvenile delinquency together with brief case histories. (Ed 276).
- *277 **ABNORMAL PSYCHOLOGY.** (2-3) Dynamics of the disturbed personality; symptoms, causes, treatment of psychoneuroses, psychoses, deviant personalities. (Ed 277).
- 279 **PSYCHOLOGICAL AND ACHIEVEMENT TESTS.** (2-3) (Ed 579).

Psychology

- 280 **PRINCIPLES OF BEHAVIOR MODIFICATION.** (3) Major theories of learning and conditioning and their application to changing of human behavior. On-site visits of some behavior modification programs. (Ed 280).
- 281 **READINGS IN PSYCHOLOGY.** (1-3) Library research project assisted and supervised by staff member. Final oral exam. Seniors, graduate students only. Required research paper.
- 283 **PRACTICUM IN PSYCHOLOGICAL TESTING.** (2-3) Practical experience in administering of group tests; scoring and interpretation. Prerequisite: Ps 279 and instructor's approval. (Ed 283).
- 285 **THE PSYCHOLOGY OF RELIGION.** (3) (Th 285).
- 290 **UNDERGRADUATE PRACTICUM IN PSYCHOLOGY.** (3) Interviewing, behavior observation, test administration, report writing, and group dynamics through on-the-job training. Opened to seniors only, upon approval of the Departmental Chairman.
- 299 **SENIOR COMPREHENSIVE REVIEW.** (2) Required of all majors. May substitute original research project upon approval of Departmental Chairman. Prerequisite: senior standing and instructor's approval.
- 365 **PSYCHOLOGY OF MASCULINITY AND FEMININITY.** (3)
- 395 **DIRECTED STUDY.** Credit to be arranged.

Graduate Courses

The following courses are required of all graduate students: 263, 264, 501, 502, 505.

- 501 **CONTEMPORARY THEORIES IN PSYCHOLOGY.** (3) An evaluative review of the concepts basic to current theory, research, and practice in psychology and its major divisions.
- 502 **PHILOSOPHICAL ISSUES IN PSYCHOLOGY.** (3) Historical development of basic psychological concepts from Aristotle to the present. Interrelations between science, psychology, and philosophy.
- 503 **ADVANCED EDUCATIONAL PSYCHOLOGY.** (3) (Ed 503).
- 505 **PROFESSIONAL PROBLEMS IN PSYCHOLOGY.** (1) Basic principles of ethics and their application to psychological theory, research, and practice. Case studies.
- 507 **ROLE AND FUNCTION OF SCHOOL PSYCHOLOGIST.** (2)
- 511 **ADVANCED STATISTICS.** (3) Elementary correlation methods. Serial correlation. Multiple regression. Factor analysis. Non-parametric statistics. Analysis of variance. Prerequisite: Ps 210 or equivalent. (Ed 511).
- 521 **ADVANCED EXPERIMENTAL PSYCHOLOGY.** (3) Intensive survey of experimental procedures and findings; utilization of laboratory equipment; introduction to individual laboratory research.
- 529 **BEHAVIOR THERAPY.** (3) Theoretical and empirical bases of behavior therapy. Projects using different techniques in a variety of settings with a variety of problems. (Ed 529).
- 530 **LEARNING AND MOTIVATION.** (3) Theories of learning. Concepts of drive, reinforcement, generalization, discrimination, transfer of training, retention and forgetting. (Ed 530).
- 532 **VOCATIONAL AND EDUCATIONAL GUIDANCE.** (2) (Ed 532).
- 533 **COUNSELING PRINCIPLES AND TECHNIQUES.** (2) (Ed 533).
- 535 **OCCUPATIONAL INFORMATION.** (2) Sources of information about occupational fields and their utilization in counseling. Psychology of career choice. (Ed 535).
- 536 **GROUP GUIDANCE.** (2) (Ed 536).
- 538 **DESIGN OF EXPERIMENTS.** (3)
- 552 **PERSONAL SELECTION AND EVALUATION TECHNIQUES.** (3)
- 553 **MARKETING RESEARCH.** (3) (BA 562).

- 580 **PSYCHOPATHOLOGY.** (2) (Ed 580).
- 582 **INDIVIDUAL TESTS OF INTELLIGENCE.** (2-4) (Ed 582).
- 584 **PROJECTIVE TECHNIQUES I.** (3)
- 585 **PROJECTIVE TECHNIQUES II.** (3) Prerequisite: Ps 584.
- 586 **PSYCHO-EDUCATIONAL ASSESSMENT.** (3) (Ed 586).
- 589 **COUNSELING AND PSYCHOTHERAPY.** (3)
- 590 **PRACTICUM: EXPERIMENTAL PSYCHOLOGY.** (3-6)
- 591 **PRACTICUM: CLINICAL PSYCHOLOGY.** (3-6)
- 592 **PRACTICUM: COUNSELING PSYCHOLOGY.** (3-6)
- 593 **PRACTICUM: INDUSTRIAL PSYCHOLOGY.** (3-6)
- 600- **WORKSHOPS AND INSTITUTES.** Titles and credit hours will be announced in each
629 individual case.
- 643 **SEMINAR: INDUSTRIAL PSYCHOLOGY.** (2) (Ed 643).
- 644 **MOTIVATION AND BEHAVIOR IN ORGANIZATIONS.** (3) (Ed 644, BA 644).
- 645 **ADVANCED DEVELOPMENTAL PSYCHOLOGY.** (3) (Ed 645).
- 646 **PSYCHOLOGY OF THE EXCEPTIONAL CHILD.** (3) (Ed 646).
- 647 **CLINICAL STUDIES: TEACHING THE EMOTIONALLY DISTURBED CHILD.** (2)
(Ed 647).
- 648 **PRACTICUM: TEACHING THE EMOTIONALLY DISTURBED CHILD.** (2) (Ed 648).
- 651 **MONTESSORI EDUCATION: PHILOSOPHICAL ASPECTS.** (Ed 651).
- 652 **CURRENT THEORY AND RESEARCH IN CHILD DEVELOPMENT.** (3) (Ed 652).
- 653 **EARLY COGNITIVE DEVELOPMENT.** (3) (Ed 653).
- 670 **PSYCHOLOGY OF READING.** (2) (Ed 670).
- 678 **DIAGNOSIS AND CORRECTION OF READING DISABILITIES.** (3) (Ed 678).
- 689 **RESEARCH IN PSYCHOLOGY.** (3) Titles to be specified.
- 690 **INTERNSHIP IN SCHOOL PSYCHOLOGY.** (6) per semester. A year's course.
- 699 **MASTER'S THESIS.** (6)

Sociology (So) and Anthropology (An)

Staff: MR. WEIR, *chairman*; MR. WEISSBUCH

Assisted by: MISS DWYER, MR. LEVINRAD, MR. MALONEY

- (*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Lower Division Courses

- *101 **INTRODUCTION TO SOCIOLOGY.** (3) Social behavior within the context of group structure, society, and culture. Basic sociological terminology and methodology.
- *121 **CONTEMPORARY SOCIAL PROBLEMS.** (3) The function of cultural values and social structures in defining social problems and proposing solutions. Problems are considered in terms of their origin, extent, and treatment.

Upper Division Courses

- 216 **SOCIOLOGY OF RELIGION.** (3) Classical and contemporary sociological perspectives concerning relationship between religion and society.
- *218 **SOCIOLOGY OF EDUCATION.** (3) (Ed 218).
- 220 **INTRODUCTION TO SOCIAL WORK.** (3) Concepts of social work. Social service in various aspects of sociology. (Ed 220).
- 222 **PRINCIPLES OF SOCIAL CASE WORK.** (3) Behavior, attitudes, and relationships involved in contacts of case workers and clients. Casework practices in community agencies. (Ed 222).
- 230 **SOCIOLOGY OF LEISURE AND RECREATION.** (3) The role and functions of leisure and recreation in culture and society.
- 232 **SOCIOLOGY OF SPORT.** (3) Organized sport as an important institutional component of American culture and society.
- 242 **URBAN SOCIOLOGY.** (3) Historical development and demographic patterns of the city and its environs. Urban and rural life are considered with ecological precepts and change.
- 245 **APPALACHIAN IN URBAN LIFE.** (3) Subcultural contact with the urban community. Social and economic adjustment problems of this group. (Ed 245).
- 250 **RACIAL AND ETHNIC MINORITIES.** (3) Minority groups in contemporary United States. Social processes involved in dominant minority relations.
- *253 **THE SCHOOL AND THE BLACK COMMUNITY.** (3) The school as a socializing agent and its relationship to the black community. Cultural-educational goals and practices. (Ed 253).
- *257 **RACIAL-CULTURAL TENSIONS AND THE COMMUNITY.** (3) Racial and cultural relations in the community. Tensions and conflict arising from racial-cultural relations.
- 260 **POLITICAL SOCIOLOGY.** (3) Bureaucratic organization, authority, power and voting behavior in political institutions. Relationships to social conditions and social institutions.
- *261 **SOCIAL PSYCHOLOGY.** (2) (Ps 261, Ed 261).
- 262 **SOCIAL DYNAMICS OF COMMUNICATION.** (3) (Ed 262, PS 262).
- 265 **SOCIAL STRATIFICATION.** (3) Class, status, and power in various social stratification systems. Relationships to social, institutional, and personality structure.
- 270 **INDUSTRIAL SOCIOLOGY.** (3) Industry as a social system and its relationship to the community. Structure, function, and strain of industrial roles.
- *280 **CULTURAL ANTHROPOLOGY.** (3) Concepts and materials of culture from the fields of ethnography, ethnology, and archaeology. Origin, development, universals, and variations of culture through cross-cultural analysis.
- 282 **ETHNOGRAPHY OF THE AMERICAN INDIAN.** (3) Prehistory and development of Indian culture in North America. Similarities and differences by cultural area.
- 290 **CRIMINOLOGY AND PENOLOGY.** (3) Causative theories of crime. Crimes and criminals in the context of behavioral systems. Policies and programs of legal treatment.
- 292 **JUVENILE DELINQUENCY.** (3) Multiple factors involved in delinquent behavior. Definition, extent, causation, and treatment.
- 300 **SOCIOLOGICAL THEORIES.** (3) European and American theorists. Origin, growth, and change of social order and the individual's place in society.
- 310 **MARRIAGE AND THE FAMILY.** (3) (Th 310).
- 350 **SEMINAR IN SOCIOLOGY.** (3) Selected topics and readings for senior sociology majors. (Others with permission of instructor.)
- 352 **PRINCIPLES OF RESEARCH.** (3) (May be taken in place of So 360 to fulfill requirement of Sociology major.) (Po 352).

- 360 **METHODS OF SOCIAL RESEARCH.** (3) Methodology in social research.
- *365 **THE NEGRO IN AMERICA.** (3) (Hs 365, Po 365).
- 395 **DIRECTED STUDY.** Credit to be arranged.

Theology (Th)

Staff: FR. KLEIN, *chairman*; FR. BRUGGEMAN, MR. CALLAN, FR. CARTER, SR. RUTH GRAF, FR. KING, DR. KNITTER, FR. MOELL, FR. O'CONNOR, FR. SEELEY, FR. TOPMOELLER

Assisted by: FR. CIVILLE, RABBI GOLDMAN, REV. HARPER

- (*) Courses so designated are approved as electives for curricular requirements in humanities, subject to limitations as indicated.

Lower Division Courses

- *100 **FOUNDATIONS OF NATURAL RELIGION.** (3) The rational basis for religious belief. God's existence and nature. Man's freedom and immortal soul. For non-Catholic students primarily.
- *111 **INTRODUCTION TO THEOLOGY.** (3) The method of theology. Mankind's fundamental religious questions with emphasis on the Judaeo-Christian experience of God.
- *114 **REVELATION IN CHRIST.** (3) God's Self-revelation in Old Testament history and in Jesus Christ. The Gospels. Man's personal response to Christ in faith.
- *120 **CHRISTIAN COMMUNITY.** (3) The Church as Christ prolonged in the community of believers and as a structured organism from the primitive community to the modern Church.
- *122 **CHRISTIAN LIFE AND CELEBRATION.** (3) The Christian's participation in Christ's life, death and resurrection through the liturgy of Word and Sacrament in the institutional Church.

Upper Division Courses

Symbols which indicate areas of study for majors in Theology: B—Biblical Theology; S—Systematic Theology; P—Practical Theology; H—Historical Theology.

- *203 **THE FUNCTION OF THEOLOGY. S.** (3) The nature, purpose, method and conditions of theology. Its relation to revelation and Church authority.
- *205 **THEOLOGY OF CREATION. S.** (3) The origin, evolution, preservation and destiny of man and the universe as seen by non-Christian religions, modern science and the Christian revelation.
- *206 **EARLY CHRISTIANITY. S-H.** (3) Development of Christianity from the apostolic age through the Christological and Trinitarian controversies of the first centuries.
- *208 **CHRIST IN MODERN THOUGHT. S.** (3) Current Christological trends with emphasis on Scripture, the humanity of Jesus, His resurrection, paschal mystery, presence, evolutionary worldview.
- *210 **THEOLOGY OF THE HOLY SPIRIT. S.** (3) The Holy Spirit in Christian revelation and theology. Discernment of the Spirit's activity, operation of His charisms. Holy Spirit in Catholicism, Protestantism and Pentecostalism.
- *213 **MARY: SIGN OF HOPE. S.** (3) Mary's place in Christian life and theology in the light of biblical revelation, tradition, historical and theological development and ecumenical perspective.
- *215 **THE SUPERNATURAL LIFE OF MAN. S.** (3) Man's elevation to a participation in the divine life through the indwelling Spirit. Sanctifying grace and the charismatic gifts.

Theology

- *216 **SOCIOLOGY OF RELIGION. R.** (3) (So 216).
- *217 **THE THEOLOGY OF DEATH. S.** (3) Man's passage through death and life-after-death seen as a re-evaluation of the present, a realization of creation and as total human fulfillment.
- *218 **DEMONOLOGY. S.** (3) Traditional and modern interpretations of the biblical evidence for the existence and nature of Satan and hell. The modern cult of the occult.
- *223 **SACRAMENTAL ENCOUNTER WITH CHRIST. S.** (3) The sacraments as continuations in the Church of the mysteries of Christ's life and as personal encounters between Christ and the Christian.
- *226 **POST-VATICAN II EUCHARISTIC THEOLOGY. S.** (3) Historical developments and new thrusts in Eucharistic theology, such as: transfinalization, transsignification.
- *230 **HISTORY AND DOCUMENTS OF VATICAN II. S-H.** (3) Historical development of key theological ideas of principal documents of Vatican II and their influence on the future of the Church.
- *232 **THE MODERN PROBLEM OF GOD. S.** (3) The perennial problem of man's knowledge of and approach to God as seen especially in its contemporary atheistic forms.
- *233 **AUTHORITY IN THE CHURCH. S.** (3) Contemporary Roman Catholic teaching on Church authority, especially the papacy and episcopal collegiality, in the light of non-Roman positions.
- *234 **THE BLACK APPROACH TO THEOLOGY. P.** (3) The Black concept of the Christian faith and the Black theology of Liberation.
- *235 **AFRICAN RELIGIONS. H.** (3) A sociological and theological study of the religions of the peoples of Africa in the past and present as background to understanding current beliefs and practices of the Black community in America.
- *236 **CHRISTIAN SECULARITY. S.** (3) The Christian's involvement in the world; the secularization process in history; the relation of the sacred and the secular.
- 237 **THE BLACK CHURCH IN AMERICA. H.** (3) The impact of Christianity upon Black American culture from the time of enslavement to the present.
- *240 **THE THEOLOGY OF KARL RAHNER. S.** (3) His ideas on revelation, faith, history, Christ, Church, sacraments, anonymous Christianity, mystery, tradition and other topics.
- *241 **THE THEOLOGY OF TEILHARD DE CHARDIN. S.** (3) His ideas on evolution, hominization, Christianization and their influence on current theology.
- *242 **THE THEOLOGY OF PAUL TILlich. S.** (3) Tillich's writings, especially his *Systematic Theology*.
- *249 **GOD IN EVOLUTION. S.** (3) The possibilities offered by Process Theology for a contemporary interpretation of Christian doctrines.
- *251 **BASIC THEOLOGICAL CONCEPTS IN THE OLD TESTAMENT. B.** (3) The meanings of such concepts as prophecy, messianism, Torah, justice, "hesed", etc. and the influence of these ideas on Judaism and Christianity.
- *253 **INTRODUCTION TO SCRIPTURE. B.** (3) The historical, literary and religious developments in both Old and New Testaments.
- *259 **INTERTESTAMENTAL HISTORY AND LITERATURE. H.** (3) The Jewish Diaspora, Josephus, the Qumran community and thought, the apocrypha, Gnosticism, and the Hermetic literature.
- *261 **THE WRITINGS OF ST. PAUL. B.** (3) The principal ideas of the Pauline letters and the distinctive contribution of Paul to Christian theology.
- *262 **JOHANNINE LITERATURE. B.** (3) The major themes in St. John's Gospel, his letters, and the Revelation of John.

- *264 **THE SYNOPTIC GOSPELS. B.** (3) The composition of these Gospels and the distinctive features of each Gospel.
- *270 **THEOLOGY OF NEW TESTAMENT SPIRITUALITY. B.** (3) A comprehensive survey of the spiritual teaching in the Gospels and the Pauline letters.
- *281 **BELIEF AND NON-BELIEF IN MODERN LITERATURE. R.** (3) The crisis of faith in modern man as expressed in significant works of modern literature. (En 281).
- *285 **PSYCHOLOGY OF RELIGION. R.** (3) Scientific investigation of religious experience: origins, expressions, growth, maturity, and attitudes in the context of personality. (Ps 285).
- *287 **LOVE IN THE WESTERN WORLD. R.** (3) (En 287).
- *293 **JESUS IN MODERN FICTION. R.** (3) (En 293).
- *302 **PRINCIPLES OF CHRISTIAN MORALITY. P.** (3) Concepts of moral theology with case studies from medical, sexual and social ethics to illustrate the principles.
- *307 **CHRISTIAN SOCIAL JUSTICE TODAY. P.** (3) The Christian mission concerning social justice today. Options and commitments to bring about social, political and economic change.
- *308 **CHRISTIANITY AND POLITICS. H.** (3) The history and content of the Judaeo-Christian tradition regarding politics, the state, war and other topics.
- *310 **MARRIAGE AND THE FAMILY. P.** (3) The latest insights into the theology of marriage and the family, married love, the wonder of birth and the challenge of parenthood. (So 310).
- *326 **MAN AT PRAYER. P.** (3) The nature, objectives, conditions, methods and styles of prayer. The liturgy, spiritual retreats, discernment of God's will, answer to prayer.
- *328 **LITURGY AND CHRISTIAN LIFE I. P.** (3) The ritualization of communication with God in Jesus in the liturgy of Word and Sacrifice (the Mass), of initiation (Baptism-Confirmation) and of reconversion (Penance).
- *329 **LITURGY AND CHRISTIAN LIFE II. P.** (3) The ritualization of Christian marriage, ministry, care for the sick and dying. Contemporary arts and Christian ritual. Protestant and Eastern Rites liturgies. Prerequisite: Th 328.
- *337 **RELIGIOUS EDUCATION PRACTICUM. P.** (3) Supervised teaching of religion on the elementary or secondary levels.
- *342 **ORIENTAL RELIGIONS. H.** (3) The highlights of Far Eastern religious traditions of Hinduism, Buddhism, Confucianism, Taoism, and Zen.
- *343 **DIALOGUE AMONG WORLD RELIGIONS. H.** (3) The foundations for a greater ecumenism among all religions. Ecumenism in the light of the Christian perspective.
- *345 **INTRODUCTION TO THE CHURCH FATHERS. R-H.** (3) The Fathers of the first five centuries. The Church's defense against pagans and heretics. Confrontation with the Empire. Development of doctrine. (Cl 345).
- *346 **GREAT CHRISTIAN THINKERS. H.** (3) Ideas and contributions to Christian theology by Augustine, Thomas Aquinas and other leading theologians.
- *352 **THE MEDIEVAL JEWISH EXPERIENCE. H.** (3) From the fall of Jerusalem, 70 A.D., to the Napoleonic era. The Talmudic material. Liturgy of the synagogue. Medieval philosophy and mysticism. The ghetto and the Diaspora.
- *353 **MODERN JEWISH LIFE. H.** (3) Napoleon to the present. Jewish movements in the modern age: Reform, Zionism, Hasidism, the State of Israel. The Jewish community in America. Cultural renaissance in Israel, the United States and England.
- *354 **JEWISH SACRED LITERATURE. H.** (3) The "great books" of Judaism: biblical, post-biblical, Talmudic, medieval and modern writings.
- *370 **REFORMATION HISTORY AND THEOLOGY. H.** (3) The lives and basic teachings of the principal Sixteenth Century Reformers.

Theology

- *374 **THE CHRISTIAN CHURCHES IN AMERICA. H. (3)** The arrival and growth of the Catholic and Protestant Churches. Their inter-relations and involvement in the sociological history of the United States.
- *376 **ROMAN CATHOLICISM IN AMERICAN HISTORY. H. (3)** The transplantation of Roman Catholicism to America: colonization, immigration, the formation of an American Catholic Church.
- *380 **HISTORY OF THE ECUMENICAL MOVEMENT. H. (3)** The factors leading to the divisions in East and West. The search for Christian reunion culminating in The World Council of Churches and Vatican II.
- *381 **THEOLOGY OF CHRISTIAN UNITY. S. (3)** Principles of Christian Unity according to Vatican II and contemporary theologians. Church structure and membership, dialogue, intercommunion, mixed marriages and religious liberty.
- *395 **DIRECTED STUDY.** Credit to be arranged.
- *398 **CHRISTIAN COMMITMENT. P. (3)** A special program in faith experience, community, prayer, and formation of conscience. Admission by interview only.



Departments—

The College of Business Administration

The Arabic numeral in parentheses following course titles indicates the number of semester credit hours which the course carries.

Accounting (Ac) and Finance (Fi)

Staff: MR BEHLER, *chairman*; DR. HEHMAN, DR. HELWIG, MR. MALY, DR. MARTIN, MR. SCHUTZMAN, MR. SMITH, MS. WHETSEL, MR. WILZ

Assisted by: MR. BERBERICH, MR. GRATHWOHL, MR. KNUEVEN, MR. NAWALANIEC, MR. N. O'CONNOR, MR. ROTHWELL, DR. SCHULTZ, MR. VONDERBRINK, MR. WOOD

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Accounting (Ac)

Lower Division Courses

- 100 **PRINCIPLES OF ACCOUNTING I.** (3) Elementary principles and procedures supplemented with practical problems and practice sets.
- 101 **PRINCIPLES OF ACCOUNTING II.** (3) A continuation of Ac 100 which is also pre-requisite.

Upper Division Courses

- 200 **INTERMEDIATE ACCOUNTING I.** (3) A broad background of theory coordinated with practical problems. Prerequisite: Ac 101.
- 201 **INTERMEDIATE ACCOUNTING II.** (3) A continuation of Ac 200 which is also a pre-requisite.
- 220 **MANAGERIAL COST ACCOUNTING I.** (3) Study of elements involved in industrial production with special emphasis on costs and reports. Prerequisite: Ac 201.
- 221 **MANAGERIAL COST ACCOUNTING II.** (3) A continuation of Ac 220 which is also prerequisite.
- 230 **TAXATION.** (3) Tax laws with special emphasis on federal tax laws as it relates to individuals. Prerequisite: Ac 201.
- 231 **EFFECTIVE TAX PLANNING.** (3) Tax planning as it relates to corporations, partnerships, trusts, and estates. Prerequisites: Ac 201, Ac 221.
- 260 **ANALYSIS OF FINANCIAL STATEMENTS.** (3) A study of the significance, development, and technique of financial statement analyses of business enterprises. Prerequisite: Ac 201 (Fi 260).
- *280 **ACCOUNTING FOR NON-BUSINESS STUDENTS.** (3) Non-technical approach to management of personal and business finances, taxes, and investments.
- 297 **TUTORIAL COURSE.** (2-3) Special reading and study for advanced students.
- 310 **ADVANCED ACCOUNTING PROBLEMS.** (3) Advanced study in accounting theory and related problems applicable to partnerships and corporations, insurance, and fiduciaries. Prerequisite: Ac 201.

Accounting

- 315 **ADVANCED ACCOUNTING THEORY.** (3) Theory and current issues as identified through releases of FASB, CASB, and SEC. Prerequisites: Ac 310 and permission of instructor.
- 320 **AUDITING PRINCIPLES.** (3) A comprehensive study of the fundamental principles of auditing. Prerequisite: Ac 201.
- 325 **ADVANCED AUDITING.** (3) Auditing theory applicable to independent and internal management audits of corporations and governments. Prerequisite: Ac 320 and permission of the instructor.
- 326 **COMPUTER AUDITING AND E.D.P.** (3) The use of the computer and E.D.P. in auditing.
- 330 **ACCOUNTING FOR NON-PROFIT INSTITUTIONS.** (3) Budgetary control, the operation of funds, and management reporting in Federal agencies. Prerequisites: Ac 201 and Ac 221.
- 340 **DATA PROCESSING.** (3) (Mg 340) (IS 100).
- 341 **SYSTEMS: ANALYSIS AND DESIGNS.** (3) (Mg 341, IS 341).
- 342 **MANAGERIAL ASPECTS OF DATA PROCESSING.** (3) (Mg 342, IS 342).

For graduate courses in accounting see **Business Administration: Graduate Division.**

For the M.B.A. degree with a concentration in accounting see **Graduate School: the Master of Business Administration.**

Finance (Fi)

Upper Division Courses

- 240 **CREDITS MANAGEMENT.** (3) (Mk 240).
- 255 **BUSINESS FINANCE.** (3) The various types of American enterprises with special emphasis on the corporation—its organization, management, financing, and budgeting.
- 257 **QUANTITATIVE METHODS IN FINANCE.** (3) Basic quantitative tools and methods. Algebraic and calculus concepts applicable to extensions into linear programming and the financial model of the firm.
- 260 **ANALYSIS OF FINANCIAL STATEMENTS.** (3) A study of the significance, development, and technique of financial statement analyses of business enterprises. Prerequisite: Ac 100. (Ac 260).
- 265 **INVESTMENTS.** (3) Survey of the economic bases of investment practice; techniques of security analysis and portfolio management. Prerequisite: Fi 255.
- 270 **FINANCIAL INSTITUTIONS.** (3) Banking and monetary institutions, business finance, financial intermediaries, saving and consumer finance, and public finance and monetary policy.
- 280 **SECURITIES AND COMMODITIES MARKETS.** (3) Securities and commodities. Method and manner of their exchange. Functions of security markets. Factors promoting changes in security prices.
- 301 **FINANCIAL MANAGEMENT.** (3) Major problems and methods used in financing business enterprises are studied primarily from the viewpoint of business management. Prerequisite: Fi 255. (Mg 301).
- 310 **INSURANCE.** (3) The principles and practices of life and property insurance. Ways in which it may be employed in the interest of personal, family, and business welfare.
- 320 **REAL ESTATE PRINCIPLES AND FINANCE.** (3)
- 322 **REAL ESTATE PRINCIPLES AND PRACTICES.** (2) Products and markets. Real estate production. Residential, commercial, and industrial brokerage. Real property valuation and finance. Property management.
- 323 **REAL ESTATE LAW.** (2) Rights and interests in real property. Contracts and conveyances. Title search. Mortgage law. Deeds and wills. License law. Landlord-tenant relations. City planning and zoning.

- 335 **PUBLIC FINANCE AND TAXATION.** (3) (Ec 335, Po 335).
- 380 **CASES AND PROBLEMS IN FINANCE.** (3) Case method study. The process of decision-making. Analytical techniques useful in handling the quantitative aspects of cases. Prerequisite: Fi 255. Recommended prerequisite: Fi 260.
- 385 **RESEARCH IN FINANCE.** (3) Directed study in a selected field by advanced majors in finance. Projects must have the approval of the Chairman.
- 397 **TUTORIAL COURSE.** (2-3) Special reading and directed study for advanced students.

Approved electives: Ac 200, 201, 230, 231, and other courses upon consultation with, and agreement of, the Department.

Business Administration (BA)

The following are general business service courses in Business Administration. Professors are assigned to these courses by the other departments in the College of Business Administration.

- 270 **BUSINESS STATISTICS.** (3) Descriptive statistics and statistical inference. Frequency distributions, measures of central tendency and dispersion, probability, sampling, estimation of parameters, test of hypotheses, and simple linear regression and correlation analysis.
- 271 **ADVANCED BUSINESS STATISTICS.** (3) Chi square. Payoff tables. The value of Bayesian inference. Correlation. Regression. Time series analysis. Forecasting and design of sample surveys. Prerequisite: BA 270 or equivalent.
- *280 **LEGAL ENVIRONMENT.** (3) To give the student a background of law by which he may critically evaluate the development of the law and the purposes which the law is intended to serve.
- 281 **BUSINESS LAW I.** (3) American Business Law. Contracts: essential, form, legality, and enforcement. Property. Negotiable instruments.
- 282 **BUSINESS LAW II.** (3) Business law: creation, powers, termination, liabilities of principal and agent. Partnerships. Corporations. Recommended prerequisite: BA 281.
- 290 **UNIFORM COMMERCIAL CODE.** (3) Preparation of candidates for the C.P.A. exam.
- 396 **BUSINESS ADMINISTRATION PROBLEMS.** (3) Case studies. Seniors. Development of analytical ability, decision-making skills, and imagination in devising feasible action programs.

Graduate Courses

Students selecting courses for the degree of Master of Business Administration must include the five core courses—BA 511, 512, 513, 514, and 515—in their programs. They will include appropriate courses from the offerings for their area of concentration. As a climax to their work they will take BA 699, a seminar dealing with practical problems.

- 501 **BASIC ECONOMICS.** (4) An accelerated course in the principles of economics for MBA students without previous course work in economics.
- 502 **INTRODUCTION TO QUANTITATIVE METHODS.** (2) Algebra, vectors, matrix algebra, differentiation, integration, and differential equations relevant to economic management.
- 503 **BASIC ACCOUNTING.** (4) Elementary principles and procedures supplemented with practical problems.
- 505 **BASIC MARKETING.** (2) Principles of marketing: concepts, functions, institutions and policies.
- 506 **BASIC STATISTICS.** (2) Descriptive statistics and classical statistical inference.
- 507 **BASIC FINANCE.** (2) The various types of American enterprises with special emphasis on the corporation—its organization, management, financing, and budgeting.

Business Administration

- 511 **ECONOMICS OF BUSINESS.** (3) Functions of the economic system; national income; business fluctuations, forecasting, government economics. Keynesian economic analysis, monetary and fiscal policies. Prerequisite: BA 501 or equivalent.
- 512 **QUANTITATIVE BUSINESS METHODS.** (3) Probability, PERT, optimization, inventory, linear and nonlinear programming, game theory, Markov Analysis, queuing, heuristic programming, etc. Prerequisite: BA 502 or equivalent.
- 513 **MANAGERIAL ACCOUNTING.** (3) The contribution of accounting to efficient business administration. Prerequisite: BA 503 or equivalent. B.S.B.A. (Accounting) graduates may substitute: Ac 315, Ac 325 or Ac 330.
- 514 **ADMINISTRATIVE OPERATION.** (3) Techniques of planning, organizing, directing, and control in business with emphasis on the behavioral aspects.
- 515 **MARKETING STRATEGY.** (3) Application of principles. Case study analysis of marketing problems and alternative solutions. Prerequisite: BA 505 or equivalent.
- 522 **MACROECONOMICS: THEORY AND POLICY.** (3) (Ec 522).
- 523 **QUANTITATIVE TECHNIQUES IN ECONOMIC ANALYSIS.** (3) (Ec 523).
- 524 **SEMINAR: DEVELOPMENT OF ECONOMIC THOUGHT.** (3) (Ec 524).
- 525 **MULTINATIONAL MANAGEMENT.** (3) Planning international trade. Sources of information. Structuring multinational firms. Personnel development, especially communication/motivation.
- 526 **MULTINATIONAL MARKETING.** (3) Product decisions, pricing decisions, channel decisions in the world market environment. Stresses cultural differences.
- 527 **MULTINATIONAL TRADE AND FINANCE.** (3) Growth and direction of trade. Internationalization of businesses. Role of governments. Mechanics of financing foreign trade and investment. (Ec 527).
- 530 **MANAGERIAL ECONOMICS.** (3) Economic analysis as applied to practical business operation. Tools of economic analysis; types of economic competition and their effect on individual firms and industries. (Ec 530).
- 532 **BUSINESS FORECASTING.** (3) (Ec 532).
- 535 **BUSINESS AND PUBLIC POLICY.** (3) Government and business in the United States compared with other countries. Practical problems. Trends in regulation. Decision-making as caused, affected, and limited by regulation.
- 538 **ECONOMICS OF LABOR.** (3) (Ec 538).
- 539 **SEMINAR: CURRENT ECONOMIC PROBLEMS.** (3) (Ec 539).
- 540 **INDUSTRIAL PRICING.** (3) The basic conditions, market structure, conduct and performance of American industry. Pricing behavior of competitive and oligopolistic enterprises. (Ec 540).
- 546 **LOCATION OF BUSINESS AND ECONOMIC ACTIVITY.** (3) The location of productive facilities. Marketing the finished product. Interrelationship of supply sources, location of productive facilities, and the market area. (Ec 546).
- 550 **PROBLEMS IN BUSINESS FINANCE.** (3) Financing current operations, policies, promotion, expansion, problems involving financial analysis and planning of capital structures. Case study method. Prerequisites: BA 507, 513. (Ec 550).
- 551 **MONEY AND CAPITAL MARKETS.** (3) Financial institutions and markets. The theory of interest rate determination, monetary policy and fiscal policy.
- 552 **INVESTMENT MANAGEMENT.** (3) Selection and management of a portfolio, based on carefully evaluated probabilities and sound techniques of security analysis. Prerequisite: BA 507 or equivalent. (Ec 552).
- 553 **CORPORATE FINANCIAL STRATEGY.** (3) Quantitative and nonquantitative methods to problems of working capital management, capital structure and budgeting, fixed asset management, valuation, and profitability.

- 554 **FINANCIAL PLANNING.** (3) Individual, family, executive, business, corporate, national and international financial planning. Prerequisite: BA 513 or equivalent.
- 555 **CONTROLLERSHIP.** (3) The duties and responsibilities of the controller. New and advanced techniques in taxes and accounting. Prerequisite: BA 513.
- 556 **CONTEMPORARY PROBLEMS IN ACCOUNTING AND FINANCE.** (3) Non-technical coverage of problems in accounting and finance relating to business organizations. Prerequisite: BA 503 or equivalent.
- 557 **ADVANCED ACCOUNTING THEORY.** (3) Theory and current issues as identified by Financial Accounting Standards Board, Cost Accounting Standards Board, and Securities and Exchange Commission. Prerequisite: Ac 201.
- 558 **ADVANCED AUDITING.** (3) Auditing theory applicable to independent and internal management audits of corporations and governments. Utilization of the computer as a major audit tool. Prerequisite: Ac 320.
- 559 **GOVERNMENTAL FINANCIAL MANAGEMENT.** (3) Application of accounting principles to government and non-profit institutions. Emphasis on budgetary control, fund operation, and management reporting. Prerequisites: Ac 201 and Ac 221.
- 560 **THE CAPITAL BUDGETING DECISION.** (3) The economic analysis and financing of investment projects such as plant, equipment, leasing, and new product decisions.
- 561 **MARKETING MANAGEMENT.** (3) New developments. Individual reports used for practical demonstration of theory application. Prerequisite: BA 515.
- 562 **MARKETING RESEARCH.** (3) Methods and techniques of marketing research; its use as a tool of management; cases in marketing research.
- 563 **INDUSTRIAL MARKETING.** (3) Problems of marketing industrial products. Management of the marketing channels and pricing, selling, and distribution of the products.
- 564 **CONSUMER BEHAVIOR THEORY.** (3) Evaluation of research findings from behavioral sciences and other disciplines. Relationship to marketing.
- 565 **ADVERTISING.** (3) The role of advertising in the marketing process. The advertising campaign, its creative and media components. The decision processes. Case method. Prerequisite: BA 515.
- 566 **MARKETING AND THE LAW.** (3) Statutory and case law as each affects marketing decision making. Sales contract, warranties, transfer of the title, remedies under U.C.C.
- 568 **MARKETING THEORY.** (3) Current marketing theory and means of augmenting it. Marketing theory as an aid to making sound business decisions.
- 569 **MARKETING MODELS.** (3) New products, pricing, brand switching, advertising budget, and media selection. Math or computer background not needed.
- 570 **SEMINAR: CONTEMPORARY MARKETING ISSUES.** (3) Current developments in marketing as related to social issues. Consumerism, ecology, social responsibility, ethical issues, and governmental roles.
- 571 **MARKETING FOR NONPROFIT ORGANIZATIONS.** (3) Adapts business marketing techniques to the specialized needs of people in government, education, health, and community service fields.
- 576 **MARKETING CHANNELS.** (3) A social systems approach to the examination of social, behavioral, and economic aspects of marketing channels of distribution.
- 600 **EXECUTIVE PRACTICES.** (3) Techniques for handling complicated human relations situations. Discussion centers around behavioral readings and their application to actual case situations. Prerequisite: BA 514.
- 601 **MANAGEMENT PLANNING.** (3) The planning function of management. Intermediate and long-range planning. Prerequisite: BA 514.
- 602 **MANAGEMENT INFORMATION SYSTEMS.** (3) Management information systems, in particular real-time MIS. Prerequisite: Ac/Mg 340 or equivalent.

Business Administration

- 603 **MATERIALS MANAGEMENT.** (3) The materials function in an industrial firm as an integrated activity. Inventory, purchasing, and traffic operations, with a discussion of objectives and measurements.
- 604 **PRODUCTION CONTROL.** (3) Advanced production and inventory control concepts and methods. Functions served by inventories. Recommended prerequisite: BA 506 or equivalent.
- 605 **QUALITY CONTROL.** (3) Technical, analytical, and managerial knowledge in a statistical context. The economics of cost, organizational impact, and the engineering function. Recommended prerequisite: BA 506 or equivalent.
- 606 **SMALL BUSINESS OPERATION.** (3) Organization, location, management, finance, production, and marketing problems of small business are studied. Lecture and case method.
- 607 **SEMINAR: APPLIED INDUSTRIAL MANAGEMENT TECHNIQUES.** (3) Interdisciplinary. Solution of industrial management problems. Prerequisite: BA 604 or equivalent.
- 608 **DATA BASE DESIGN.** (3) Standard data base management systems. The design of actual data base. Prerequisite: Ac/Mg 340 or equivalent.
- 609 **MANAGEMENT ASPECTS OF MIS.** (3) Planning and evaluating the feasibility of management information systems (MIS), controlling and organizing aspects of management information systems.
- 610 **PROBLEMS OF LABOR.** (3) An analysis of labor-management problems through the use of the "Incident Process."
- 611 **ADVANCED PERSONNEL MANAGEMENT.** (3) A case method approach to complex personnel problems at the management level.
- 612 **SEMINAR: COLLECTIVE BARGAINING.** (3) The historical development of collective bargaining. Problems that arise in the day-to-day administration of the labor-management agreement.
- 613 **PERSONNEL AND THE LAW.** (3) The historical development, current status, and economic implications of laws enacted by various levels of government to protect the worker's basic needs in our society.
- 615 **PERSONNEL SELECTION AND DEVELOPMENT.** (3) Principles underlying sound practices in personnel selection, training, and development. The development of programs in these areas.
- 616 **PSYCHOLOGY OF JOB STRESS.** (3) The causes of job stress are studied in an industrial work environment and solutions to relieve stress on the job are examined.
- 620 **QUANTITATIVE DECISION-MAKING.** (3) Strategies of decision-making cost of information, revision of decisions, decision trees, theory of utility, and evaluation of competing alternatives. Prerequisite: BA 512.
- 621 **OPERATIONS RESEARCH: SIMULATION.** (3) Concepts for the manager. Planning computer simulation of queuing and scheduling problems, Monte Carlo simulation. Prerequisite: BA 512.
- 622 **OPERATION RESEARCH: OPTIMIZATION.** (3) Advanced use of quantitative techniques in making optimal business decisions. Prerequisite: BA 512.
- 623 **SURVEY OF SAMPLING THEORY.** (3) (Mt 651).
- 624 **STATISTICAL DECISION THEORY.** (3) Decision theory. Games, values, and optimal strategies in games. Statistical games. Optimal strategies. Sequential games. Bayes and Minimax sequential procedures. Prerequisite: BA 512. (Mt 641).
- 625 **SURVEY RESEARCH IN BUSINESS.** (3) Phases involved in survey research. Student project.
- 626 **DESIGN OF EXPERIMENTS.** (3)
- 627 **ADVANCED BUSINESS STATISTICS.** (3)

- 628 **MULTIVARIATE STATISTICAL ANALYSIS.** (3) Multiple regression, multiple correlation, principal components, factor analysis, cluster analysis, discriminant analysis, and cononical correlation are studied.
- 640 **PSYCHOLOGY OF EXECUTIVE BEHAVIOR.** (3) Examination of the assumptions underlying the behavioral school of management thought. Individual and group behavioral patterns in organizations.
- 644 **MOTIVATION AND BEHAVIOR IN ORGANIZATIONS.** (3) The role of motivation in performance within organizations. Various concepts of motivation are studied, emphasizing research findings. (Ed 644, Ps 644).
- 645 **HUMANISTIC MANAGEMENT.** (3) The concepts of Transactional Analysis, Gestalt, Value Clarification, Reality Therapy, Encounter Groups, Communication Theory are studied as to their impact on the management process.
- 690 **BUSINESS AND SOCIETY.** (3) (Ec 690).
- 692 **BUSINESS ORGANIZATION AND THE LAW.** (3) The partnership and the corporation. Jurisprudential problems. Law and managers. Limits of discretion. Duties and responsibilities of managers.
- 695 **INDIVIDUAL READINGS AND RESEARCH.** (2-3) Open to especially qualified students with the consent of the chairman of the appropriate department.
- 696 **SMALL BUSINESS CONSULTING.** (3) Student teams serve as consultants to small business enterprises. Site visitation, analysis of problems and recommended solutions.
- 698 **ENTREPRENEURSHIP.** (3) New ventures. Search, screening, evaluation, negotiation and financing to initiate or purchase a company. Prerequisites: BA 511, 512, 513, 514, and 515. For Management, Marketing, Finance, or Business Economics concentrations.
- 699 **BUSINESS ADMINISTRATION PROBLEMS.** (3) Opportunity to integrate core and concentration background with other graduate students through the use of selected cases. Prerequisites: BA 511, 512, 513, 514, and 515.

Economics (Ec) and Industrial Relations (IR)

Staff: DR. MASTRIANNA, *chairman*; DR. BRYANT, DR. DONNELLY, DR. HAILSTONES, DR. LINK, DR. MARMO, MR. ROTHWELL, DR. SCHULTZ, DR. ZIMMERMAN

Assisted by: FR. BESSE, MR. BEYER, DR. FREIBERG, MR. GOOD, DR. THIEMANN, DR. TUREL, DR. WEBB

- (*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Economics (Ec)

Lower Division Courses

- *101 **PRINCIPLES OF ECONOMICS.** (3) General economic activity. National income, employment, money and banking, business fluctuations, and economic stability. The economy as a whole is examined.
- *102 **PRINCIPLES OF ECONOMICS.** (3) Market forces of supply and demand in allocating the nation's resources and securing efficiency in their use. Economic behavior of consumers, firms, and resource owners.

Upper Division Courses

- 200 **MICROECONOMIC ANALYSIS.** (3) Economic principles. Fundamental concepts of value and price, rent, interest, wages and profits. Relationship to problems of production, distribution, and exchange. Prerequisite: Ec 102.

Economics

- 201 **MACROECONOMIC ANALYSIS.** (3) The determinants of Gross National Product, employment levels, and rates of economic growth. The developing body of modern macroeconomic theory. Prerequisite: Ec 101.
- *202 **HISTORY OF ECONOMIC THOUGHT.** (3) World economic movements. Aristotle, Thomas Aquinas, Adam Smith, Ricardo, Mills, Malthus, George, Clark, Bentham, Jevons and Keynes. Prerequisites: Ec 101, 102.
- *210 **HUMAN RESOURCES.** (3) Prerequisite: Ec 102. (IR 210, Mg 210).
- 222 **ECONOMETRICS.** (3) Mathematical and statistical techniques used by economists to test the validity of economic theories. Hypothesis testing and regression analysis. Prerequisites: Ec 200, 201.
- *235 **ECONOMIC HISTORY OF THE UNITED STATES.** (3) The American economy from the period of colonization. The progress of population, agriculture, industry, domestic and foreign commerce, banking and finance, and transportation.
- 240 **ECONOMIC GEOGRAPHY.** (3) The economic implications of natural resources. Production of goods in relation to the development of agriculture, commerce, and industry in the United States and foreign countries.
- 245 **URBAN ECONOMICS.** (3) Interdisciplinary. Tools for problem solving. Forces leading to urbanization and differing rates of growth in urban areas. Affluence, equity, and stability are investigated. Prerequisite: Ec 102. (Po 245).
- 250 **MONEY AND BANKING.** (3) Prerequisite: Ec 101. (Fi 250).
- 300 **LABOR RELATIONS.** (3) (IR 300).
- 310 **CURRENT LABOR PROBLEMS.** (3) (IR 310).
- 311 **HISTORY OF THE LABOR MOVEMENT.** (3) (IR 311).
- 313 **LABOR LAW.** (3) (IR 313).
- *320 **ECONOMIC THEORY AND SOCIAL ORDER.** (3) Economics and Christian ethics. The Encyclicals. The businessman and a code of ethics founded on Christian principles.
- 325 **INDUSTRIAL ORGANIZATION.** (3) Basic conditions, market structures, conduct and performance of American industry. Public policy as related to the problems of bigness and monopolization. Prerequisite: Ec 102.
- 330 **GOVERNMENT AND BUSINESS.** (3) U.S. government structure and regulation of business. Constitutional limitations. Due process of law. Equal protection. Privileges and immunities. Obligation of contract. (Po 330).
- 335 **PUBLIC FINANCE AND TAXATION.** (3) Forms of taxation; incidence of taxation; borrowing; non-tax revenues; expenditures; the effects of government finance on the economy. Prerequisite: Ec 101. (Po 335, Fi 335).
- *341 **COMPARATIVE ECONOMIC SYSTEMS.** (3) Origin and development of economic systems. Their operations and purposes. Socialism, Fascism, Communism, and Capitalism.
- 343 **ECONOMICS OF THE COMMUNIST STATE.** (3) The principles of Marxist Communism. Marx, Engels, Lenin, and Stalin. Popular and orthodox communism.
- 345 **INTERNATIONAL ECONOMICS.** (3) United States trade and the world. Causal relationships. Role of government. International, private agreements. International business. Prerequisite: Ec 200.
- 348 **ECONOMICS OF TRANSPORTATION.** (3)
- *360 **CURRENT ECONOMIC PROBLEMS.** (3) Current problems: labor, monetary and fiscal policy, debt management, social security legislation, and public regulation.
- 377 **MANAGERIAL ECONOMICS.** (3) Microeconomic analysis for decision making within the business firm. The relationship between theory and the decision process. Prerequisite: Ec 102.

- 395 **SEMINAR IN ECONOMICS.** (3) Major economic topics are examined in depth. Student research and classroom discussion. Prerequisites: Ec 101, 102.
- 397 **TUTORIAL COURSE.** (2-3) Special reading and study for advanced students.
- Other courses are acceptable for a major in economics at the discretion of the Chairman or the student's advisor.

Graduate Courses

- 521 **MICROECONOMICS: THEORY AND APPLICATIONS.** (3) The economic principles of price theory. Analyses are conducted within a framework of traditional and modern contributions in the field. (BA 521).
- 522 **MACROECONOMICS: THEORY AND POLICY.** (3) Theories of employment. Interrelationships implied in the determination of interest rates. The demand and supply for money. Price levels. Growth and development. Monetary and fiscal policy. (BA 522).
- 523 **QUANTITATIVE TECHNIQUES IN ECONOMIC ANALYSIS.** (3) Concepts and techniques of economic theory: elasticity, marginal analysis, linear programming, capital budgeting. Quantitative methods. (BA 523).
- 524 **SEMINAR: DEVELOPMENT OF ECONOMIC THOUGHT.** (3) Neo-Classical and contemporary thought. The rise of marginalism. Theories of production, partial equilibrium, and general equilibrium. Growth of welfare economics. (BA 524).
- 527 **MULTINATIONAL TRADE AND FINANCE.** (3) Growth and direction of trade. Internationalization of businesses. Role of governments. Mechanics of financing foreign trade and investment. (BA 527).
- 530 **MANAGERIAL ECONOMICS.** (3) Economic analysis as applied to practical business operation. Tools of economic analysis; types of economic competition and their effect on individual firms and industries. (BA 530).
- 532 **BUSINESS FORECASTING.** (3) (BA 532).
- 535 **BUSINESS AND PUBLIC POLICY.** (3) (BA 535).
- 538 **ECONOMICS OF LABOR.** (3) Determinants of the competitiveness of labor markets; study of economic determinants of employment levels. Seminar method is used. (BA 538).
- 539 **SEMINAR: CURRENT ECONOMIC PROBLEMS.** (3) (BA 539).
- 540 **INDUSTRIAL PRICING.** (3) The basic conditions, market structure, conduct and performance of American industry. Pricing behavior of competitive and oligopolistic enterprises. (BA 540).
- 546 **LOCATION OF BUSINESS AND ECONOMIC ACTIVITY.** (3) (BA 546).
- 548 **TRANSPORTATION ECONOMICS.** (3)
- 550 **PROBLEMS IN BUSINESS FINANCE.** (3) (BA 550).
- 552 **INVESTMENT MANAGEMENT.** (3) (BA 552).
- 612 **SEMINAR: COLLECTIVE BARGAINING.** (3) (BA 612).
- 690 **BUSINESS AND SOCIETY.** (3) (BA 690).
- 695 **SPECIAL STUDY.** Credit by arrangement.
- 697 **RESEARCH SEMINAR.** (6)
- 698
- 699 **MASTER'S THESIS.** (6)

Industrial Relations (IR)

Upper Division Courses

- *210 **HUMAN RESOURCES.** (3) Prerequisites: Ec 100, 101. (Ec 210, Mg 210).
- *300 **LABOR RELATIONS.** (3) Issues and problems involved in union-management relations. Evaluation of collective bargaining as a method for resolving labor disputes in our economic system. (Ec 300).
- 310 **CURRENT LABOR PROBLEMS.** (3) Analytical framework for examining labor problems. Application to important problems facing the labor movement today. Prerequisite: IR 210. (Ec 310).
- *311 **HISTORY OF THE LABOR MOVEMENT.** (3) Workers' movements in the U.S.; comparison of characteristics of different organizations from the Colonial period to the present. (Ec 311).
- 312 **RESEARCH IN INDUSTRIAL RELATIONS.** (3) Tools essential for sound research in problems in industrial relations. Current problems are studied to insure competence in the use of research tools. Prerequisite: IR 210.
- 313 **LABOR LAW.** (3) Development of labor law in the U.S.; emphasis on laws treating injunctions, worker combinations, labor-management relations, internal union affairs, and working conditions. (Ec 313).
- 315 **RESEARCH ON CURRENT LABOR PROBLEMS.** (3) Research methodology. Employment in pursuing research on current labor problems. Prerequisite: IR 210. (Ec 310).
- 317 **LABOR UNIONS.** (3) The role of labor unions in American society.
- 320 **PERSONNEL ADMINISTRATION.** (3) (Mg 320).
- 330 **INDUSTRIAL PSYCHOLOGY.** (3) (Ps 251).
- 395 **CASES AND PROBLEMS IN PERSONNEL RELATIONS.** (3) Case studies in selected personnel problems with emphasis on the application of relevant behavioral science research and concepts.
- 397 **TUTORIAL COURSE.** (2-3) Contents to be determined according to the needs of the student.

Approved Electives: Upon consultation with, and approval of, the Department.

Management and Information Systems

Staff: DR. R. THIERAUF, *chairman*; DR. CAMEALY, DR. DURBROW, DR. GEEDING, MR. HALL, DR. HAYES, MR. KLEKAMP, MR. KRAMER, MR. NIEHAUS

Assisted by: MR. BREYER, DR. BRUVOLD, DR. BUTEN, MR. CARUSO, MR. CENTNER, DR. COSGOVE, DR. DONNELLY, MR. GARTNER, MR. GREGORY, DR. GROSSE, MR. HOFFNER, DR. KLEE, MR. McRAE, MR. MEEKER, DR. MURPHY, MR. O'CONNELL, DR. QUATMAN, MR. REYNOLDS, MRS. RUWE, MR. M. THIERAUF

- (*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Management (Mg)

Lower Division Course

- *100 **PRINCIPLES OF MANAGEMENT.** (3) The process of management applicable to forms of business organization. Essentials of the production function.

Upper Division Courses

- *210 **HUMAN RESOURCES.** (3) A survey of labor and labor law; examination of wage determinants and wage theory; examination of cause and remedies of unemployment. Prerequisites: Ec 100, 101. (IR 210; Ec 210).
- *300 **LABOR RELATIONS.** (3) (IR 300).
- 301 **FINANCIAL MANAGEMENT.** (3) Major problems and methods used in financing business enterprise from the viewpoint of business management. Prerequisites: Fi 255, Mg 100.
- 302 **PRODUCTION MANAGEMENT.** (3) Decision-making related to resource allocation to provide students with analytical tools to optimize the results of production allocation. Prerequisite: Mg 100.
- 303 **OFFICE MANAGEMENT.** (3) A study of the principles of management and their application to office management. Lecture and case discussion. Prerequisite: Mg 100.
- 310 **HUMAN RELATIONS AND MOTIVATION.** (3) Current concepts of human behavior as applied to the business organization. The disciplines of psychology and sociology are utilized. Prerequisite: Mg 100.
- *311 **RESEARCH IN MANAGEMENT.** (3) Application of research methods to selected managerial problems. Prerequisite: Mg 100.
- 312 **CONTEMPORARY MANAGEMENT PROBLEMS.** (3) Problems vary. Examples: managerial authority, management and society, patterns of management, philosophy of management. Prerequisite: Mg 100.
- 313 **MANAGERIAL METHODS ANALYSIS.** (3) Managerial techniques for optimum effectiveness: process charting, work and time measurement, performance rating, work sampling, and paperwork procedures. Prerequisite: Mg 100.
- 314 **MANAGERIAL POLICY FORMULATION.** (3) Cases designed to reinforce knowledge of the mechanics of the management process. Prerequisite: Mg 100.
- 315 **ORGANIZATIONAL THEORY OF MANAGEMENT.** (3) Theory of organizational structures as applied to business firm. Prerequisite: Mg 100.
- 320 **PERSONNEL ADMINISTRATION.** (3) Principles and practices in the administration of human relations in the industrial and commercial world. (IR 320).
- 330 **INTRODUCTION TO QUANTITATIVE METHODS.** (3) (BA 502).
- 331 **APPLIED QUANTITATIVE METHODS FOR BUSINESS.** (3) Application of higher mathematics to recurring business problems. Basic operations research techniques are covered. Prerequisites: Mt 112, 122.
- 340 **PRINCIPLES OF DATA PROCESSING.** (3) Principles of business data processing. Structure and function of electronic data processing machines and systems. (Ac 340, IS 100).
- 341 **SYSTEMS ANALYSIS AND DESIGN.** (3) EDP systems analysis and design. Work simplification for improved data processing methods and procedures. Prerequisite: Mg 340 or equivalent. (Ac 341, IS 341).
- 342 **MANAGERIAL ASPECTS OF DATA PROCESSING.** (3) Data processing systems and management organization and control. Planning and evaluating the feasibility of EDP systems. Prerequisite: Mg 340 or its equivalent. (Ac 342, IS 342).
- 343 **FORTRAN PROGRAMMING.** (3) FORTRAN II and IV programming languages for scientific problems. (IS 343).
- 344 **COBOL PROGRAMMING.** (3) COBOL programming language for business problems. (IS 344).
- 345 **DATA PROCESSING INFORMATION SYSTEMS.** (3) Data processing systems. The design of actual information processing systems. Prerequisite: Mg 341, 344. (IS 345).
- 346 **COMPUTER OPERATIONS MANAGEMENT.** (3) Practical problems confronted by the computer operations manager. Organization control and scheduling functions. Environmental considerations. Prerequisite: Mg 340 or equivalent. (IS 346).

Marketing

- 347 **SURVEY OF DATA PROCESSING APPLICATIONS.** (3) Data processing installations. Hardware and software. Current data processing problems. (IS 347).
- 395 **CASES AND PROBLEMS IN MANAGEMENT.** (3) Case studies of selected management problems with emphasis on the application of statistical techniques for analysis and solution.
- 397 **TUTORIAL COURSE.** (3) Research in scholarly journals on a management topic of current import. Open to students only with consent of instructor.

Approved Electives: Upon consultation with, and approval of, the Department.

INFORMATION SYSTEMS (IS)

Lower Division Course

- 100 **PRINCIPLES OF DATA PROCESSING.** (3) Structure, function, and application of computers and data processing systems. Projects using BASIC language in a time sharing mode.

Upper Division Courses

- 331 **APPLIED QUANTITATIVE METHODS FOR BUSINESS.** (3) Application of higher mathematics to recurring business problems. Basic operations research techniques are covered. Prerequisites: Mt 112, 122.
- 341 **SYSTEMS ANALYSIS AND DESIGN.** (3) EDP systems analysis and design. Work simplification for improved data processing methods and procedures. Prerequisite: IS 100 or equivalent. (Ac, Mg 341).
- 342 **MANAGERIAL ASPECTS OF DATA PROCESSING.** (3) Data processing systems and management organization and control. Planning and evaluating the feasibility of EDP systems. Prerequisite: IS 100 or its equivalent. (Ac, Mg 342).
- 343 **FORTRAN PROGRAMMING.** (3) FORTRAN II and IV programming languages for scientific problems. (Mg 343).
- 344 **COBOL PROGRAMMING.** (3) COBOL programming language for business problems.
- 345 **DATA PROCESSING INFORMATION SYSTEMS.** (3) Data processing systems. The design of actual information processing systems. Prerequisite: IS 341, 344. (Mg 345).
- 346 **COMPUTER OPERATIONS MANAGEMENT.** (3) Practical problems confronted by the computer operations manager. Organization control and scheduling functions. Environmental considerations. Prerequisite: IS 100 or equivalent. (Mg 346).
- 347 **SURVEY OF DATA PROCESSING APPLICATIONS.** (3) Data processing installations. Hardware and software. Current data processing problems. (Mg 347).
- 348 **ASSEMBLY LANGUAGE.** (3) Features of the IBM 360, Data representation, number systems, data movement, arithmetic, program control. Prerequisite: IS 100 or equivalent (CS 255).

Marketing (Mk)

Staff: DR. TREBBI, *chairman*; DR. LEWIS, MR. KUMPF, MR. PARKER,
MR. SCHERTZER, DR. VAN KIRK, DR. WEBB

Assisted by: MR. CARUSO, MR. LOHAUS, MR. McMULLIN, MR. B. MILLER,
MR. PITCAIRN, MS. RUWE, MR. H. THOMAS, MR. VENKATESH

(*) Courses so designated are approved as electives for curricular requirements in social science, subject to limitations as indicated.

Lower Division Course

- *100 **PRINCIPLES OF MARKETING.** (3) Marketing concepts, functions, institutions, and policies. Marketing's role in society. Prerequisite for upper division courses unless waived by department chairman.

Upper Division Courses

- 202 **MARKETING RESEARCH.** (3) Marketing research, methodologies, and managerial utilization of research findings. Prerequisite: BA 270.
- 204 **MARKETING MANAGEMENT.** (3) Marketing planning. The co-ordination of all aspects of marketing. Product line development. Prerequisite: six hours of upper division courses in Marketing.
- 210 **INDUSTRIAL MARKETING.** (3) Problems of marketing industrial products. Management of the pricing, selling, and servicing industrial goods distributions. Customer services.
- 212 **PURCHASING.** (3) Principles and practices of purchasing. Techniques in making decisions on quality and quantity at the right prices. Price policies, sources of supplies, and standards of performance.
- 219 **BROADCAST STATION SALES.** (3) (CA 219).
- 220 **INTERNATIONAL MARKETING.** (3) Conditions peculiar to international distribution of goods and services and its effects on the national welfare.
- 230 **RETAILING MANAGEMENT.** (3) Fundamental principles and policy considerations for the successful management of modern-day retailing organizations. Case study.
- 235 **DISTRIBUTION CHANNELS.** (3) Macro-marketing institutions and channels. Time, place, and behavioral concepts in the channels of distribution.
- 240 **CREDITS MANAGEMENT.** (3) Nature, instruments, and place of credit. Management of consumer, mercantile, and bank credit. Analysis of risk. Management of collection and credit control. (FI 240).
- 250 **PROMOTION—ADVERTISING.** (3) Creative and institutional aspects of advertising and their relationship to market and product attributes. Effects of legal and social environment.
- 261 **PROMOTION—SELLING.** (3) Dynamics of selling and techniques of persuasive leadership. Sales management. Selection, training, compensation, and analysis of sales force activities.
- *270 **UNDERSTANDING THE CONSUMER.** (3) Marketing strategy implications of consumer behavior. Anthropology, economics, psychology, sociology, and the consumer.
- 272 **ETHNIC MARKETING.** (3) Marketing implications of cultural and ethnic differences in American society. Literature relating subgroups to marketing strategies.
- 280 **PHYSICAL DISTRIBUTION ANALYSIS.** (3) Examines the logistics problems of the firm as a part of the overall distribution process. The quantitative approach to distribution control.
- *292 **CONTEMPORARY MARKETING ISSUES.** (3) Current developments in consumerism and consumer protection. Ecology, social responsibility and ethical issues. Governmental roles.
- 295 **TUTORIAL COURSE.** (2-3) Research, meetings and attendance at scheduled lectures as determined by the advisor. Prerequisite: Permission of the chairman.
- 299 **MARKETING PLANNING AND ANALYSIS.** (3) Application of marketing principles to case analysis. Prerequisite: Nine semester hours of upper division courses in marketing.

Institute for Business and Community Services

Staff: DR. GEEDING, Institute Director; MRS. COOPER, Nursing Programs Director; MRS. RASTANI, Assistant to the Director; MRS. GOODRICH AND MISS DRISCOLL, Program Coordinators

Assisted by: members of the Xavier University faculty and resource personnel from the Cincinnati area.

Numerous short-term, non-credit seminars, workshops, and institutes are offered by the University through the Institute.

Programs

The Graduate School

The Arabic numeral in parentheses following course titles indicates the number of semester credit hours which the course carries.

The following programs are offered exclusively through the Graduate School. Other graduate programs also have an undergraduate program. The complete course descriptions of such departments are listed in the undergraduate sections of this catalogue.

Corrections (Cr)

Staff: MR. HAHN, *director*; DR. RICHARDSON, *assistant director*; DR. ENDRES, MR. DALLMAN, MR. ENSIGN, MR. FARMER, MR. McCARTHY, MR. O'CONNOR, MR. OVERBERG, MR. PALMER

Assisted by: DR. BERG, MR. SETA

(*) Courses so designated are approved for curricular requirements in social studies subject to limitations as indicated.

Upper Division Courses

- *266 **CRIME AND PERSONALITY.** (3) (Ps 266, Ed 266).
276 **PSYCHOLOGY OF DELINQUENCY.** (2) (Ps 276, Ed 276).

Graduate Courses

- 501 **FOUNDATIONS OF CORRECTIONS.** (3) Theories of criminology, current philosophies, and methodology.
- 503 **INSTITUTIONAL CORRECTIONS.** (3) Treatment methods and custodial care in correctional institutions for juveniles and adults.
- 505 **NON-INSTITUTIONAL CORRECTIONS.** (3) Probation and parole principles and techniques. Alternatives to incarceration. Decision-making. The use of auxiliary services for juvenile and adult offenders.
- 510 **LEGAL ASPECTS OF CORRECTIONS.** (2) Laws related to the field of corrections. Recent Supreme Court decisions. The lawyer's role in relation to corrections. Rights and responsibilities. Prerequisite: Cr 501.
- 520 **SOCIOLOGY OF CRIME AND DELINQUENCY.** (3) Social factors related to crime and delinquency. Etiological theories and their implications for prevention and correction.

- 533 **INTERVIEWING AND COUNSELING IN CORRECTIONS.** (2) Principles and methodology including use of authority and crisis intervention.
- 540 **CORRECTIONAL ADMINISTRATION.** (2) Management problems in corrections. Budget, personnel, public relations. Prerequisite: Cr 501.
- 541 **DIVERSION AND THE CRIMINAL JUSTICE SYSTEM.** (2) Implications of contemporary programs to minimize penetration in the criminal justice system.
- 542 **ROLE OF CORRECTIONAL ARCHITECTURE IN CONTEMPORARY CRIMINAL JUSTICE PLANNING.** (2) Federal guidelines, moratorium on construction and other current issues.
- 550 **ALCOHOL AND CRIMINALITY.** (2) Alcohol-abuse related to the public offender.
- 580 **INDIVIDUAL RESEARCH AND DIRECTED STUDY IN CORRECTIONS. (Non-classroom).** (2) Field observation, case analysis, special readings, or data evaluation. Taken concurrently with Cr 590.
- 590 **INTERNSHIP IN CORRECTIONS. (Non-classroom).** (2) Supervised on-the-job training. Three hundred hours. Placement in correctional setting. Final course in the program.

Hospital and Health Administration (HA)

Staff: PROF. ARLINGHAUS, *director*; DR. BOCKLET, MR. DAM, MRS. RUWE, DR. TUCKER

Assisted by: DR. GEEDING, MR. KLEKAMP, MR. WILZ

Hospital Administration

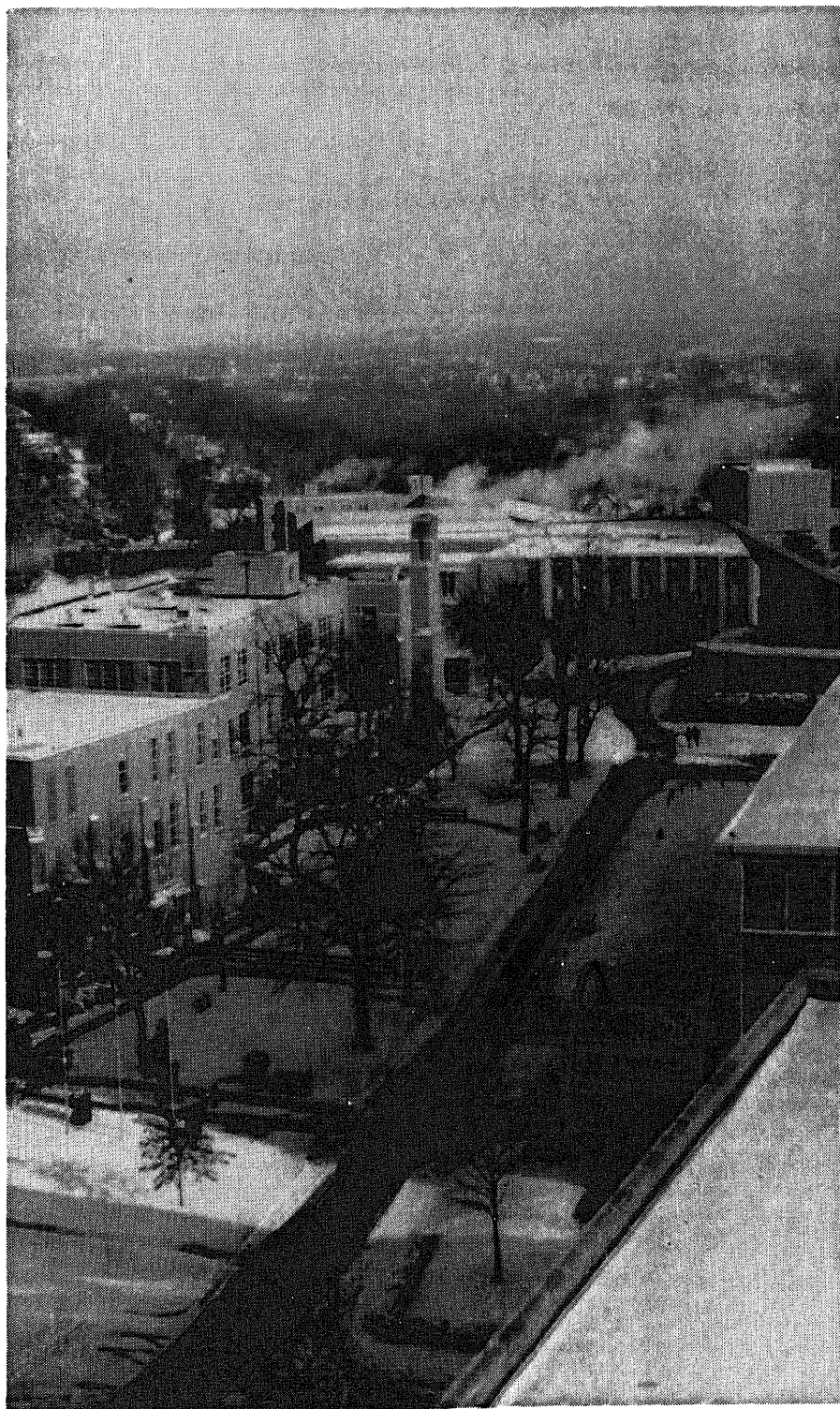
- 630 **HOSPITAL ORGANIZATION THEORY.** (3) Analysis of the hospital organization. Policy-making roles. Organization and operation of functional elements of the hospital. The institutional planning process.
- 631 **QUANTITATIVE TECHNIQUES FOR HEALTH ADMINISTRATORS.** (3) Mathematical and statistical techniques. Management engineering. Computerized information systems as tools for the health administrator's use.
- 632 **HOSPITAL FINANCIAL MANAGEMENT I.** Management of cash, accounts receivable, and inventory. Fixed assets and depreciation. Hospital audit guide. Reimbursement systems. Hospital yardsticks. Future delivery systems.
- 633 **HOSPITAL FINANCIAL MANAGEMENT II.** (3) Departmental costs and budgets. Reporting and data systems. Cash, operating, and capital budgets. Medicare. P.L. 92-603. Current financial developments.
- 634 **HOSPITAL LEGAL ASPECTS.** (3) Law as it relates to hospitals. Conflict of interest, contracts, consent, liability, insurance. Labor law.
- 635 **CURRENT TRENDS IN MEDICINE.** (3) Trends in the practices of the healing professions. Concepts of health and disease.
- 636 **HOSPITAL HUMAN RESOURCES MANAGEMENT.** (3) Personnel administration policies, procedures, and techniques. Management's role in labor relations.
- 637 **SEMINAR: HEALTH CARE ADMINISTRATION.** (3) Case and incident methods. The changing environment in hospital and health care delivery. Hospital administration problems.
- 638 **MEDICAL CARE ORGANIZATION I.** (3) Cost of medical care. Medical personnel. Third party payers. Supply and distribution of hospital beds. Medical-economic considerations of health.

Hospital Administration

- 639 **MEDICAL CARE ORGANIZATION II.** (3) Comprehensive Health Planning; planning health care facilities on the community, state, federal, and world levels. Considerations and laws in health planning. Public Health Administration. Community health clinics. Incidence of illness. Control of diseases. Community health environment.
- 640 **PSYCHOLOGY OF EXECUTIVE BEHAVIOR.** (3) Techniques for complicated human relations situations. Psychological (behavioral) and sociological readings and their application to actual situations.
- 641 **RESEARCH IN HOSPITAL ADMINISTRATION.** (3) Statistical concepts necessary for writing and use of research papers in the health administration field. Business research.
- 642 **HEALTH ECONOMICS.** (3) Economic principles and the production and delivery of health services. Unique characteristics of health care. Health manpower. Public and private financing. Demand determinates.
- 648 **MASTER'S THESIS.** (3)
- 649 **ADMINISTRATIVE RESIDENCY.** (9) Twelve months.

Management Engineering (ME)

- 610 **HEALTH SYSTEMS ANALYSIS.** (4) Techniques of systems analysis. Applications in health and hospital administration. Information for management decisions. Planning techniques. Organizational analysis. Human factors in system development.
- 611, 612 **HEALTH INFORMATION SYSTEMS I AND II.** (3) each semester. Analysis and design of information systems for hospitals, health planning agencies, and other health organizations. Feasibility studies. Implementation. System operation and maintenance. Management information systems and clinical support systems. Prerequisite: HA 610.
- 613, 614 **HEALTH SERVICES OPERATIONS RESEARCH I AND II.** (3) each semester. Operations research and statistics applied to health administration problems. Linear programming. Queuing theory. Economic analysis. Simulation. Industrial engineering-work simplification and methods analysis. Prerequisite: HA 610.
- 618, 619 **APPLIED RESEARCH PROJECT.** (6) each semester. Faculty-supervised applied research project in a local health agency involving systems analysis techniques. Culminates in a research paper.



The Graduate School

Administrative Officers

RAYMOND F. McCOY, Ed.D.

Dean

THOMAS H. HANNA, Ed.D.

Associate Dean

JAMES P. GAFFNEY, Ed.D.

Assistant Dean

THOMAS J. HAILSTONES, Ph.D.

Director, Master of Business Administration Program; Dean, College of Business Administration

JOHN C. ROTHWELL, M.B.A.

Assistant to the Dean

The Graduate Council

RAYMOND F. McCOY, Ed.D.

(Chairman) Dean, Graduate School

VYTAUTAS J. BIELIAUSKAS, Ph.D.

Chairman, Department of Psychology

HARVEY A. DUBE, Ph.D.

Chairman, Department of Chemistry

BERNARD A. GENDREAU, Ph.D.

Chairman, Department of Philosophy

THOMAS J. HAILSTONES, Ph.D.

Director, Master of Business Administration Program; Dean, College of Business Administration

THOMAS H. HANNA, Ed.D.

Associate Dean, Graduate School

WILLIAM J. LARKIN III, Ph.D.

Chairman, Department of Mathematics

FRANK MASTRIANNA, Ph.D.

Chairman, Department of Economics

ERNEST FONTANA, Ph.D.

Chairman, Department of English

ROMAN J. SCHWEIKERT, Ed.D.

Chairman, Department of Education

PAUL L. SIMON, Ph.D.

Chairman, Department of History

JOHN B. VIGLE, M.S.L.S.

Director of the University Library

GENERAL POLICIES

The policies listed below affect all graduate students. Some degree programs do have special policies which are specified in individual program descriptions.

Admission and Probation Committee

The Committee consists of the Chairman of the Department which the student seeks to enter, the Dean of the Graduate School, and the Associate Dean.

Scope and General Requirements

The Graduate School opened in 1946 under the direction of its present Dean. Its first graduate degrees were awarded in 1947. In 1952 the Master of Business Administration program was added. These degree programs are offered: the Master of Arts in economics, English, history-political science, psychology, and, in summers only, philosophy; the Master of Science in chemistry, mathematics, and corrections; the Master of Education; the Master of Business Administration; and the Master of Hospital and Health Administration. The Graduate School has always been coeducational.

Classification of Students

Graduate students who have been admitted to Xavier University are designated as *degree*, *provisional*, or *special* students.

Degree students are those students officially accepted into candidacy for a graduate degree program. Students not in degree status are technically classified as special students until candidacy has been approved.

Provisional students are those students accepted with a deficiency of an academic or administrative nature which must be removed before they may apply for candidacy as a degree student.

Special students are those pursuing graduate courses without intent of completing a graduate degree. They may pursue these courses with profit but without regard for degree requirements.

Academic Calendar

The Graduate School Academic Calendar is integrated with the total University Calendar, which may be found at the front of this catalogue.

Admission

Application for admission to graduate studies is made in form. Application forms can be obtained upon request. Applications should be followed promptly by a transcript of the applicant's credits.

Students electing graduate work leading to a master's degree must present evidence of having a bachelor's degree from an accredited institution, and also present official transcripts from each college in which credit was obtained. Others will be registered conditionally.

An applicant with a bachelor's degree from a non-accredited institution is not admitted to full graduate standing until he has successfully completed at least six hours of graduate work with the required grades, and has been accepted by the department which controls his program. Certain colleges and/or departments within the University do not accept students from regionally non-accredited institutions.

Since graduate work is work done under direction, the chairman of the department of the student's major subject must decide on the student's preparation for graduate study in that department; and the chairman or one appointed by him will be the student's advisor throughout. The general prerequisites for graduate work in any department must be the equivalent of an undergraduate major at Xavier University.

Notification of acceptance or rejection is sent to each applicant as soon as possible after the receipt of his application and pertinent transcript(s). The Dean of the Graduate School will deny admission if the applicant's record of scholarship is not sufficiently distinguished, or if his undergraduate program is judged inadequate for advanced academic or professional study.

Graduate School

Seniors of satisfactory academic standing who are within nine hours of completing their undergraduate requirements for the bachelor's degree may, in their last semester, register for graduate work, providing that these courses are in excess of the requirements for the bachelor's degree.

Official acceptance for graduate study is good for a two-year period from the time of acceptance. If a student does not honor his acceptance within this period of time, his application and documents are destroyed unless he requests that the documents be returned or sent to another university.

Any falsification of information on the application, transcripts, or recommendations (where required) or test scores will be sufficient cause for disqualification for admission or dismissal if admitted. All tuition and fees paid and graduate credit earned is forfeited under such dismissal.

Students transferring from another university must be in good standing at that university or they will not be admitted to Xavier. Evidence of good standing must be produced upon request.

Xavier University is non-discriminatory on the bases of sex, race, color, religion, national, or ethnic origin.

Admission—International Students

International students must apply on special application forms available through the Graduate Office and must comply with all requirements for admission before formal acceptance will be granted and an I-20 form issued.

Because of the extensive processing required of applicants from foreign countries, no application for an academic school year beginning in September will be accepted from an international student not within the United States after May 15 for the ensuing academic school year.

International students within the United States attending other accredited institutions of higher learning must apply and submit all documents and other requirements prior to June 15 if they wish acceptance for the academic school year beginning in September. Such students may be accepted for a subsequent spring semester or summer session if they apply after June 15.

Students must provide the Graduate Office in advance of acceptance with evidence of proficiency in the English language (TOEFL score is preferred), evidence of financial resources or sponsorship to pay tuition, fees, and living expenses while at Xavier, one *official* copy of their total college or university academic record from *all* schools attended (mark sheets should be provided where pertinent), three letters of reference including character and academic recommendations, an official medical examination report or certificate of health dated within one year of application, and the GMAT score if application is for the M.B.A. program. Transcripts must bear the original signature (not a photograph) of the authorized official and the original seal (not a photograph) of the institution to be acceptable. Attested or "true" copies are not acceptable unless certified by an authorized official. All documents not issued in English by the officials signing them must be accompanied by certified English translations. Direct all information to "Graduate International Student Advisor" at Xavier University.

Xavier does not accept students in the U.S. on visitor's visas, or students who enter the U.S. on I-20 forms issued by another university unless the student attends that institution for at least one quarter or semester. Female students must reside in a campus dormitory unless sponsored by a local American family.

Academic Contract

Completion of the registration process on the part of the applicant or student and the University constitutes the formation of an Academic Contract binding on both parties. The terms of such contract include the express provisions, regulations, and academic and financial requirements contained in the University catalogue in effect at the time of registration and all the provisions, regulations, and requirements that can reasonably be implied from such express catalogue provisions. However, the University reserves the right to modify tuition and the amount or number of fees at the beginning of any academic years subsequent to the student's initial registration. Continuation as a student in good standing is a condition of compliance with the terms of the Academic Contract.

Full-time Course Load

A full-time graduate course load per semester consists of twelve semester hours minimum. This may be reduced in programs requiring extensive laboratory work upon agreement between the department chairman concerned and the Graduate Dean. A minimum of five semester hours is considered full-time during a summer session for all programs.

Fully employed students normally may not take more than seven semester hours of coursework in the Fall and Spring semesters or four semester hours during regular summer sessions in which they are fully employed.

For students not fully employed six semester hours each summer session is ordinarily the maximum student load permitted though a student who wishes may take seven hours in a summer session without special permission. Permission to take more than seven hours must be obtained from one of the Deans. Ordinarily it will *not* be granted.

Intersession Courses

A maximum of six semester hours of intersession credit hours may be used toward a graduate degree.

Miller Analogies Test

All applicants for admission to the Graduate School (other than those seeking the M.B.A. or M.H.A.) will be required to take the Miller Analogies Test at Xavier University, or to bring with them an official report of their scores. Scores will aid the faculty in the guidance of the student. M.B.A. and M.H.A. applicants will be required to take the Graduate Management Admission Test, or to have official test scores forwarded to the Graduate School.

Candidacy

Candidacy shall begin when, after the student's completion of six hours of graduate work, his application shall have been passed by the Graduate Council. Every student must make such application after completing six hours of work at Xavier. Those thought unfit will be advised to discontinue their course.

No more than five years may elapse between candidacy and completion of work for the degree.

Candidates for the master's degree who fail to complete all requirements within five years after admission to candidacy must be readmitted to candidacy by the Dean of the Graduate School before they can proceed. All work must be completed within seven years preceding the date upon which the degree is conferred.

A student who attends only summer sessions may be granted a graduate degree provided he is engaged in work related to his major subject.

Requirements

A minimum of thirty semester hours of graduate work is demanded for any Master's degree. However, more than 30 graduate hours may be required in some master's programs—e.g., Psychology, Hospital and Health Administration, and Montessori Education.

Specific requirements of the Masters' programs are presented later in this section. Though advisory services are provided to assist all students, the student alone is responsible for following the procedures and completing the steps required in his program. Requirements of the Graduate School, both procedural and substantive, may be waived only by written request of the student and/or department chairman concerned and must have the written approval of the Dean of the Graduate School.

Distribution of the course requirements must be approved by the chairman of the department of the major subject. At least one-half of the courses must be in that department. Candidates, however, for the Master of Arts and Master of Science degrees are advised to take all their work in their major department.

Character of the courses required is subject to the decision of the advisor. At least one-half of the hours of credit in the major subject and one-half the total number of hours toward the degree must be obtained in courses numbered 500 to 699, distinctly graduate courses.

Graduate School

Course Numbers

This is the system of numbering courses:

100 to 199 Lower division courses

*200 to 499 Upper division courses, open to graduate students for graduate credit except where specified as for undergraduate credit only

500 to 699 Courses for graduate credit only, open to graduate students only

Examinations

Candidates for graduate degrees shall be required to pass a final comprehensive examination, oral or written. This examination is oral in all programs requiring a thesis. It shall be the policy of the Graduate School to give these examinations three weeks prior to the end of the final semester. The chairman of the major department or one appointed by him shall be chairman of the examining committee and be responsible for giving the examination. A student must pass other examinations required by his major department.

The matter for the examination shall be based primarily on the student's courses and, if he is a candidate for the Master of Arts or Master of Science degree, on his thesis if a thesis is required in his program. It is understood, however, that a candidate's general knowledge of his field must be found satisfactory by his examiners.

A student who fails to pass the final comprehensive examination may appeal to the departmental chairman of the student's major to repeat the examination during a subsequent semester or session (only one examination is permitted during the summer). A second failure will result in termination of candidacy for a degree.

Thesis

The thesis required for the Master of Arts or Master of Science degree should embody the results of the applicant's research in some problem of his major subject, and must at each stage be under the direction of the chairman of the department or of one appointed by him.

Before beginning work on the thesis, the student should secure from the Graduate Office the form, Approval of Thesis Project, and also the instruction, Form and Mechanics for Writing Theses.

The student must submit three typed copies of his thesis after it has been formally approved, and pay the current fee for the binding of the library copy.

Application for Degree

All students planning to complete requirements for graduate degrees must complete application forms for the Graduate Office within the first month of their final semester of work—summers, during the first two weeks. When the degree is not obtained at the time specified on the application, the student must reapply for the new date.

It is recommended that an appointment be made with the student's department chairman at the time the student registers for his final semester of work to make certain all degree requirements will have been met by the end of the semester.

The Graduate School will automatically eliminate from the graduation list the name of any student whose final grade label contains either a grade of I (incomplete) or a missing grade unless there is evidence in the student's file that the course is not a requirement for the degree.

Non-Academic Requirements for the Degree

Candidates for a graduate degree must have discharged all financial obligations to the University.

*See page 213 for M.B.A. exceptions.

Graduate Grading System

The following symbols are used in the evaluation of course work: A—indicative not only of high achievement, but also of an unusual degree of intellectual ability and initiative; B—above average attainment; C—work of minimum or average attainment; S—satisfactory; D—inferior, no graduate credit; F—failure; U—unsatisfactory. To obtain credit graduate students must do work of B quality in courses numbered 200 to 499, and of C quality in courses numbered 500 or higher.

Student records and transcripts include all courses attempted including those in which a grade of W and I are awarded. Partial transcripts showing only coursework satisfactorily completed are not issued. Courses retaken and passed are not a basis for the removal of unacceptable grades originally received.

Repetition of Courses

Courses completed in a student's undergraduate program may not be repeated for graduate credit.

Probation

One unsatisfactory grade (below C in courses in the 500-699-series, below B in courses in the 200-499-series) places a graduate student on probation; two such grades makes him ineligible to reregister in a degree program.

Clearance of Incompletes

Grades of I (incomplete) must be cleared by a student within thirty days after the last day of the semester, unless the professor concerned specifies another date. After thirty days, the grade becomes a permanent I.

Class Attendance

Reasonable attendance at all class meetings of courses for which a student has registered, except tutorial and special study courses, is expected of students as a condition for the granting of academic credit. Lack of reasonable attendance as determined by the Graduate Council, Graduate Dean, and faculty members concerned is reason for denial of credit for a course and possible course failure.

Dismissal

The Graduate School reserves the right to dismiss from any graduate degree program any student whose quality of classwork is beneath the standard set by the Graduate Council of the University.

Such dismissal is prospective in nature and does not affect any terms of any past Academic Contract between the dismissed student and the University.

Advanced Standing from Other Universities

Six semester hours (or the equivalent) of graduate work completed at another accredited graduate school prior to initial admission to Xavier University may be transferred as *Advanced Standing* toward the M.A., M.S., M.B.A., M.H.A., or M.Ed. degree. The permission of the department chairman concerned and the approval of the Graduate Dean, assuming the credits are applicable to the student's degree objective, is necessary. Only grades of A or B are acceptable for *Advanced Standing*, and the course work must have been completed on the university's main campus. *Extension work and work done by correspondence are not acceptable for Advanced Standing.*

As a matter of policy, the Graduate School does not enter coursework completed at other universities on its permanent records unless the coursework applies toward a Xavier University advanced degree or pertains to certification recommended by the University.

Graduate School

Graduate Credit Transferable

Ordinarily no graduate credit completed at another university is transferable toward a graduate degree at Xavier once the student has begun his graduate program at Xavier.

Under certain extraordinary circumstances, advanced written approval for transfer of a course may be obtained from one of the Deans under such circumstances as:

1. When a student is permanently transferred to another city.
2. When taking an institute not available at Xavier.
3. When directed by one of the Deans for a specific purpose to take a course not available at Xavier.

Access to Graduate Students' Files and Release of Confidential Information

Education records are defined as those records, files, documents, and other materials which (1) contain information directly related to a student; and (2) are maintained by Xavier University.

The only information divulged openly without consent of a student by the Graduate Office is *Directory Information* which is defined as the student's name, address, telephone listing, date and place of birth, major field of study, dates of attendance, degrees and awards received, and previous educational agencies or institutions attended by the student. *Should a student not wish directory information released, it is the student's responsibility to so notify the Graduate Office.*

The Graduate School will release education records without consent to state officials where required by state law which was adopted prior to November 19, 1974, accrediting institutions, or to appropriate persons if in the judgment of one of the Graduate School deans the knowledge of such information is necessary to protect the health or safety of the student or other persons.

Students' files are made available to Xavier University officials including faculty members who have legitimate educational interests.

A student may examine his or her own file except for closed recommendations at any time upon twenty-four hours notice in writing to the Graduate Office. Closed recommendations are those recommendations given to the University on a confidential basis with reference to admission to graduate programs. Closed recommendations after December 31, 1974 where the student has signed a waiver of access are removed from a student's file before the student is permitted to review it. After review of the file, a record of the review is maintained within the file. A student may see his or her file only under supervision of one of the members of the staff of the Graduate Office.

If an individual outside the University complex wishes to review a student's folder, the Graduate School will require that the student give a written release to the Graduate Office for the individual to use or review the file. A written record of each such review will be maintained in the student's file along with a copy of the release. A student must give the Graduate Office a written release if it is desired that material from his or her file be sent outside the University.

Transcripts to be sent to anyone but the student himself must be requested in writing by letter or by the Graduate School's form for transcript requests.

Health Service

Full-time graduate students may choose to avail themselves of the University's Student Health Service at the student fee of \$15.00 per semester (fall and spring semesters only).

A student accident, sickness, and hospital insurance plan is available to full-time graduate students at a reasonable rate.

Housing Arrangements

Graduate students usually make their own arrangements for obtaining housing accommodations. Dormitory accommodations are available to a limited number of male and female graduate students each semester, and generally available to all single graduate students, male and female, during the summer sessions. Assistance in obtaining off-campus accommodations may be obtained by writing the Director of Student Housing, Office of the Dean of Students.

Campus Parking

A limited amount of parking is available to graduate students on campus. The Graduate School cannot guarantee a parking place as a condition of enrollment. Parking stickers are required on cars parked on campus, and a parking fee is charged during the fall and spring semesters.

Facilities for Study and Research

Computer Center: The University Computer Center operates an I.B.M. 360/30 type computer and Time Sharing services which are available to all faculty and students of the University for either classroom work or research. Members of the Computer Center also provide consultation and advisory assistance to those wishing to use these services in their work.

Library: The University has a rapidly growing collection of almost 200,000 volumes of books, periodicals and microform which were selected to serve as well as supplement the educational and research programs of the University. A special service for graduate students is the interlibrary loan program. Consortium agreements have opened several local college research libraries to Xavier University students. A fuller description of the library is on page 14.

Numerous departments of the University maintain departmental collections within their own buildings.

Graduate students wishing to keep books in the library may obtain a locker on an assigned basis.

Center for Human Development: The newly created Center for Human Development is engaged in research studies in the areas of guidance, reading, improvement, and Montessori education as well as other areas within the Departments of Psychology and of Education.

Veterans' Education

The Graduate School has been approved by the Veterans' Administration for educational training under all existing public laws. Requests for information should be addressed to The Director, Veterans' Education.

International Student Advisor

The Graduate School's International Student Advisor will assist international students with such problems as adjustment to University life, requirements of the Immigration Service, and social matters. The department chairman handles the student's academic counseling.

American Association of University Women

Xavier University is a member of the American Association of University Women which is open to all women who hold baccalaureate or higher degrees. Information about membership is available from the Graduate Office.

Scholarships: Graduate School

Xavier University annually offers scholarships in all departments in which graduate programs are offered. These departments are business administration, chemistry, economics, education, English, history-political science, mathematics, and psychology. A number of scholarships may be awarded in each department by the Graduate Scholarship Committee on recommendation of the chairman of the department concerned. Scholarships will be awarded only to those who have demonstrated real academic excellence in their undergraduate work. Scholarships cover tuition only and are valued at \$1,740-\$2,088 each.

Awards will be subject to the following requirements and procedures:

1. Scholarships will be awarded only to students prepared to do full-time graduate study (usually 12 semester hours minimum per regular semester, 6 hours during a summer session, or as determined by the department chairman in certain departments). Students may not work at any job on a full-time basis while on scholarship status.
2. Only students who meet fully departmental requirements as outlined in the University Catalogue should apply.
3. Applications should be made by letter addressed to the Dean of the Graduate School, Xavier University, Cincinnati, Ohio 45207. An application for admission to graduate study must also be submitted with the scholarship letter of application if this has not previously been done.
4. Transcripts of all previous college work should be forwarded to the Dean of the Graduate School (one from each college attended).
5. At least two letters from educators who can evaluate the academic qualifications of the applicant should be forwarded directly to the Dean of the Graduate School by the writers.

Graduate School

6. The Miller Analogies Test must be taken and the score provided to the Graduate Office. M.B.A. applicants must take the GMAT.
7. Applications, letters, and transcripts for scholarships must be in the Graduate Office not later than March 31 and applicants will be notified of the decision of the Graduate Scholarship Committee during the latter part of April of the academic year prior to the award.

Assistantships

The Walter A. and George McDonald Fund, established in honor of Mr. and Mrs. Andrew J. McDonald, provides income from a gift of \$50,000 for a graduate assistant in the Department of Chemistry.

Graduate assistantships are awarded annually in the Departments of Chemistry, History, Mathematics, and Psychology. Assistants are expected to devote about half-time to graduate studies and about half-time to service in the department.

Letters of application should be addressed to the chairman of the department concerned. A complete transcript of the applicant's undergraduate record and letters of recommendation from the chairman of the applicant's undergraduate department and one other professor should be sent directly to the chairman of the department at Xavier University.

All letters of application, recommendation, and transcripts should be in the hands of the chairman concerned not later than April 1, and successful applicants will be notified ordinarily in April by the chairman concerned.

Tuition and Fees*

Matriculation (payable once)	\$10.00
Tuition: Education, Arts, Science courses (per semester hour)	62.00
Tuition for Teachers (per semester hour)	55.00†
Tuition: Business Administration, Economics, Hospital and Health Administration courses (per semester hour)	69.00
Tuition: Business Administration, Columbus, Ohio	75.00
Business Administration, Lexington, Ky.	71.00
Miller Analogies Test (Taken in group sessions)	6.00
(Administered individually)	7.00
Graduate Management Admission Test	12.50
Graduation fee	30.00
Binding of thesis fee (Library copy)	4.50
Laboratory science fee (per course per semester for biology, chemistry, physics, Experimental Psychology, and Physiological Psychology)	20.00
Laboratory science deposit (per course per semester— partially refundable)	10.00
Laboratory materials deposit for physical science thesis (payable once—partially refundable)	75.00
Parking Fee	
Full time student	14.00
Part time student	8.00

†Full-time teachers and school personnel.

Students awarded their degree as of August or January must pay all outstanding financial obligations including the Graduation Fee before a transcript showing the degree will be released. Students receiving their degree as of May or June must pay all tuition and fees including the Graduation Fee by May 1. The Graduation Fee must be paid by every student who graduates, whether in person or *in absentia* (with permission).

* Expenses listed are for the 1976-77 academic year. Changes are made in these rates from time-to-time.

Contingent Fees*

Duplicate Transcript	\$ 1.00
Special Examination	15.00

Financial arrangements should be settled on the day of registration. Attendance at classes will not be permitted until financial arrangements have been made with the Bursar. A time payment plan is available. Consult the Bursar.

Service Fee

A 1% per month service fee will be charged to all accounts with an unpaid balance over 30 days old. The service fee is computed on the balance outstanding on the first day of the preceeding month, less any payments and credits received during that month. New charges incurred during the month are not subject to a service fee for that month. To avoid any additional service fee, the entire amount due may be paid at any time. No transcripts or other services will be issued until the account is cleared.

Withdrawal

Students who have officially registered for a class but decide to discontinue attendance, or students who wish to cancel registration before they have entered class *must withdraw officially by completing a withdrawal slip in the Graduate School office or by informing the office in writing of their intent.*

The same procedure applies when a student decides to drop one class to enter another.

The date on which the withdrawal slip or other written notice is received is used by the Graduate School to determine possible tuition charges or refunds. No refunds may be granted without official withdrawal through the Graduate School office. Ceasing to attend class or informing a professor of the intent to withdraw does not constitute official withdrawal.

If a student ceases to attend classes without officially withdrawing, the instructor may award a grade of I (Incomplete). Official withdrawal is indicated by a grade of W.

Refunds

The following is the official interpretation of University refund policy as applied to students of the Graduate School:

1. A refund of *tuition (fees are not refundable)* may be claimed in the case of withdrawal or dismissal in the first weeks of a semester according to the schedule detailed below.
2. Computation of refunds will be based upon the *official date of withdrawal*, not the last class attended. A claim for a tuition refund will not be honored by the University after one year has lapsed dating from 35 days after the beginning of each course in question.
3. The official date of withdrawal is the date upon which the student notifies the Graduate Office of his withdrawal in writing.
4. Withdrawal of a student who has been permitted to make only a partial payment at registration is handled precisely as it would have been had he completed payment; *thus he may owe a balance even though he has withdrawn.*
5. Students who do not withdraw officially through the Graduate School office when they stop attending classes *are liable for the total tuition and fee charges for the semester or session.* Those who register, decide not to start to class, but do not withdraw officially through the Graduate School office *are also liable for the total tuition and fee charges for the semester or session.*
6. A student is subject to the schedule of refunds even though he does not complete the course or courses for which he is registered or even though he does not attend any of the classes in those courses. Passing or failing the course does not alter the financial obligation.

* Expenses listed are for the 1976-77 academic year. Changes are made in these rates from time-to-time.

Schedule of Refunds, Academic Year

	<i>Refund</i>
Before the first class meeting	100%
First day of class and 6 days thereafter	90%
7-13 days after first class meeting	70%
14-20 days after first class meeting	50%
21-27 days after class meeting	30%
28-34 days after first class meeting	10%
After 34 days	None

Refunds, Summer Sessions and Intersessions

For tuition refund schedules for summer sessions and intersessions, consult the University Summer Bulletin.

Payment of Parking Tickets

Parking tickets for violations of "No Parking" zones, reserved lots, or for disregarding the instructions of a parking attendant or security guard, will be issued. The first parking ticket for parking without a valid parking permit will be issued with a fine of \$10.00 attached, subsequent violations with a \$5.00 fine attached.

All fines must be paid at the Bursar's Office. Parking ticket fines not paid within five days after their issuance, or not appealed within five days after their issuance, will be charged to the student's account maintained in the Bursar's Office. University policies with respect to the satisfaction of all payments due the University will apply thereafter.

THE MASTER OF ARTS THE MASTER OF SCIENCE

The final goal of the M.A. and the M.S. programs is that the student may come to possess a specialized knowledge of his chosen field and an intelligent appreciation of its place in the wide panorama of human thought.

The degree of M.A. or M.S. is awarded to the candidate who has demonstrated a capacity for further study or teaching by satisfactorily completing a program of graduate work designed to give him these characteristics:

1. An understanding of the relations of his subject to allied subjects and to the synthesis of Christian culture, which is the basis of Western civilization.
2. A comprehensive knowledge of the broad field of learning in which the degree is conferred.
3. A specialized knowledge of a portion of that field.
4. Proven ability to do research in the special field of study.

General Requirements

In accordance with the above objectives the *general* requirements for the degrees are respectively:

1. Completion of such undergraduate prerequisites as will give assurance of the candidate's general educational background. Satisfactory completion of the Miller Analogies Test.
2. A reading knowledge of a foreign language or approved substitute. This requirement does not apply to all degrees. See specific degree program for information.
3. Completion of a program consisting of at least twenty-four hours of integrated classroom study within the student's chosen field, an acceptable thesis of a research character for which six graduate credit hours are registered for and awarded; or at least thirty hours of integrated classroom study, a substantial research paper specifically accepted by the department to satisfy this requirement.
4. Completion of a final oral comprehensive examination, if a thesis is written, or a written examination if a thesis is not included in the program.

Specific Departmental Requirements

Within the general requirements, departments administering programs may add specific regulations. Candidates for degrees are urged to maintain close relationship with the chairmen of their particular departments.

THE MASTER OF ARTS—ECONOMICS

Normally the applicant will be expected to have had the following: six hours in Principles of Economics, three hours in Calculus, three hours in an intermediate microeconomics theory course, and three hours in an intermediate macroeconomics theory course. If the applicant has not had these undergraduate courses, and yet gives evidence that he is qualified to pursue graduate study in economics, the Department of Economics at its discretion may allow the applicant to take these or equivalent courses at Xavier University or at some other accredited institution. In exceptional instances some of these prerequisites may be waived.

Applicants may be required to take the Graduate Record Examination before being admitted to graduate studies in the Department of Economics. If the applicant has taken this examination previous to his application to the Graduate School of Xavier University, he must provide the Department of Economics with an official report of his score.

Thirty semester hours of graduate work are required of the applicant. Twenty-four of these hours are devoted to fulfilling course requirements, and the remaining six hours to thesis requirements. Students may transfer up to six graduate credits from other institutions with approval of the department. With approval, students may take one or two upper-division undergraduate courses for graduate credit, provided they earn at least a grade of B and perform whatever added course requirements are assigned by the instructor. Certain graduate courses from other disciplines may be taken with the approval of the department.

Courses in economics and in other disciplines provide the following concentrations: Financial Economics, Industrial Economics, Quantitative Methods, Labor Economics, Public Economics, and Regional-International Economics.

THE MASTER OF ARTS—ENGLISH

The candidate for the Master of Arts degree in English must give substantial proof of his proficiency in literary criticism and textual analysis. He must show an ability to do research and a thorough factual knowledge of the history of English and American literature. The Department of English expects that all candidates for the Master of Arts degree in English will spend considerable time on individual study, literary and textual analysis, and research in addition to the actual course work. The knowledge of an undergraduate English major is presumed to be had by every candidate for the Master of Arts in English. In addition, the ability to express oneself with mechanical accuracy and precision of idiom is demanded.

All candidates are urged to include a course in the history of the English language. Courses selected in the 200 to 499 level ought to complement their undergraduate work. Courses and seminars selected on the 500 to 699 level should build upon the undergraduate work that they have completed in English. Since backgrounds on the undergraduate level may vary, each applicant should work out a program with the Chairman of the Department before beginning his graduate work.

Students may choose one of two programs. In one program the student completes thirty hours of course work. During one of the 500 or 600 courses he must complete a seminar research paper, which is to be typewritten according to proper form and submitted to the Chairman, Department of English, after it has been graded and approved by the professor in the course for which it was written. At least half of the courses taken must be at the 500 or 600 level.

In the second program, the student completes twenty-four hours of course work, at least half of which must be at the 500 or 600 level, and successfully completes a thesis. The thesis, for which six hours of credit are awarded, must be written under the guidance of a member of the English Department faculty and must demonstrate the student's ability to do scholarly research of high quality. This thesis must be read and approved by the director of the thesis and two other readers from the English Department faculty.

Candidates must score satisfactorily on the Miller Analogies Test, which is to be taken during the first semester of graduate work.

Applicants for the M.A. in English must also pass a written comprehensive examination in English and American literature, which ordinarily should not be taken until all class work has been completed. This examination, administered in the spring and in mid-summer, is taken in two sessions. A reading list for the comprehensive examination is available in the Chairman's office.

Graduate School

Admission

1. A 3.0 average in all English courses on the undergraduate level.
2. A minimum of thirty undergraduate credit hours in English. In case the applicant does not meet these requirements, he may be admitted as a special student until he makes up the necessary hours.
3. Recommendations from members of the Department of English in the college or university where he did his undergraduate work. One of these recommendations should come from the chairman of the Department of English where the undergraduate work was completed.

Any student applying for admission to the program leading to the Master of Arts in English must complete the following procedures before registration:

1. Submit to the Graduate School the completed application form for admission to the Graduate School and the completed application form for admission to the graduate program in English.
2. Arrange for transcript of previous college work to be sent to the Graduate School.
3. Submit to the Graduate School and to the Chairman, Department of English, his score on the Graduate Record Examination in Literature.
4. Arrange with the Chairman, Department of English, for a personal interview.

Part-time students may be admitted for their first semester of work prior to their personal interview. All admission procedures, however, must have been completed before the second registration.

THE MASTER OF ARTS—HISTORY

The Master's program in history at Xavier is designed to meet the needs of two types of students. First, the research M.A., with its emphasis on historiography and technique, gives the student who plans to work toward the Ph.D. the background that he should have. The second type, the non-research M.A., is planned for the secondary or the elementary school teacher who desires to earn the Master of Arts degree. It emphasizes content courses and factual material. The non-research program will ordinarily not prevent the student from further studies, should he decide at a later date to do so.

Requirements:

1. All students must complete half their work in courses numbered 500 to 699 including Hs 501: Historical Methodology.
2. Those who elect the degree with thesis must present twenty-four hours of class work. Six additional hours will be granted for the thesis when it is accepted.
3. Those who elect the degree without thesis must complete two to five courses in one of the following areas of concentration: The United States, Europe, Ancient (Classical), Latin America, or Asia. They must also write an extended research paper, on a subject having Departmental approval, in the area of concentration, and pass an extended written examination in that area.
4. Further instructions are available from the department chairman.

THE MASTER OF ARTS—PHILOSOPHY

The Master's program aims at a high degree of the habit of philosophy, a penetrating grasp of systematic philosophy, an ability to formulate and analyze a problem and find a solution, a knowledge of the major philosophical positions propounded in the West, and the capacity to evaluate critically the thought of other philosophers.

Xavier offers this degree in a consortium arrangement with The Athenium of Ohio's accredited M.A. program in philosophy. Xavier graduate offerings are limited to summer sessions. During the academic year, certain suitable undergraduate courses may be taken and applied to the graduate program; or course offerings may be elected at The Athenium of Ohio (with previous program approval by Xavier's Chairman, Department of Philosophy) and transferred to the Xavier degree program.

The minimum requirements for the degree of Master of Arts in philosophy are:

1. Completion of twenty-four hours of work at the 500-699 level; or a minimum of twelve hours of such courses and twelve hours at the 300-499 level (or, by exception, at the 200-299 level). These must include surveys in three periods of the history of philosophy (PI 250, 260, 270) if these have not been previously had.
2. A reading knowledge of French or German with the possibility of an approved substitute if thesis work demands it.
3. A Master's thesis, PI 699, six hours.
4. A comprehensive examination on course work and the thesis.

THE MASTER OF ARTS—PSYCHOLOGY

To insure comprehensiveness, all candidates must include in their program each of the following courses designed in their whole to provide integrated coverage of the graduate field of psychology. For description of courses see listings under the Department of Psychology.

263, **THEORIES OF PERSONALITY I AND II.** Four credit hours, two each semester.

264

501 **CONTEMPORARY THEORY IN PSYCHOLOGY.** Three credit hours.

502 **PHILOSOPHICAL ISSUES IN PSYCHOLOGY.** Three credit hours.

505 **PROFESSIONAL PROBLEMS IN PSYCHOLOGY.** One credit hour.

511 **ADVANCED STATISTICS.** Three credit hours.

521 **ADVANCED EXPERIMENTAL PSYCHOLOGY.** Three credit hours.

To insure the attainment of his particular objective in graduate study in psychology, the student must include a concentration in one of the following *areas of concentration*:

General-Experimental Psychology

A minimum of thirteen credit hours selected from the following courses: Biological Basis of Animal Behavior, Learning and Motivation, Design of Experiments, Research Problems in Psychology, Communication, Social Psychology, Differential Psychology, Psychological and Achievement Tests.

Clinical Psychology

A minimum of thirteen credit hours selected from the following courses: Learning and Motivation, Psychopathology, Dynamic Psychology, Individual Tests of Intelligence, Counseling Principles and Techniques, Projective Techniques I and II, Research Problems in Psychology, Communication, Counseling and Psychotherapy, Diagnosis and Correction of Reading Disabilities. Practicum in Clinical Psychology is required.

Counseling Psychology

A minimum of thirteen credit hours selected from the following courses: Learning and Motivation, Developmental Psychology, Dynamic Psychology, Vocational and Educational Guidance, Psychological and Achievement Tests, Counseling Principles and Techniques, Individual Tests of Intelligence, Communication, Diagnosis and Correction of Reading Disabilities. Practicum in Counseling is required.

Industrial Psychology

A minimum of thirteen credit hours selected from the following courses: Occupational Information, Marketing Research, Personnel Selection and Evaluation Techniques, Communication, Design of Experiments, Dynamic Psychology, Learning and Motivation. Practicum in Industrial Psychology is required.

Graduate School

School Psychology

A minimum of thirteen credit hours selected from the following courses: Psychological and Achievement Tests, Individual Tests of Intelligence, Learning and Motivation, Counseling and Psychotherapy, Projective Techniques, Developmental Psychology, and The Role and Function of the School Psychologist. All are required, together with a nine-month full-time approved internship, for Ohio School Psychologist certification. Ps 507 replaces the requirement of Ps 505 for those whose concentration is in school psychology.

Requirements

Depending on the student's concentration, a minimum of thirty-six graduate hours is required for the Master of Arts in psychology. These shall ordinarily be distributed as follows:

1. Seventeen credit hours in the core courses.
2. Thirteen hours in the area of concentration.
3. Six hours awarded for Master's thesis.

The Master of Arts in psychology will be awarded only to candidates *who have demonstrated a reading knowledge of a foreign language or demonstrated competence in the computer language by passing the University course or passing a special examination* and, in a final oral examination, have both successfully defended their thesis and demonstrated their knowledge of the general field of psychology.

Admission

1. Bachelor's degree from an accredited college or university.
2. A 2.8 overall undergraduate average and a 3.0 average in all psychology courses.
3. A minimum of eighteen undergraduate credit hours in psychology which should include experimental psychology (with laboratory), introductory statistics, psychology of personality, and/or abnormal psychology. Courses in biological science and college mathematics are recommended as a preparation for graduate studies. In case the applicant does not meet these requirements, he may be admitted as a special student until he makes up the necessary hours.
4. Satisfactory performance in the Miller Analogies Test.
5. Candidates for the Master of Arts in psychology must have personality and character traits which are in agreement with ethical standards of psychology.

Students must complete the following procedures in advance of registration:

1. Submit to the Graduate Office the completed application form for admission to the Graduate School and special application form for admission to the department of psychology.
2. Submit transcript of previous college work.
3. Submit to the Graduate Office report of M.A.T. score or arrange with the Department of Psychology for examination.
4. Arrange with the Psychology Department for a personal interview. (The interviewing of students from considerable distance may be delegated to a local psychologist by special arrangement.)
5. The Dean of the Graduate School will notify the applicant of official acceptance.

Part-time students may be admitted as special students for their first semester of work prior to M.A.T. results and personal interview. All admission procedures, however, must have been completed prior to their second registration.

THE MASTER OF SCIENCE—CHEMISTRY

The M.S. in chemistry is designed to prepare students for continuing their education to the doctoral level in chemistry, for employment in the chemical industry, or for teaching positions at the secondary and junior college level.

For admission to the program, the applicant should have had undergraduate training in chemistry substantially equivalent to that of a Xavier University B.S. Chemistry major.

Undergraduate prerequisites also include mathematics through the calculus and a full year of physics. A student seriously deficient in these prerequisites will be required to make up the deficiency prior to, or concurrently with, his graduate chemistry studies.

All candidates for the degree of Master of Science must select courses from the four major areas of chemistry according to the following scheme:

Organic Chemistry

One course to be selected from Ch 550, Organic Stereochemistry, and Ch 590, Organic Reaction Mechanisms.

Physical Chemistry

Two courses to be selected from Ch 525, Thermodynamics; Ch 530, Chemical Kinetics; and Ch 535, The Chemical Bond.

Inorganic Chemistry

One course to be selected from Ch 610, Advanced Inorganic Chemistry I, and Ch 612, Advanced Inorganic Chemistry II.

Analytical Chemistry

Two courses to be selected, one from Ch 660, Chemical Separations, and Ch 670, Chemical Measurements; the other from Ch 680, Instrumental Methods, and Ch 685, Synthesis and Characterization of Chemical Compounds.

These courses, all of which carry two hours of credit, generally are offered on a two year cycle. However, the program can be entered in any semester (excluding summer). The sequence of courses is listed in a brochure which can be obtained from the Chairman of the Department of Chemistry. For descriptions of courses, see listings under the Department of Chemistry.

In addition to the twelve semester hours of chemistry obtained by selection of six of the courses indicated above, the student must earn another twelve hours of classroom credit. The courses which may be taken include: graduate courses in chemistry other than the ones selected from the above list; certain upper division undergraduate courses in chemistry; graduate mathematics and physics courses; and certain upper division mathematics and physics courses. No more than two undergraduate chemistry courses may be counted towards the degree requirements and the permission of the Chairman of the Chemistry Department must be obtained in the case of mathematics and physics courses.

In his selection of courses, the student is guided by the department chairman, or, after selection of a research project, by his research director. Among the courses, other than those listed above, which are offered regularly are the following:

- 320 **INTRODUCTION TO RADIOCHEMISTRY.** Two or three credit hours.
- 340 **TOPICS IN ORGANIC CHEMISTRY.** Two credit hours.
- 370 **BIOCHEMISTRY.** Three credit hours.
- 535 **INTRODUCTION TO VIBRATIONAL SPECTROSCOPY.** Two credit hours.
- 555 **HETEROCYCLIC ORGANIC CHEMISTRY.** Two credit hours.
- 570 **NEWER METHODS OF SYNTHETIC ORGANIC CHEMISTRY.** Two credit hours.
- 595 **ORGANOMETALLIC CHEMISTRY.** Two credit hours.
- 640 **MEDICINAL CHEMISTRY.** Two credit hours.

Graduate School

690 **SPECIAL TOPICS.** Two credit hours each semester.

692 **SPECIAL STUDY.** One credit hour each semester.

A minimum of thirty semester hours of credit is required for the degree of Master of Science in Chemistry. These shall ordinarily be distributed as follows:

1. Twelve credit hours selected from the specified courses in the four areas of organic, physical, inorganic, and analytical chemistry.
2. Twelve additional credit hours selected from graduate and upper division undergraduate chemistry courses and from appropriate mathematics and physics course offerings (see above).
3. Six hours of credit obtained through satisfactory completion of a Master's research problem (Ch 699), submission of a written thesis, and the passing of an oral examination on the contents of the thesis. (A student who can present credentials attesting to significant research experience previously obtained, upon approval by the Chairman of the Department, may be permitted to substitute six hours of additional course work for the research requirement.)
4. The satisfactory completion of a written examination in a scientific modern language (chemical German, French, or Russian). Successful completion of an examination (or a University course) in computer language (FORTRAN) may be substituted for the reading proficiency examination in a scientific modern language.
5. For full-time students, enrollment in Ch 500, Graduate Chemistry Seminar, each semester of attendance. Part-time students are encouraged to attend seminar whenever their schedules permit.

All degree students must present at the time of registration a schedule of courses to be taken which has been approved by the Chairman of the Department of Chemistry or by the student's research director.

Non-degree students are encouraged to consult with the Chairman prior to registration to determine if they possess the proper prerequisites for the course(s) of interest.

Part-time students, especially those who have not chosen a research topic, are urged to consult with the Chairman to learn how curriculum modifications have affected their program of studies.

THE MASTER OF SCIENCE—MATHEMATICS

The program of studies leading to a Master of Science Degree in mathematics is designed to allow the student to select courses in theoretical mathematics or in applied mathematics including the fields of Operations Research and Statistics.

Courses are offered primarily in the late afternoon and evenings to accommodate part-time as well as full-time students.

Prerequisites and Required Courses

Before being formally accepted into the program, the student must have completed at least 12 semester hours past the elementary calculus, including courses in the multivariate calculus. Before being granted the degree, he must evidence knowledge in the following areas: Linear Algebra, Point Set Topology, Introductory Real and Complex Analysis.

Requirements

As soon as he is admitted to Graduate School, the student should choose an advisor, and submit his name to the Chairman of the Department. Upon completing six graduate credit hours at Xavier he must apply for candidacy. The student must complete thirty hours, at least half of which must be at the 500 level or higher. He must complete a substantial research paper acceptable to the department, and pass a final comprehensive examination.

Alternately a student may complete twenty-four hours, half at the 500 level or higher and submit an acceptable thesis of a research character for which six hours are awarded. He must demonstrate a reading knowledge of a foreign language or approved substitute and pass a final comprehensive examination.

Two Year Cycles of Courses 1976-77

<i>Fall</i>	<i>Spring</i>
Mt 201—Mathematical Statistics I	Mt 211—Mathematical Statistics II
Mt 260—Elementary Topology	Mt 270—Intermediate Analysis
Mt 5 —Graduate Elective	Mt 5 —Graduate Elective
Mt 602—Operations Research I	Mt 612—Operations Research II

1977-78

<i>Fall</i>	<i>Spring</i>
Mt 201—Mathematical Statistics I	Mt 211—Mathematical Statistics II
Mt 280—Complex Analysis	Mt 342—Linear Programming
Mt 303—Numerical Analysis I	Mt 5 —Graduate Elective
Mt 5 —Graduate Elective	Mt 613—Numerical Analysis II

Other courses in applied and theoretical mathematics together with seminars, institutes and short term courses will be offered according to demand.

Recent electives have included:

Group Theory	Advanced Ordinary Differential Equations
Numerical Linear Algebra	Vector and Tensor Analysis
Measure Theory and Integration	Design of Experiments
Stochastic Processes	Applied Regression Analysis
Advanced Optimization Techniques	Statistical Decision Theory
Abstract Algebra	Calculus of Variables
Real Analysis	Advanced Statistics

THE MASTER OF SCIENCE—CORRECTIONS

The Master of Science in corrections is a professional degree designed to meet the needs of workers, both institutional and non-institutional, already in the field of corrections, as well as for those who are preparing to enter careers in corrections.

Accordingly, this degree will be awarded to candidates who have demonstrated a capacity for understanding the dynamics of criminal and delinquent behavior, the nature and scope of the crime and delinquency complex in contemporary society, and the current philosophy, methodology, and techniques of corrections, by satisfactorily completing a program of graduate work designed to impart this knowledge, establish desirable attitudes, and sharpen the necessary skills.

Students electing graduate work in corrections generally must present evidence of an undergraduate degree from an accredited college or university acceptable to the Admissions Committee.

A minimum of thirty hours is required for the degree of Master of Science in corrections. These will be distributed as follows:

- 501 **FOUNDATIONS OF CORRECTIONS.** Three credit hours.
 503 **INSTITUTIONAL CORRECTIONS.** Three credit hours.
 505 **NON-INSTITUTIONAL CORRECTIONS.** Three credit hours.
 266 **CRIME AND PERSONALITY.** Three credit hours. **OR**
 520 **SOCIOLOGY OF CRIME AND DELINQUENCY.** Three credit hours.

Graduate School

The following five courses are also required:

- 276 **PSYCHOLOGY OF DELINQUENCY.** Two credit hours.
- 510 **LEGAL ASPECTS OF CORRECTIONS.** Two credit hours.
- 540 **CORRECTIONAL ADMINISTRATION.** Two credit hours.
- 580 **INDIVIDUAL RESEARCH AND DIRECTED STUDY IN CORRECTIONS.** (Non-classroom.) Two credit hours.
- 590 **INTERNSHIP IN CORRECTIONS.** (Non-classroom.) Two credit hours.

The following courses are available as electives to fill out the final eight hours of the M.S. in corrections program:

- Cr 533 **INTERVIEWING AND COUNSELING IN CORRECTIONS.** Two credit hours.
- Cr 541 **DIVERSION AND THE CRIMINAL JUSTICE SYSTEM.** Two credit hours.
- Cr 542 **ROLE OF CORRECTIONAL ARCHITECTURE IN CONTEMPORARY CRIMINAL JUSTICE PLANNING.** Two semester hours.
- Cr 550 **ALCOHOL AND CRIMINALITY.** Two credit hours.
- Ed 272 **GUIDING THE EMOTIONALLY DISTURBED CHILD.** Two credit hours.
- Ed 273 **EDUCATING THE DISTURBED CHILD.** Two credit hours.
- Ed 507 **EDUCATIONAL RESEARCH.** Three credit hours.
- Ed 510 **STATISTICAL TECHNIQUES.** Three credit hours.
- Ed 579 **PSYCHOLOGICAL AND ACHIEVEMENT TESTS.** Two credit hours.
- Ps 232 **CHILD PSYCHOLOGY.** Two credit hours.
- Ps 233 **ADOLESCENT PSYCHOLOGY.** Two credit hours.
- Ps 235 **DIFFERENTIAL PSYCHOLOGY.** Two credit hours.
- Ps 261 **SOCIAL PSYCHOLOGY.** Two credit hours.
- Ps 262 **SOCIAL DYNAMICS OF COMMUNICATION.** Three credit hours.
- Ps 263 **THEORIES OF PERSONALITY I.** Two credit hours.
- Ps 264 **THEORIES OF PERSONALITY II.** Two credit hours.
- Ps 275 **DYNAMIC PSYCHOLOGY.** Two credit hours.
- Ps 277 **ABNORMAL PSYCHOLOGY.** Two credit hours.
- Ps 533 **COUNSELING PRINCIPLES AND TECHNIQUES.** Two credit hours.
- Ps 647 **CLINICAL STUDIES: THE EMOTIONALLY DISTURBED CHILD.** Two credit hours.
- So 220 **INTRODUCTION TO SOCIAL CASE WORK.** Two credit hours.

The Master of Science in corrections will be awarded only to candidates who pass an extensive written examination on the general field of corrections covered by the required courses.

Internship

The Graduate School will arrange for students completing the M.S. in corrections to take specialized training in facilities located near their homes. A minimum of three hundred hours of on-the-job training is necessary to fulfill degree requirements.

The student must arrange for an internship through the Director of the corrections program.

An Internship Fee of \$125.00 to cover expenses in the administration of the internship is charged each student registering for Cr 590: Internship in Corrections.

THE MASTER OF EDUCATION

The Master of Education, a professional degree, is designed to meet the needs of teachers and school administrators actually engaged in school work. It has one basic aim: stimulating better teaching wherever the influence of the successful candidate may extend, whether it be in an individual classroom, an entire school or a whole school system.

Accordingly, this degree is awarded to the candidate who has demonstrated a capacity for improving the quality of teaching within the particular sphere of his influence by satisfactorily completing a program of graduate work designed to give him these characteristics:

1. Broad knowledge of the principles and techniques of education in modern society.
2. Specific knowledge of one major area of the field of education.
3. Essential understandings and skills necessary for intelligent consumption of educational research.

Requirements for the degree of Master of Education are specified with certain basic considerations in mind:

1. Sufficient flexibility is necessary to care adequately for the particular needs of the in-service educator who enrolls for the degree.
2. Graduate programs must be so planned as to insure the student's attaining a comprehensive knowledge of professional theory and practice in the principal areas of the field; a detailed knowledge of at least one major area of specialization—for high school teachers this area may be an appropriate academic field; and capability in the skills and knowledge necessary for intelligent comprehension and use of educational research.

To insure comprehensiveness in their programs for the degree of Master of Education, all candidates must include in their programs each of four general survey courses designed, in their whole, to provide integrated coverage of the broad field of education. These courses are:

501 **PHILOSOPHY OF EDUCATION.** Three credit hours.

503 **ADVANCED EDUCATIONAL PSYCHOLOGY.** Three credit hours.

505 **EDUCATIONAL ADMINISTRATION.** Three credit hours.

507 **EDUCATIONAL RESEARCH.** Three (two/one) credit hours.

To insure their mastery of a particular area of education, candidates must include in their programs a concentration of at least twelve credit hours in one of the following *areas of concentration*:

Administration, guidance, elementary education, secondary education, physical education, the emotionally disturbed child, Montessori education, reading specialist, instructional service specialist, educational media specialist, school social work, biology, business, chemistry, classics, communication arts, English, history-political science, mathematics, French, German, Spanish, philosophy, physics, theology, music, and humanities.

Those interested in the M. Ed. program may obtain brochures covering specifics of concentrations from the Graduate School office. Separate folders are available for concentrations in Montessori education, reading specialist, and school social work.

A minimum of thirty hours is required for the degree of Master of Education. These shall be distributed as follows:

1. General surveys in education, twelve credit hours.
- *2. Concentration, twelve credit hours.
3. Pertinent electives, six credit hours.

The degree will be awarded only to candidates who have passed an extensive written examination covering their particular field of concentration (administration, guidance, etc.) or over the four general survey courses in education if they have concentrated in a subject matter field or in elementary or secondary education.

Should the student fail the comprehensive examination he may repeat it only once.

* Certain concentrations may require more than 12 semester hours, particularly where state certification requirements are involved.

THE MASTER OF BUSINESS ADMINISTRATION

The degree of Master of Business Administration is a professional degree designed to meet the needs of persons in industry for training which will ready them for increasing executive responsibilities.

Accordingly this degree is awarded to the candidate who has demonstrated capacity for leadership in the field of business by satisfactorily completing a graduate program designed to give him the following characteristics:

1. Broad knowledge of the principles and techniques of business administration.
2. Specific knowledge of one of the major phases of business administration.
3. Essential understandings and skills necessary for intelligent consumption of research in the fields of business.

Students may be admitted to graduate work in business administration on any of these bases:

1. Undergraduate degree in business administration.
2. Undergraduate non-business degree, plus at least two full years of business experience, and eighteen hours of course work in business subjects including accounting, economics, marketing, statistics, finance, and quantitative analysis. Undergraduate deficiencies may be removed by completing BA 501: Basic Economics (four credit hours); BA 502: Introduction to Quantitative Methods (two credit hours); BA 503: Basic Accounting (four credit hours); BA 505: Basic Marketing (two credit hours); BA 506: Basic Statistics (two credit hours); BA 507: Basic Finance (two credit hours) or their equivalents, as appropriate. These are special courses open only to graduate students with undergraduate deficiencies.
3. Undergraduate non-business degree with at least thirty hours of business and economics subjects. Deficiencies may be removed by an extended graduate program including BA 501, 502, 503, 505, 506, and 507 (sixteen graduate hours as shown) and two additional hours as advised in individual cases.

All M.B.A. degree applicants must take the Graduate Management Admission Test. Applicants should arrange to take the test prior to admission. Test application forms may be obtained from Xavier's Graduate School Office or by writing directly to the Educational Testing Service, Box 966, Princeton, New Jersey 08540.

To insure comprehensiveness in their programs for the degree of Master of Business Administration, all candidates must include in their programs each of five general survey courses designed in their whole to provide integrated coverage of the broad business field. These courses are:

- 511 **ECONOMICS OF BUSINESS.** Three credit hours.
512 **QUANTITATIVE BUSINESS METHODS.** Three credit hours.
513 **MANAGERIAL ACCOUNTING.** Three credit hours.
514 **ADMINISTRATIVE OPERATIONS.** Three credit hours.
515 **MARKETING STRATEGY.** Three credit hours.

To insure their mastery of a particular area of business administration, candidates will ordinarily include in their programs a concentration of at least nine credit hours in one of the following *areas of concentration*:

Accounting
Finance
Personnel
Management
Marketing

Advanced Business Economics
Quantitative Methods
Industrial Management
Data Processing
Multinational Business

As a climax to his program, the candidate must include the conference-type seminar, BA 699. This will assist him in marshalling his knowledge of the business field in the solution of specific problems. A student must have at least eighteen graduate hours before taking this course.

A minimum of thirty graduate hours is required for the M.B.A. These shall ordinarily be distributed as follows:

1. Fifteen hours in the five core areas.
2. At least nine hours in a functional area of concentration.
3. Three hours in Seminar: Business Administration Problems.
4. Business electives.

The degree will be awarded only to candidates who have passed a written comprehensive examination on the general field as covered by the five core courses and the individual's area of concentration.

No 200-400 level courses may be used in the Master of Business Administration program toward the degree without special approval from the Dean of the School of Business Administration.

MASTER OF HOSPITAL AND HEALTH ADMINISTRATION (M.H.A.) Hospital Administration

The degree of Master of Hospital Administration is awarded the candidate who has followed a program of studies designed to give him a background in three areas; first, in the principles and concepts of general organization and management theory; second, in the principles and concepts particularly applicable to the management of hospitals; and third, in the social, political and economic determinants of the health care system.

To accomplish the above objectives, the candidate must satisfactorily complete the following:

Academic Year (42 cr. hrs. required)

BA 514	Administrative Operations	3 cr. hrs.
HA 630	Hospital Organization Theory	3 cr. hrs.
HA 631	Quantitative Techniques for Health Administrators	3 cr. hrs.
HA 632	Hospital Financial Management I	3 cr. hrs.
HA 633	Hospital Financial Management II	3 cr. hrs.
HA 634	Hospital Legal Aspects	3 cr. hrs.
HA 635	Current Trends in Medicine	3 cr. hrs.
HA 636	Hospital Human Resources Management	3 cr. hrs.
HA 637	Seminar: Health Services Administration	3 cr. hrs.
HA 638	Medical Care Organization I	3 cr. hrs.
HA 639	Medical Care Organization II	3 cr. hrs.
HA 640	Psychology of Executive Behavior	3 cr. hrs.
HA 641	Research in Hospital Administration	3 cr. hrs.
HA 642	Health Economics	3 cr. hrs.

Administrative Residency Year (12 cr. hrs. required)

HA 648	Master's Thesis	3 cr. hrs.
HA 649	Administrative Residency (12 months)	9 cr. hrs.

Graduate School

The degree of Master of Hospital and Health Administration will be awarded only to candidates who have passed a written comprehensive examination on seven areas of study.

A minimum of forty-two graduate hours plus the completion of the administrative residency and master's thesis are required for the degree of Master of Hospital and Health Administration.

Students may be considered for admission to graduate degree work in Hospital Administration on the following two bases:

1. Have received undergraduate degree.
2. Have completed six (6) credit hours in accounting, six (6) credit hours in economics, and three (3) credit hours in statistics.

Note: Undergraduate deficiencies may be removed by completing:

BA 501 **BASIC ECONOMICS.** Four credit hours.

BA 503 **BASIC ACCOUNTING.** Four credit hours.

BA 506 **BASIC STATISTICS.** Two credit hours.

The forty-two graduate credit hours must be taken exclusive of the prerequisite work in basic accounting, basic economics, and basic statistics.

Before receiving the degree of Master of Hospital and Health Administration, all students must complete a calendar year of administrative residency in a hospital, unless specifically exempted in writing by the Director of the Program. Exception will be made only when the student evidences equivalent experience prior to enrolling in the degree program. A student will ordinarily receive compensation from the hospital in which he performs his residency. The student will register for nine credit hours and pay the normal tuition charge.

The candidate must write a Master's Thesis and have it accepted by the faculty of the Graduate Program in Hospital and Health Administration as partial fulfillment of the requirement of the degree.

There is also a Health Administrative Forum requirement which includes an outside reading program, field trips, and a seminar discussion series of current hospital and health care issues and problems.

MASTER OF HOSPITAL AND HEALTH ADMINISTRATION (M.H.A.) Management Engineering

The objectives of this program are to prepare quantitative health care executives within the health care system in carrying out their responsibilities for analyzing demand for health care, allocating scarce resources, improving organizational performance, and evaluating the impact of services rendered on the health status of the community.

To accomplish the above objectives, the candidate must satisfactorily complete the following:

1st Academic Year (31 credit hours required)

BA 514	Administrative Operations	3 cr. hrs.
BA 600	Executive Practices	3 cr. hrs.
HA 610	Health Systems Analysis	4 cr. hrs.
HA 630	Hospital Organization Theory	3 cr. hrs.
HA 632	Hospital Financial Management I	3 cr. hrs.
HA 633	Hospital Financial Management II	3 cr. hrs.
HA 635	Current Trends in Medicine	3 cr. hrs.
HA 638	Medical Care Organization I	3 cr. hrs.
HA 639	Medical Care Organization II	3 cr. hrs.
	Elective	3 cr. hrs.

Summer Field Placement (3 months)

HA 648	Administrative Residency	3 cr. hrs.
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2nd Academic Year (24 credit hours required)

HA 611	Health Information Systems I	3 cr. hrs.
HA 612	Health Information Systems II	3 cr. hrs.
HA 613	Health Services Operations Research I	3 cr. hrs.
HA 614	Health Services Operations Research II	3 cr. hrs.
HA 618	Applied Research Project	3 cr. hrs.
HA 619	Applied Research Project	3 cr. hrs.

Note: During the second academic year, the candidate will spend three days a week in the hospital working on systems problems. During each semester, the candidate will register for an applied research project. The candidate will normally receive a stipend from the hospital in which he performs his summer placement and applied research projects.

A minimum of 58 graduate hours exclusive of any prerequisite work is required for the degree of Master of Hospital and Health Administration (Management Engineering).

The Master in Hospital and Health Administration will be awarded only to candidates who have passed a written comprehensive examination on seven areas of study.

Students may be considered for admission to graduate degree work in management engineering on the following two bases:

1. Have received an undergraduate degree from an accredited institution;
2. Have completed the following prerequisites:
 - 6 hours—Calculus
 - 3 hours—Introduction to Mathematics
 - 3 hours—Computer Programming
 - 3 hours—Basic Economics
 - 3 hours—Basic Accounting

There is also a Health Administration Forum requirement which includes an outside reading program, field trips, and a seminar discussion series of current hospital and health care issues and problems.

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Budget Review Committee
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B.S., Xavier University

ALBERT F. ANDERSON, JR.

Professor of Education, 1969
B.S., M.Ed., Xavier University; Ed.D., Colorado State College; Assistant Professor of Education, 1963-1966; Associate Professor, 1966-1969

EDWARD J. ARLINGHAUS

Professor of Hospital and Health Care Administration, 1974 and Director of the Program, 1966
B.B.A., University of Cincinnati; M.B.A., M.Ed., M.S., Xavier University; Associate Professor of Hospital and Health Care Administration, 1966-1974

JAMES F. ASBROCK

Lecturer in Physics, 1974
B.S., Xavier University

WALTER J. BADO, S.J.

Assistant Professor of Philosophy, 1971
A.B., M.A., Loyola University; Ph.L., West Baden College; S.T.L., Hochschule Sankt Georgen

CLIFFORD R. BARNES

Lecturer in French, 1975
B.Mus., A.M., Ph.D., University of Southern California

NORMAN J. BARRY

Assistant Professor of Psychology, 1972
A.B., Boston College; Ph.D., University of Toledo

WALTER F. BEHLER

Professor of Accounting, 1971 and Acting Chairman of the Department, 1975
B.S.B.A., M.B.A., Xavier University; C.P.A., Kentucky and Ohio; Instructor in Accounting, 1949-1953; Assistant Professor of Accounting, 1953-1957; Associate Professor, 1957-1971

ALBERT BEIGEL

Professor of Modern Languages, 1971
A.B., Elisabeth Gymnasium; M.A., University of Vienna; Ph.D., University of Cincinnati; Associate Professor of Modern Languages, 1969-1971

ROBERT G. BENKERT

Lecturer in Communication Arts, 1958
A.B., Xavier University; M.Ed., University of Cincinnati

CPT. KELLEY E. BENNETT

Assistant Professor of Military Science, 1973
B.S., Murray State University; M.A., University of Arkansas

LEE J. BENNISH, S.J.

Associate Professor of History, 1975
Litt. B., Xavier University; M.A., Ph.L., S.T.L., Loyola University; Ph.D., Duke University; Assistant Professor of History, 1967-1975

DONALD S. BERBERICH

Lecturer in Accounting, 1975
B.S., University of Cincinnati; M.B.A., Xavier University

NORMAN L. BERG

Associate Professor of Psychology, 1973
A.B., University of Cincinnati; M.A., Xavier University; Ph.D., Queen's University; Assistant Professor of Psychology, 1969-1973

CLIFFORD S. BESSE, S.J.

Professor of Economics, 1963
A.B., Loyola University; Ph.D., St. Louis University; Instructor in Economics, 1952-1955; Assistant Professor of Economics, 1955-1958; Associate Professor, 1958-1963; Chairman of the Department, 1955-1967; Assistant Dean, College of Arts and Sciences, 1967-1969; Associate Dean, 1969-1974

PETER M. BEYER

Lecturer in Economics and Industrial Relations, 1975
B.S., Wisconsin State University; M.B.A., Xavier University

VYTAUTAS J. BIELIAUSKAS

Professor of Psychology, 1960 and Chairman of the Department, 1959
B.A., University of Vilkauskis; M.A., Ph.D., Universities of: Kaunas, Munich, Tuebingen; Associate Professor of Psychology, 1958-1960

ELENA BLAIR

Assistant Professor of Philosophy, 1971
B.S., Collegio Incorporado, Santa Maria; Ph.Prs., University of Buenos Aires; M.S.Ed., Fordham University; Instructor in Philosophy, 1969-1971

ALBERT A. BOCKLET

Assistant Professor of Hospital and Health Care Administration, 1974
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WILLIAM D. BOLSEN

Adjunct Associate Professor of Education, 1971
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Associate Professor of Philosophy, 1975
S.T.B., Catholic University of America; Ph.D., University of Munich; Assistant Professor of Philosophy, 1971-1975

JAMES W. BOOTHE

Adjunct Assistant Professor of Education, 1975
B.S., M.Ed., Xavier University; Ed.D., Western Michigan University; Lecturer in Education, 1973-1975

JOSEPH E. BOURGEOIS

Professor of Modern Languages, 1959
 A.B., M.A., University of Kentucky; Ph.D.,
 University of Cincinnati; Instructor in Modern
 Languages, 1945-1952; Assistant Professor of
 Modern Languages, 1952-1956; Chairman of
 the Department, 1955-1971; Associate
 Professor, 1956-1959

JOSEPH M. BRANDT

Lecturer in Education, 1975
 B.S., University of Cincinnati; M.Ed., Xavier
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FRANCIS C. BRENNAN, S.J.

Professor of English; Academic Vice President,
 1974
 A.B., Ph.L., S.T.L., St. Louis University; A.M.,
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Lecturer in Management, 1969
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Professor of Theology, 1962
 M.A., Xavier University; Ph.L., Maison St. Louis;
 S.T.L., Maison St. Augustin; S.T.D., Weston
 College; Chairman of the Department,
 1965-1971

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Assistant Professor of Education, 1973
 B.S., M.Ed., Xavier University; Instructor in
 Education, 1970-1973

THOMAS J. BRUGGEMAN

Assistant Professor of Mathematics, 1960
 B.S., University of Dayton; M.S., Xavier
 University; Instructor in Mathematics,
 1957-1960

NORMAN T. BRUVOLD

Lecturer in Management, 1975
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HAROLD L. BRYANT

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Associate Professor of Classics, 1975
 A.B., Xavier University; Ph.L., Loyola University;
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Jesuit Educational Association Colleges and Universities

Alabama

Spring Hill College, Mobile 36608

California

Loyola University, Los Angeles 90045
University of Santa Clara, Santa Clara 95053
University of San Francisco, San Francisco 94117

Colorado

Regis College, Denver 80221

Connecticut

Fairfield University, Fairfield 06430

District of Columbia

Georgetown University, Washington 20007

Illinois

Loyola University, Chicago 60626

Louisiana

Loyola University, New Orleans 70118

Maryland

Loyola College, Baltimore 21210

Massachusetts

Boston College, Boston 02167
Holy Cross College, Worcester 01610

Michigan

University of Detroit, Detroit 48221

Missouri

Rockhurst College, Kansas City 64110
St. Louis University, St. Louis 63103

Nebraska

The Creighton University, Omaha 68131

New Jersey

St. Peter's College, Jersey City 07306

New York

Canisius College, Buffalo 14208
Fordham University, Bronx 10458
Le Moyne College, Syracuse 13214

Ohio

John Carroll University, Cleveland 44118
Xavier University, Cincinnati 45207

Pennsylvania

St. Joseph's College, Philadelphia 19131
University of Scranton, Scranton 18510

Washington

Gonzaga University, Spokane 99202
Seattle University, Seattle 98122

West Virginia

Wheeling College, Wheeling 26003

Wisconsin

Marquette University, Milwaukee 53233

